

Houston Amendments to the 2012 International Fire Code



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CHAPTER 1

SCOPE AND ADMINISTRATION

[A] 101.1 Title. These regulations shall be known as the City of Houston Fire Code of [NAME OF JURISDICTION], hereinafter referred to as “this code.”

[A] 101.2.1 Appendices. Provisions in the appendices shall not apply unless specifically adopted. Appendices A, B, C, D, E, F, G, H, I, and J are hereby adopted and made part of this code.

[A] 101.3 Intent. The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises and to provide safety to fire fighters and emergency responders during emergency operations. The provisions of this code shall not apply to any activity for which local regulation is preempted by federal or state law.

101.3.1 Landlord/tenant. The terms of this code shall not be construed to alter the terms of any lease or other agreement between landlord and tenant or others relating to property that is the subject of this code; provided that no provision of any lease or other agreement shall be construed to excuse compliance with this code by any person, including the construction, maintenance, occupancy, or use of any property in violation of this code. It is the intent of this code to identify the parties this jurisdiction will hold responsible for compliance with and violations of this code, rather than to determine the rights and liabilities of persons under agreements to which this jurisdiction is not a party.

101.6.Standards. Copies of the Houston Fire Department Standards that are referred to in this code have been placed on file in the City Secretary's Office in connection with the code's adoption and shall constitute a part of this code. The standards may be inspected in the City Secretary's Office or the Office of the Fire Prevention Bureau, and copies may be purchased at the fees prescribed by law.

[A] 102.2 Administrative, operational and maintenance provisions. The administrative, operational and maintenance provisions of this code shall apply to:

1. Conditions and operations arising after the adoption of this code.
2. Existing conditions and operations not legally in existence at the time of adoption of this code.
3. Conditions that, in the opinion of the fire code official, constitute a distinct hazard to life or property.

This section shall be construed in a manner that is consistent with Chapter 34 of the Building Code, Appendix “L” of the Building Code (Life Safety Requirements for Existing Buildings), Sections 102 and 110 of this code and City of Houston Ordinance No.78-2672.

102.2.1 Existing buildings. Buildings or structures in existence at the time of the passage of this code may have their existing use or occupancy continued if the buildings or structures comply with the standards established in Chapter 10, Article IX, of the *City Code*, Section 102.6 and Chapter 34 of the *Building Code* and Appendix "L" of the *Building Code* (Life Safety Requirements for Existing Buildings). Determination of compliance shall be under the primary jurisdiction of the building official. Whenever the *fire code official* determines, pursuant to inspection of such a building or structure, that there exists therein a fire hazard that causes the building or structure to be dangerous to life, the *fire code official* shall initiate proceedings under Chapter 10, Article VIII, of the *City Code*, including the placarding of buildings as authorized therein. The *fire code official* shall notify the jurisdiction's neighborhood protection official, as defined in the *City Code*, and if the building official determines that the building or structure constitutes a dangerous building as defined in Article IX of Chapter 10 of the *City Code*, then the building official shall initiate dangerous building abatement proceedings before the hearing official or the Building and Standards Commission under the applicable provisions of Chapter 10 of the *City Code*.

[A] 102.10 Conflicting provisions. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. ~~Where, in a specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where, in any specific instance, the applicable provisions of the *Construction Code* specify different materials, methods of construction or other requirements than this code, and the building official and the *fire code official* are unable to mutually reconcile the requirements by issuing a written interpretation, then either of them may refer the matter to the general appeals board created under the *Building Code*. The general appeals board shall conduct a review of the matter and issue a written code interpretation based upon the apparent intent of the codes involved. Notwithstanding any other provision of this code or the *Construction Code*, interpretations that are issued by the general appeals board shall not be subject to any further appeal.~~

SECTION 103 DEPARTMENT OF LIFE SAFETY AND FIRE PREVENTION BUREAU

[A] 103.1 General. ~~The department of fire prevention~~ Life Safety and Fire Prevention Bureau of the Houston Fire Department is established within the jurisdiction under the direction of the *fire code official*. ~~The function of the department~~ this bureau shall be the implementation, administration and enforcement of the provisions of this code.

[A] 103.2 Appointment. ~~The *fire code official* shall be appointed by the chief appointing authority of the jurisdiction; and the *fire code official* shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.~~

[A] 103.3 Deputies. ~~In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the *fire code official* shall have the authority to appoint a deputy *fire code official*, other related technical officers, inspectors and other employees.~~

[A] 103.4 Liability. ~~The *fire code official*, member of the board of appeals, officer or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and~~

~~without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties. Except as otherwise provided by law, the *fire code official* shall not personally be liable in damages for any act or omission arising out of any official action taken to implement and enforce the provisions of this code. Additionally, except as otherwise provided by law, the *fire code official* shall not personally be liable in damages for any act or omission taken in the course and scope of employment. Where and to the extent consistent with the provisions of Chapter 2, Article X, of the *City Code*, this jurisdiction shall provide legal representation and indemnification for any suit brought against the *fire code official* because of acts or omissions performed in the enforcement of this code. This code shall not be construed to relieve from or lessen the responsibility of any person owning, operating, or controlling any building or structure for any damages to persons or property caused by defects, nor shall the code enforcement agency or its parent jurisdiction be held as assuming any such liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.~~

~~**[A] 103.4.1 Legal defense.** Any suit instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings. The *fire code official* or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code; and any officer of the department of fire prevention, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of any act or omission in the performance of official duties in connection therewith.~~

~~**[A] 104.1 General.** The ~~Consistent with the provisions of this code, the *fire code official* is hereby authorized to enforce the provisions of this code and shall have the authority to render interpretations of this code, and to adopt policies, procedures, rules and regulations—standards in order to clarify the application of its provisions. Such interpretations, policies, procedures, rules and regulations—standards shall be in compliance with the intent and purpose of this code and shall not have the effect of waiving requirements specifically provided for in this code. A certified copy of the standards shall be filed with the City Secretary and additional copies shall be kept in the office of the Life Safety and Fire Prevention Bureau for inspection by the public. Copies shall be furnished at the fees provided by law.~~~~

~~The *fire code official* is authorized to enforce all ordinances of the jurisdiction and laws of the state pertaining to:~~

- ~~1. The prevention of fires;~~
- ~~2. The suppression or extinguishing of dangerous or hazardous fires;~~
- ~~3. The storage, use and handling of hazardous materials;~~
- ~~4. The installation and maintenance of automatic, manual and other private fire alarm systems and fire extinguishing equipment;~~
- ~~5. The maintenance and regulation of fire escapes;~~
- ~~6. The maintenance of fire protection and the elimination of fire hazards on land and in buildings, structures and other property including those under construction;~~
- ~~7. The means, adequacy and maintenance of egress;~~

8. The investigation of the cause, origin and circumstances of fire and unauthorized releases of hazardous materials;
9. The posting of certificates of occupancy and life safety certificates where required by the *Building Code*; and
10. The conducting of fire safety campaigns.

104.1.1 Standards. Throughout this code, the *fire code official* is authorized to grant approvals or permissions, promulgate standards, impose requirements, or exercise similar discretionary authorization over materials, personnel, activities or procedures; however, no specific standards or decision making criteria are stated. It is intended that discretionary authorization be administered in a uniform manner, that authorizations not be unreasonably withheld, and that rules and standards be based upon the preservation of the public health, safety and welfare. The *fire code official* shall be guided by accepted principles of fire safety and shall look to this code and any standards that are adopted herein by reference for guidance. If an individual authorization is denied, the person requesting the authorization shall be advised of the reasons in writing and shall be entitled to a review of the decision by appeal to the Board of Appeals.

[A] 104.5 Notices and orders. ~~The As may be required to enforce this code, the *fire code official* is authorized to issue and to serve such notices, or orders, and criminal citations, as well as administrative citations or summonses in the manner prescribed by Chapter 10, Article XVIII, of the *City Code* as are required to affect compliance with this code in accordance with Sections 109.1 and 109.2.~~

104.7.3 Contractor service reports. Fire protection service contractors shall provide the most recent inspection report of any facility that they service to the fire code official upon request. This can be done via email or fax. If the date of the inspection report is more than five years prior to the date the report is requested by the fire code official, then the contractor shall be required to conduct an inspection and provide the new inspection report to the fire code official.

[A] 104.10.1 Assistance from other agencies. Police and other enforcement agencies shall have authority to render necessary assistance in the investigation of fires and in enforcing the provisions of this code when requested to do so by the *fire code official*.

[A] 105.1.1 Permits required. ~~Any property owner or authorized agent who intends to conduct an operation or business, or install or modify systems and equipment which is regulated by this code, or to cause any such work to be done, shall first make application to the fire code official and obtain the required permit. Permits required by this code shall be obtained from the Fire Permit Office. The property owner or authorized agent shall obtain a permit prior to engaging in any activities, operations, practices, or functions regulated by this code and requiring a permit as listed in Section 105.6, and shall pay permit fees, as required, prior to receiving issuance of the permit. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the *fire code official*. It shall be unlawful for any person to engage in any activities, operations, practices or functions listed in Section 105.6 for any reason without~~

holding a current and valid permit for the activity, operation, practice or function as issued by the fire permit office.

[A] 105.1.2 Types of permits. There shall be two types of permits as follows:

1. Operational permit, issued by the Fire Department. An operational permit allows the applicant to conduct an operation or a business for which a permit is required by Section 105.6 for either:
 - 1.1. A prescribed period.
 - 1.2. Until renewed or revoked.
2. Construction permit, issued by the building official in accordance with the Building Code. A construction permit allows the applicant to install or modify systems and equipment for which a permit is required by and in accordance with the Building Code Section 105.7.

[A] 105.2.2 Inspection authorized. Before a new operational permit is *approved*, the *fire code official* is authorized, but not required, to inspect the receptacles, vehicles, buildings, devices, premises, storage spaces or areas to be used to determine compliance with this code or any operational constraints required. In instances where laws or regulations are enforceable by departments of the jurisdiction other than the fire department, joint approval shall be obtained from all departments concerned.

[A] 105.3.1 Expiration. An operational permit shall remain in effect until reissued, renewed, or revoked, or for such a period of time as specified in the permit. ~~Construction permits shall automatically become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Before such work recommences, a new permit shall be first obtained and the fee to recommence work, if any, shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year.~~ Permits are not transferable and any change in occupancy, operation, tenancy or ownership shall require that a new permit be issued.

[A] 105.3.3 Occupancy prohibited before approval. The building or structure shall not be occupied prior to the ~~fire code building~~ official issuing a permit ~~and conducting associated inspections indicating the applicable provisions of this code have been met.~~ certificate of occupancy in accordance with the Building Code.

Exceptions:

1. The building official is authorized to issue a temporary certificate of occupancy in accordance with the Building Code.
2. The fire code official, with the joint approval of the building official, is authorized to permit the temporary occupancy of a building, or portion thereof, when standby personnel are provided in accordance with Section 112.

[A] 105.5 Revocation. ~~The fire code official is authorized to revoke a permit issued under the provisions of this code when it is found by inspection or otherwise.~~ A permit issued under the provisions of this code may be revoked as provided herein after a hearing conducted by the Section 105 hearing official, if the Section 105 hearing official finds from a preponderance of evidence adduced at such hearing that there has been a false statement or misrepresentation as to the material facts in the application or construction documents on which the permit or approval was based, or a violation of the terms and conditions as set forth in this code, including, but not limited to, any one of the following:

1. The permit is used for a location or establishment other than that for which it was issued.
2. The permit is used for a condition or activity other than that listed in the permit.
3. Conditions and limitations for the permit, as set forth in the permit this code, have been violated.
4. There have been any false statements or misrepresentations as to the material fact in the application for permit or plans submitted or a condition of the permit.
5. The permit is used by a different person or firm than the name for which it was issued.
6. The permittee failed, refused or neglected to comply with orders or notices duly served in accordance with the provisions of this code within the time provided therein.
7. The permit was issued in error or in violation of an ordinance, regulation or this code.

105.5.1 Notice of hearing. Not later than 14 days prior to the date set for the revocation hearing by the Section 105 hearing official, the permit holder shall be given a written notice by the fire code official, which shall set forth:

1. The grounds upon which the fire code official will seek revocation of the permit;
2. That a hearing has been scheduled thereon before the Section 105 hearing official and the time, date and place of the hearing; and
3. That the permit holder may appear, may be represented by counsel, may present evidence and may cross examine witness presented by the fire code official.

105.5.2 Hearing. Except for hearings related to orders issued under Section 105.5.3, all hearings under this Section 105 shall be conducted by a Section 105 hearing official. In rendering a decision, the Section 105 hearing official shall consider only the evidence presented at the hearing. A decision of the Section 105 hearing official shall be set forth in writing, copies of which shall be served upon each party in the same manner as the notice of a right to a hearing.

105.5.3 Emergency revocation of permit. If the revocation of a permit issued under this code reasonably appears to be necessary to abate or ameliorate a serious and immediate fire hazard, the fire code official may revoke the permit without prior notice or hearing. In such circumstance, however, the fire code official must provide the permit

holder with an opportunity for a post-revocation hearing in the manner prescribed by Chapter 10, Article IX, Division 8, of the *City Code*.

~~[A] 105.6.2 Amusement buildings.~~ An operational permit is required to operate a special amusement building. **Apparatus access, road access-control gates.** An operational permit is required to install or maintain an access-control gate on a fire apparatus access road.

[A] 105.6.4 Carnivals, festivals, trade show exhibitions and fairs. An operational permit is required to conduct a carnival, festival, trade show exhibition or fair. A site or floor plan showing the dimensions and locations of the aisles, cooking booths, LP-gas storage, etc., shall be submitted with the permit application.

~~[A] 105.6.11 Cutting and welding.~~ An operational permit is required to conduct cutting and welding operations within the jurisdiction. See Section 105.6.23.

~~[A] 105.6.13 Exhibits and trade shows.~~ An operational permit is required to operate exhibits and trade shows. See Section 105.6.4.

[A] 105.6.14 Explosives, fireworks, and pyrotechnics. An operational permit is required for the manufacture, storage, handling, sale or use of any quantity of *explosives, explosive materials*, fireworks or pyrotechnic special effects within the scope of Chapter 56.

Exception: Storage in Group R-3 occupancies of smokeless propellant, black powder and small arms primers for personal use, not for resale and in accordance with Section 5606.

[A] 105.6.15 Fire depository, key boxes. An operational permit is required to install a key box or fire depository box. See Houston Fire Department LSB Standard No. 05, "Key Boxes" and LSB Standard 06 "Fire Depository Boxes." ~~**Fire hydrants and valves.**~~ An operational permit is required to use or operate fire hydrants or valves intended for fire suppression purposes which are installed on water systems and accessible to a fire apparatus access road that is open to or generally used by the public.

~~**Exception:**~~ A permit is not required for authorized employees of the water company that supplies the system or the fire department to use or operate fire hydrants or valves.

~~[A] 105.6.21 Reserved. HPM facilities.~~ An operational permit is required to store, handle or use hazardous production materials.

[A] 105.6.22 High-piled storage. An operational permit is required to use a building or portion thereof as a *high-piled storage area*, as defined in Chapter 32, exceeding 500 2,500 square feet (46-232 m²). A floor plan showing the dimensions and locations of the stock piles and aisles shall be submitted with the permit application in accordance with Chapter 32.

[A] 105.6.23 Hot work operations. An operational permit is required for hot work including, but not limited to:

1. Public exhibitions and demonstrations where hot work is conducted.
2. Use of portable hot work equipment inside, or for cutting or welding in or on a building or a structure.

Exception: Work that is conducted under a construction permit.

3. Fixed-site hot work equipment, such as welding booths.
4. Hot work conducted within a hazardous fire wildfire-risk-area.
5. Application of roof coverings with the use of an open-flame device.
6. ~~When approved, the fire code official shall issue a permit to carry out a hot work program. This program allows approved personnel to regulate their facility's hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in Chapter 35. These permits shall be issued only to their employees or hot work operations under their supervision.~~

[A] 105.6.27 LP-gas. An operational permit is required ~~for:~~

1. ~~Storage and use of LP-gas. To install or maintain any LP-gas container of 125 gallons (473 L) aggregate water capacity or more or operate any tank vehicle that is used for the transportation of LP-gas.~~

An operational permit is required for the storage, handling or use of any amount of LP-gas in, on or in connection with demonstrations, public exhibitions, or temporary commercial cooking or on mobile food units.

For a single container with a 500-gallon (1893 L) water capacity or for one or more containers with an aggregate 2,000 gallons (7572 L) water capacity or more, the installer shall submit construction documents for the permit.

For operational permit requirements for LP-gas storage, handling, or use, see Chapter 61.

Exception: ~~A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less or multiple container systems having an aggregate quantity not exceeding 500 gallons (1893 L), serving occupancies in Group R-3.~~

2. ~~Operation of cargo tankers that transport LP-gas.~~

[A] 105.6.29 Miscellaneous combustible storage. ~~An operational permit is required to store in any building or upon any premises in excess of 2,500 cubic feet (71 m³) gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork or similar combustible material. An operational permit is required to store more than 50 cubic feet (1.4 m³) of uncompacted rubbish or combustible waste.~~

[A] 105.6.30 Open burning. An operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or

private ground. See Section 307. ~~Instructions and stipulations of the permit shall be adhered to.~~

~~**Exception:** *Recreational fires.*~~

~~[A] 105.6.31 **Reserved. Open flames and torches.** An operational permit is required to remove paint with a torch; or to use a torch or open flame device in a wildfire risk area.~~

~~[A] 105.6.35 **Reserved. Private fire hydrants.** An operational permit is required for the removal from service, use or operation of private fire hydrants.~~

~~**Exception:** A permit is not required for private industry with trained maintenance personnel, private fire brigade or fire departments to maintain, test and use private hydrants.~~

~~[A] 105.6.36 **Pyrotechnic special effects material.** An operational permit is required for use and handling of pyrotechnic special effects material. See Section 105.6.14.~~

~~[A] 105.6.38 **Reserved. Refrigeration equipment.** An operational permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6.~~

~~[A] 105.6.39 **Repair garages and motor Motor fuel-dispensing facilities.** An operational permit is required to dispense flammable or combustible liquids, liquefied petroleum gas, liquefied natural gas or compressed natural gas, in accordance with Chapter 23. for operation of repair garages, and automotive, marine and fleet motor fuel-dispensing facilities.~~

~~[A] 105.6.43 **Temporary membrane structures, and tents and canopies.** An operational permit is required to operate an air-supported temporary membrane structure, or a tent, or canopy having an area in excess of 400 square feet (37 m²) of 1200 square feet (112 m²) or more, or an aggregate area of 1200 (112 m²) square feet or more.~~

Exceptions:

- ~~1. Tents used exclusively for recreational camping purposes.~~
- ~~2. Tents open on all sides, which comply with all of the following:~~
 - ~~2.1. Individual tents having a maximum size of 700 square feet (65 m²).~~
 - ~~2.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total.~~
 - ~~2.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.~~

~~**105.6.47 Asphalt kettles and roof torching operations.** A permit is required in accordance with Sections 303 and Chapters 33 and 35.~~

105.6.48 Battery systems. An operational permit is required for stationary lead acid battery systems having a liquid capacity of more than 50 gallons (189 L).

**TABLE 105.6
SCHEDULE OF FIRE PERMITS**

<u>SECTION REFERENCE NUMBER</u>	<u>PERMIT DESCRIPTION</u>	
<u>105.6.1</u>	<u>Aerosol products</u>	<u>Tier 1:</u> <u>Level 2 Aerosols > 500 and ≤ 2,500 lbs</u> <u>Level 3 Aerosols > 500 and ≤ 1,000 lbs</u> <u>Combined Level 2 and 3 > 500 and ≤ 2,500 lbs</u> <u>Tier 2:</u> <u>Amounts greater than for Tier 1</u>
<u>105.6.2</u>	<u>Apparatus access, road access-control gates</u>	<u>One</u> <u>Two or more</u>
<u>105.6.3</u>	<u>Aviation facilities</u>	<u>Aircraft refueling vehicles:</u> <u>First one</u> <u>Each additional</u> <u>Maximum</u> <u>Aircraft service or repair occupancy</u>
<u>105.6.4</u>	<u>Carnivals, festivals, trade show exhibitions and fairs</u>	
<u>105.6.5</u>	<u>Cellulose nitrate film</u>	
<u>105.6.6</u>	<u>Combustible dust-producing operations</u>	
<u>105.6.7</u>	<u>Combustible fibers</u>	<u>Tier 1:</u> <u>Loose fiber storage > 100 and ≤ 500 cu. ft.</u> <u>Baled fiber storage > 100 and ≤ 1,000 cu. ft.</u> <u>Tier 2:</u> <u>Amounts greater than for Tier 1</u>

<u>SECTION REFERENCE NUMBER</u>	<u>PERMIT DESCRIPTION</u>	
<u>105.6.8</u>	<u>Compressed gases</u>	<p><u>Tier 1:</u></p> <p><u>Corrosive: up to > 200 cu. ft. and ≤1620 cu. ft. at NTP</u></p> <p><u>Flammable (excluding cryogenic and LPG): up to >200 cu. ft. and ≤ 2000 cu. ft. at NTP</u></p> <p><u>Highly toxic: up to 40 cu. ft. at NTP</u></p> <p><u>Inert & simple asphyxiant : no limit > 6000 cu. ft. at NTP (no limit, always Tier 1)</u></p> <p><u>Oxidizing (including oxygen): up to > 504 cu. ft. and ≤ 3000 cu.ft. at NTP</u></p> <p><u>Pyrophoric > 100 cu. ft. at NTP</u></p> <p><u>Toxic: up to 1620 cu. ft. at NTP</u></p> <p><u>Tier 2:</u></p> <p><u>Amounts greater than for Tier 1</u></p>
<u>105.6.9</u>	<u>Covered and open mall buildings</u>	<u>Includes partial cost of Life Safety Inspection</u>
<u>105.6.10</u>	<u>Cryogenic fluids</u>	<p><u>Tier 1:</u></p> <p><u>Flammable:</u></p> <p><u>> 1 gal. and ≤ 90 gal. (inside bldg.)</u></p> <p><u>> 60 gal. and ≤ 90 gal. (outside bldg.)</u></p> <p><u>Inert:</u></p> <p><u>> 60 gal. (inside bldg.) no limit, always Tier 1</u></p> <p><u>> 500 gal. (outside bldg.) no limit, always Tier 1</u></p> <p><u>Oxidizing (includes oxygen):</u></p> <p><u>> 10 gal. and ≤ 90 gal. (inside bldg.)</u></p> <p><u>> 50 gal. and ≤90 gal. (outside bldg.)</u></p> <p><u>Physical or health hazard not included above: no limit, always Tier 1</u></p> <p><u>Tier 2:</u></p> <p><u>Amounts greater than for Tier 1</u></p>
<u>105.6.12</u>	<u>Dry cleaning plants</u>	
<u>105.6.14</u>	<u>Explosives, fireworks, and pyrotechnics</u>	
<u>105.6.15</u>	<u>Fire depository, key boxes</u>	<u>One</u> <u>Two or more</u>

<u>SECTION REFERENCE NUMBER</u>	<u>PERMIT DESCRIPTION</u>	
105.6.16	<u>Flammable and combustible liquids</u>	<p>Parts 1-5, 7, 8:</p> <p><u>Tier 1</u></p> <p><u>Class IA:</u> <u>> 5 gal. and ≤ 60 gal. (inside bldg.)</u> <u>> 10 gal. and ≤ 60 gal. (outside bldg.)</u></p> <p><u>Class IB:</u> <u>> 5 gal. and ≤ 120 gal. (inside bldg.)</u> <u>> 10 gal. and ≤ 120 gal. (outside bldg.)</u></p> <p><u>Class IC:</u> <u>> 5 gal. and ≤ 180 gal. (inside bldg.)</u> <u>> 10 gal. and ≤ 180 gal. (outside bldg.)</u></p> <p><u>Class IA, IB, or IC combined amounts:</u> <u>> 5 gal. and ≤ 240 gal. (inside bldg.)</u> <u>> 10 gal. and ≤ 240 gal. (outside bldg.)</u></p> <p><u>Class II:</u> <u>> 25 gal. and < 240 gal. (inside bldg.)</u> <u>> 60 gal. and ≤ 240 gal. (outside bldg.)</u></p> <p><u>Class IIIA:</u> <u>> 25 gal. and ≤ 660 gal. (inside bldg.)</u> <u>> 60 gal. and ≤ 660 gal. (outside bldg.)</u></p> <p><u>Class IIIB:</u> <u>> 60 gal. no limit; always Tier 1 (in a tank or vessel)</u></p> <p>Parts 1-5, 7, 8</p> <p><u>Tier 2</u> <u>Amounts greater than for Tier 1</u></p> <p>Part 6: <u>Tank removal, installation, disposal or abandonment</u></p> <p><u>One</u> <u>Two</u> <u>Three or more</u></p>
105.6.17	<u>Floor finishing</u>	
105.6.18	<u>Fruit and crop ripening</u>	
105.6.19	<u>Fumigation and thermal insecticidal fogging</u>	

<u>SECTION REFERENCE NUMBER</u>	<u>PERMIT DESCRIPTION</u>	
105.6.20	Hazardous materials	<p><u>Tier 1:</u></p> <p><u>Corrosive liquid up to > 55 gal. and ≤ 1,000 gal.</u></p> <p><u>Corrosive solid up to > 1000 lbs. and ≤ 10,000 lbs.</u></p> <p><u>Flammable solids up to > 100 lbs. and ≤ 250 lbs.</u></p> <p><u>Highly toxic liquids or solids up to 20 lbs.</u></p> <p><u>Oxidizing material, Class 1:</u></p> <p> <u>Liquids > 55 gal. and ≤ 8,000 lbs.</u></p> <p> <u>Solids > 500 lbs. and ≤ 8,000 lbs.</u></p> <p><u>Oxidizing material, Class 2:</u></p> <p> <u>Liquids > 10 gal. and ≤ 500 lbs.</u></p> <p> <u>Solids > 100 lbs. and ≤ 500lbs.</u></p> <p><u>Oxidizing material liquid or solid, Class 3:</u></p> <p> <u>Liquids > 1 gal. and ≤ 20 lbs.</u></p> <p> <u>Solids > 10 lbs. and ≤ 20 lbs.</u></p> <p><u>Oxidizing material, liquid or solid, Class 4: up to 2 lbs.</u></p> <p><u>Organic peroxides, liquid or solid, Class 1: up to 10 lbs.</u></p> <p><u>Organic peroxides, liquid or solid, Class 2: up to 100 lbs.</u></p> <p><u>Organic peroxides, Class 3:</u></p> <p> <u>Liquid > 1 gal. and ≤ 250 lbs.</u></p> <p> <u>Solid > 10 lbs. and < 250 lbs.</u></p> <p><u>Organic peroxides, Class 4:</u></p> <p> <u>2 gal. or 20 lbs. or more (no limit, always Tier 1)</u></p> <p><u>Pyrophoric gases: up to 100 cu. ft.</u></p> <p><u>Pyrophoric liquid or solid: up to 8 lbs.</u></p> <p><u>Toxic liquid: > 10 gal. and ≤ 1,000 lbs.</u></p> <p><u>Toxic solid: >100 lbs. and ≤ 1,000 lbs.</u></p> <p><u>Unstable reactive, gas, Class 1: no limit (no limit, always Tier 1)</u></p> <p><u>Unstable reactive, gas, Class 2: up to 500 cu. ft.</u></p> <p><u>Unstable reactive, gas, Class 3: up to 100 cu. ft.</u></p> <p><u>Unstable reactive, gas, Class 4: up to 20 cu. ft.</u></p> <p><u>Unstable reactive, liquid & solid, Class 1:> 10 gal. or 100 lbs. (no limit, always Tier 1)</u></p> <p><u>Unstable reactive, Class 2:</u></p> <p> <u>Liquid > 5 gal. and <100 lbs.</u></p> <p> <u>Solid > 50 lbs. and ≤ 100 lbs.</u></p> <p><u>Unstable reactive, liquid & solid, Class 3: up to 10 lbs.</u></p> <p><u>Unstable reactive, liquid & solid, Class 4: up to 2 lbs.</u></p> <p><u>Water reactive, liquid & solid, Class 1: > 55 gal. or 500 lbs. (no limit, always Tier 1)</u></p> <p><u>Water reactive, Class 2:</u></p> <p> <u>Liquid > 5 gal. and ≤ 100 lbs.</u></p> <p> <u>Solid > 50 lbs. and ≤ 100 lbs.</u></p> <p><u>Water reactive, liquid & solid, Class 3: up to 10 lbs</u></p> <p><u>Tier 2</u></p> <p><u>Amounts greater than for Tier 1</u></p> <p><u>Organic peroxides, liquid or solid, unclassified detonable</u></p>

<u>SECTION REFERENCE NUMBER</u>	<u>PERMIT DESCRIPTION</u>	
<u>105.6.22</u>	<u>High-piled storage</u>	<u>Level 1: 2,500 - 20,000 sq. ft.</u> <u>Level 2: > 20,000 sq. ft.</u>
<u>105.6.23</u>	<u>Hot work operations</u>	
<u>105.6.24</u>	<u>Industrial ovens</u>	
<u>105.6.25</u>	<u>Lumber yards and woodworking plants</u>	
<u>105.6.26</u>	<u>Liquid- or gas-fueled vehicles or equipment in assembly buildings</u>	<u>One unit</u> <u>Two units</u> <u>Three or more units</u>
<u>105.6.27</u>	<u>LP-gas</u>	<u>Uses other than for mobile food units</u> <u>For use on a mobile food unit</u>
<u>105.6.28</u>	<u>Magnesium</u>	<u>Tier 1:</u> <u>Storage, >10 lbs. and < 250 lbs.</u> <u>Open use, >10 lbs. and < 25 lbs.</u> <u>Tier 2:</u> <u>Amount greater than for Tier 1</u>
<u>105.6.29</u>	<u>Miscellaneous combustible storage</u>	<u>One unit</u> <u>Two or more units</u>
<u>105.6.30</u>	<u>Open burning</u>	
<u>105.6.32</u>	<u>Open flames and candles</u>	
<u>105.6.33</u>	<u>Organic coatings</u>	<u>Tier 2 (no Tier 1):</u> <u>For operations producing > 1 gal. in one day</u>
<u>105.6.34</u>	<u>Places of assembly</u>	<u>50-100 occupants (includes partial cost of Life Safety Inspection)</u> <u>101-299 occupants (includes partial cost of Life Safety Inspection)</u> <u>300+ occupants (includes partial cost of Life Safety Inspection)</u>
<u>105.6.37</u>	<u>Pyroxylin plastics</u>	<u>Tier 2 (no Tier 1):</u> <u>To store or handle > 25 lbs. of pyroxylin</u>
<u>105.6.39</u>	<u>Motor vehicle fuel-dispensing stations</u>	
<u>105.6.40</u>	<u>Rooftop heliports</u>	
<u>105.6.41</u>	<u>Spraying or dipping</u>	
<u>105.6.42</u>	<u>Storage of scrap tires and tire byproducts</u>	
<u>105.6.43</u>	<u>Temporary membrane structures, tents and canopies</u>	
<u>105.6.44</u>	<u>Tire-rebuilding plants</u>	

<u>SECTION REFERENCE NUMBER</u>	<u>PERMIT DESCRIPTION</u>	
<u>105.6.45</u>	<u>Waste handling</u>	
<u>105.6.46</u>	<u>Wood products</u>	
<u>105.6.47</u>	<u>Asphalt kettles and roof torching operations</u> <u>Asphalt kettles</u> <u>Ignited torches - (annual repair permit)</u> <u>Site specific permit</u>	<u>Asphalt kettles</u> <u>First one</u> <u>Each additional</u> <u>Maximum</u> <u>Ignited torches</u> <u>First one</u> <u>Each additional</u> <u>Maximum</u>
<u>105.6.48</u>	<u>Battery systems</u>	

[A] 105.7 Reserved. Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.16.

[A] 105.7.1 Automatic fire-extinguishing systems. A construction permit is required for installation of or modification to an automatic fire-extinguishing system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

[A] 105.7.2 Battery systems. A permit is required to install stationary storage battery systems having a liquid capacity of more than 50 gallons (189 L).

[A] 105.7.3 Compressed gases. When the compressed gases in use or storage exceed the amounts listed in Table 105.6.8, a construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a compressed gas system.

Exceptions:

1. Routine maintenance.
2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.

[A] 105.7.4 Cryogenic fluids. A construction permit is required for installation of or alteration to outdoor stationary cryogenic fluid storage systems where the system capacity exceeds the amounts listed in Table 105.6.10. Maintenance performed in accordance with this code is not considered an alteration and does not require a construction permit.

[A] 105.7.5 Emergency responder radio coverage system. A construction permit is required for installation or modification to emergency responder radio coverage systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

[A] 105.7.6 Fire alarm and detection systems and related equipment. A construction permit is required for installation of or modification to fire alarm and detection systems

and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

~~**[A] 105.7.7 Fire pumps and related equipment.** A construction permit is required for installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers, and generators. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.~~

~~**[A] 105.7.8 Flammable and combustible liquids.** A construction permit is required:~~

- ~~1. To install, repair or modify a pipeline for the transportation of flammable or combustible liquids.~~
- ~~2. To install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used.~~
- ~~3. To install, alter, remove, abandon or otherwise dispose of a flammable or combustible liquid tank.~~

~~**[A] 105.7.9 Hazardous materials.** A construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a storage facility or other area regulated by Chapter 50 when the hazardous materials in use or storage exceed the amounts listed in Table 105.6.20.~~

~~**Exceptions:**~~

- ~~1. Routine maintenance.~~
- ~~2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.~~

~~**[A] 105.7.10 Industrial ovens.** A construction permit is required for installation of industrial ovens covered by Chapter 30.~~

~~**Exceptions:**~~

- ~~1. Routine maintenance.~~
- ~~2. For repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.~~

~~**[A] 105.7.11 LP-gas.** A construction permit is required for installation of or modification to an LP-gas system.~~

~~**[A] 105.7.12 Private fire hydrants.** A construction permit is required for the installation or modification of private fire hydrants.~~

~~**[A] 105.7.13 Solar photovoltaic power systems.** A construction permit is required to install or modify solar photovoltaic power systems.~~

~~**[A] 105.7.14 Spraying or dipping.** A construction permit is required to install or modify a spray room, dip tank or booth.~~

~~**[A] 105.7.15 Standpipe systems.** A construction permit is required for the installation, modification, or removal from service of a standpipe system. Maintenance performed in~~

~~accordance with this code is not considered a modification and does not require a permit.~~

~~**[A] 105.7.16 Temporary membrane structures and tents.** A construction permit is required to erect an air-supported temporary membrane structure or a tent having an area in excess of 400 square feet (37 m²).~~

~~**Exceptions:**~~

- ~~1. Tents used exclusively for recreational camping purposes.~~
- ~~2. Funeral tents and curtains, or extensions attached thereto, when used for funeral services.~~
- ~~3. Tents and awnings open on all sides, which comply with all of the following:~~
 - ~~3.1. Individual tents shall have a maximum size of 700 square feet (65 m²).~~
 - ~~3.2. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total.~~
 - ~~3.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be maintained.~~

~~**[A] 106.2.3 Requested inspections (*fire code official approval*).** Whenever a person requests that the jurisdiction conduct an inspection, or perform other duties not specified in this code and not in connection with a permit required under this code the service shall be scheduled outside regular working hours, or on a weekend or a holiday observed by the jurisdiction, so that the service will not interfere with the regular duties of or cause an undue burden on jurisdiction personnel.~~

~~**[A] 106.2.4 Priority inspection.** Whenever a person requests that the jurisdiction conduct an inspection, or perform other duties specified in this code, at a specific time, rather than at the convenience of the jurisdiction, the service shall be scheduled outside regular working hours, or on a weekend or a holiday observed by the jurisdiction, so that the service will not interfere with the regular duties of the personnel or cause an undue burden on the personnel.~~

~~**[A] 108.1 Board of appeals established.** In order to hear and decide appeals of orders from decisions or determinations made by of the *fire code official* relative to the application and interpretation of this code as to the suitability of alternate materials and types of construction and to provide for reasonable interpretations of the provisions of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the Mayor, subject to confirmation by the City Council governing body and shall hold office at its pleasure. The *fire code official* shall be an ex officio member of said board but shall have no vote on any matter before the board. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *fire code official*. See Appendix A.~~

~~**[A] 108.2 Limitations on authority.** An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted,~~

the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed. The board shall have no authority to waive requirements of this code. The fire code official shall take action in accordance with the decision of the board.

[A] 108.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to this code hazards of fire, explosions, hazardous conditions or fire protection systems and are not employees of the jurisdiction.

[A] 109.3 Notice of Violation. When the *fire code official* finds a building, premises, vehicle, storage facility or outdoor area that is in violation of this code, the *fire code official* is authorized to prepare a written notice of violation ("NOV") describing the conditions deemed unsafe and, when compliance is not immediate, specifying a time for reinspection. The NOV advises the recipient of the existence of a violation of this code but does not initiate a judicial or administrative proceeding. Service of an NOV is not required prior to service of a citation or summons or to other action to enforce this code.

[A] 109.3.1 Service of NOV. The fire code official may serve (by personal service or by certified mail, return receipt requested) an NOV upon such person(s) as the fire code official reasonably believes should be notified of the violation. A notice of violation issued pursuant to this code shall be served upon the owner, operator, occupant or other person responsible for the condition or violation, either by personal service, mail or by delivering the same to, and leaving it with, some person of responsibility upon the premises. For unattended or abandoned locations, a copy of the NOV may such notice of violation shall be posted on the premises in a conspicuous place at or near the entrance to such premises, in which case a copy of the NOV and the notice of violation shall be mailed by certified mail, with return receipt requested or a certificate of mailing, to the owner of the property at the owner's last known address, according to the records of the appraisal district in which the property is located of the owner, occupant or both.

[A] 109.3.3 Prosecution of violations. If the notice of violation is not complied with promptly, the fire code official is authorized to request the legal counsel of the jurisdiction to institute the appropriate legal proceedings at law or in equity to restrain, correct or abate such violation or to require removal or termination of the unlawful occupancy of the structure in violation of the provisions of this code or of the order or direction made pursuant hereto. If a person owning, operating, or maintaining an occupancy, property, or vehicle subject to this code allows a violation of this code to exist or fails to take immediate action to abate a violation when ordered to do so by the fire code official, the fire code official is authorized to take any action authorized by this code or other applicable law.

[A] 109.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a [SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense. **General penalty; continuing violations.** When in this code an act is prohibited or is made or declared to be unlawful or an offense or misdemeanor, or wherever in this code the doing of any act is required or the failure

to do any act is declared to be unlawful, and no specific penalty is provided therefor, the violation of any such provision of this code shall be punished by a fine of not less than \$500.00, nor more than \$2000.00; provided, however, that no penalty shall be greater or lesser than the penalty provided for the same offense under the laws of the state. Each day any violation of this code shall continue shall constitute a separate offense. In prosecutions under this code, the various provisions hereof that are designated as exceptions shall not be treated as exceptions within the meaning of Section 2.02 of the *Texas Penal Code*, and instead, they shall constitute defenses to prosecution within the meaning of Section 2.03 of the *Texas Penal Code*.

109.4.1 License suspension/revocation. The suspension, revocation, cancellation or denial of any license, permit or certificate by the jurisdiction shall not prohibit the imposition of any civil or criminal penalty. The imposition of a civil or criminal penalty by the jurisdiction shall not prohibit the suspension, revocation, cancellation or denial of any license, permit or certificate.

109.4.2 Enforced removal or abatement. The application of the foregoing penalty shall not be held to prevent the enforced removal or abatement of any prohibited condition.

109.4.3 Administrative adjudication of unlawful parking or stopping of vehicle. The provisions of Chapter 16, Article IV, of the *City Code* shall be applicable to the adjudication of any offense arising under this code that involves the parking or stopping of a vehicle. The fines for parking or stopping of a vehicle shall be as otherwise provided in this section or other provisions of this code, as applicable, but the citation shall be issued and adjudicated in all respects as provided in Chapter 16, Article IV, of the *City Code*.

[A] 109.4.1 109.4.4 Abatement of violation. Referral to city attorney. In addition to the imposition of the penalties herein described, the *fire code official* is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises. In addition to other remedies authorized by this code or other applicable law, the *fire code official* may refer a violation to the city attorney for appropriate legal action to abate or restrain an activity, condition, or occupancy constituting or resulting from a violation of this code.

[A] 110.1 General authority. If during the inspection of a premises, a building or structure, or any building system, in whole or in part, constitutes a clear and inimical threat to human life, safety or health, the *fire code official* shall issue such notice or orders to remove or remedy the conditions as shall be deemed necessary in accordance with this section, and shall refer the building to the building department for any repairs, *alterations*, remodeling, removing or demolition required. If all or part of a property or structure violates this code and constitutes a threat to public health or safety, the *fire code official* shall issue such notices or orders to abate the threat as are reasonable under the circumstances. Such notices may include one or more placards posted conspicuously at the property stating that the property is a threat to public health or safety, that the fire code official may order an evacuation of the structure or take other action against the property, and that persons who continue to use the building do so at their own risk. The wording of the placard shall be factually accurate, but no particular wording is prescribed.

~~**[A] 110.1.2 Structural hazards, Administrative hearing under City Code.** When an apparent structural hazard is caused by the faulty installation, operation or malfunction of any of the items or devices governed by this code, the *fire code official* shall immediately notify the building code official in accordance with Section 110.1. The *fire code official* may schedule a public hearing before a hearing officer as provided by Chapter 10, Article IX, Division 2 of the *City Code* and request any relief authorized by the said Article IX.~~

~~**[A] 110.3 Summary abatement.** Where conditions exist that are deemed hazardous to life and property, the *fire code official* or fire department official in charge of the incident is authorized to abate summarily such hazardous conditions that are in violation of this code. If all or part of a property or structure constitutes a serious and immediate fire hazard, the *fire code official* or a fire department official in charge of an incident may abate or otherwise remedy the said hazard without prior notice or hearing. In such circumstance, however, the *fire code official* must provide each owner, lienholder, and mortgagee of the subject property with an opportunity for a post-abatement hearing in the manner prescribed by Chapter 10, Article IX, Division 8 of the *City Code*.~~

~~**[A] 110.4 Abatement.** The *owner*, operator or occupant of a building or premises deemed unsafe by the *fire code official* shall abate or cause to be abated or corrected such unsafe conditions either by repair, rehabilitation, demolition or other *approved* corrective action.~~

~~**[A] 111.4 Failure to comply.** It shall be unlawful to fail to comply with any stop work order. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than [AMOUNT] dollars or more than [AMOUNT] dollars.~~

~~**[A] 113.1 Fees.** A permit shall not be issued until the fees have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid. Fees for permits, inspections and other services under this code shall be assessed and payable to the jurisdiction. Fees are annual unless otherwise provided in this code or by regulation of the *fire code official*.~~

~~**[A] 113.1.1 Permits.** Except for permits and inspections under Section 113.1.3.2, the fee for a permit includes an initial inspection and one follow-up inspection, if a follow-up inspection is deemed necessary in the judgment of the inspector.~~

~~**[A] 113.1.2 Special inspection provisions.**~~

~~**[A] 113.1.2.1 Inspections not related to permits.** Fees for inspection or other services not specified in this code and not in connection with a permit required under this code shall be based on the time expended as set forth in the city fee schedule for this provision.~~

~~A deposit in the full amount of the anticipated fee shall be required prior to the commencement of the inspection. Examples of the types of inspections covered by this section include, but are not limited to, inspections requested by persons who are applying for state or federal permits that have provisions for a fire inspection and compliance inspections requested in connection with real estate transactions. This fee shall be in addition to all other fees required by this code~~

[A] 113.1.2.2 Inspection at a specific time. Fees for inspection or other services specified in this code at a scheduled, specific time, rather than at the convenience of the jurisdiction, shall be based on the time expended as set forth in the city fee schedule for this provision. This fee shall be in addition to all other fees required by this code.

[A] 113.1.3 Reinspections.

[A] 113.1.3.1 Whenever it becomes necessary to make a reinspection (after the initial inspection and one follow-up inspection under Section 113.1.1 or after the initial inspection under Section 113.1.3.2) because of faulty material, faulty workmanship, or incomplete work or for any other reason, the permit holder shall pay for each reinspection a fee in the amount stated in the city fee schedule, unless a greater fee is specifically required by this code. This fee shall be in addition to all other fees required by this code.

[A] 113.1.3.2 Retesting and reinspection fees for fire protection systems and underground fuel storage tank permits. Fees for permits, inspections, and testing for fire alarm, sprinkler, and other fire protection systems under Sections 901.5 (fire alarm, sprinkler and other fire protection systems) and 5704.2.12.2 (underground fuel storage tanks) include one-time inspection and testing. If a fire protection system or underground fuel storage tank fails testing or inspection or *approved* plans are not on site at the time of the scheduled test, the permit holder shall pay a retest fee in the amount set forth in the city fee schedule for retesting and reinspection.

[A] 113.1.3.3 Inspection cancellation fee. A fee in the amount stated in the city fee schedule shall be assessed to the permit holder and payable to the jurisdiction if a scheduled test or inspection of a fire protection system pursuant to Section 901.5 or underground fuel storage tank pursuant to Section 5704.2.12.2 is cancelled by the permit holder at any time during the four hours prior to the time scheduled for the test or inspection.

[A] 113.1.4 Other fees.

[A] 113.1.4.1 Administrative fee. The administrative fee stated in the city fee schedule shall be charged upon the preparation of each permit or license issued by the fire department. This fee shall apply regardless of whether the permit or license is issued pursuant to this code or the *City Code*, and it shall be payable in addition to all other applicable fees for the permit or license. The foregoing administrative fee shall not be applicable if no other fee is provided by law for the permit or license.

[A] 113.1.4.2 Receipt. The administrative receipt fee stated in the city fee schedule shall be charged upon the preparation of each fee or deposit receipt issued by the fire permit office. This fee shall apply regardless of whether the fee or deposit is payable pursuant to this code or the *City Code*. This fee shall be in addition to all other applicable fees or deposits. When paid for a deposit or fee receipt, this fee shall neither constitute nor be refundable as a part of the deposit. This fee shall not apply when a permit or license is issued and the fee specified in Section 105.9.1 above is imposed.

[A] 113.1.4.3 Correction fee. The correction fee stated in the city fee schedule shall be charged for correction of any license or permit in those instances where the license or permit is initially issued with an error caused by incorrect

information having been furnished by the applicant. A reinspection fee shall also be imposed as provided in Section 105.8.2 when the error causes a reinspection to be required.

[A] 113.1.4.4 Replacement fee. The replacement fee stated in the city fee schedule shall be charged for replacement of any permit that is lost or requires replacement for other reasons, such as a change of the permit holder's name.

[A] 113.2 Schedule of permit-fees. A fee for each permit or service shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

[A] 113.3 Work commencing before permit issuance. Any person who commences any work, activity or operation regulated by this code before obtaining the necessary permits shall be subject to an additional fee established by the applicable governing authority, which shall be in addition to the required permit fees.

[A] 113.4 Related fees. The payment of the fee for the construction, *alteration*, removal or demolition of work done in connection to or concurrently with the work or activity authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

~~**[A] 113.5 Refunds.** The applicable governing authority is authorized to establish a refund policy. The *fire code official* or building official, as applicable, may authorize refunding of any fee paid hereunder that was erroneously paid or collected due to an error by one or more employees of the jurisdiction. This provision shall not be applicable if the error occurred because of incorrect information provided by the applicant.~~

The *fire code official* or building official, as applicable, may authorize the refunding of not more than 90 percent of the permit fee paid in excess of the minimum permit fee stated in the city fee schedule when no inspection has been performed under a permit issued in accordance with this code. If an inspection has been performed under the permit, no refund shall be authorized.

The *fire code official* or building official, as applicable, shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment.

113.6 Exemption from permits and fees. To the extent that the state and the federal government are exempt as a matter of law from compliance with this code, neither the state nor the federal government shall be required to obtain a permit for work undertaken for, by or on the premises of either of them. However, the fees set forth in this code shall be applicable to the extent that the state or the federal government elects to obtain a permit for exempt work.

Except for work undertaken for, by or on the premises of the state or the federal government, permits shall be required for work undertaken for, by or on the premises of any political subdivision or unit of government (including, but not limited to, the jurisdiction) in the same manner and to the same extent as for work performed by or for other persons. The fees prescribed in this code shall be applicable to all permits issued to or for governmental agencies except counties and the jurisdiction. The jurisdiction and counties are exempted from the payment of fees. The exemption for the jurisdiction and for counties shall extend only to work to be undertaken for, by or on the premises of the jurisdiction or a county itself as a body corporate and politic. Furthermore, the exemption for a county shall not extend to work undertaken for, by or on the premises of units of government that, although affiliated with a county, have separate governmental existence from the county, including but not limited to, hospital districts and flood control districts.

113.7 Annual fee increase. Notwithstanding any maximum fee established by this section or Section 105.9, the fees established in this code, as adjusted according to this provision, shall be automatically increased on the first day of each subsequent calendar year as provided in Section 1-13 of the City Code.

SECTION 114 **STANDBY PERSONNEL**

114.1 General. The fire code official is authorized to require that standby inspectors be provided when deemed necessary to ensure public safety due to the number of persons present, or the nature of a performance, exhibition, display, contest or activity. The fire code official is also authorized to require standby personnel as a condition for:

1. The approval of any permit required in Section 105.
2. The issuance of a temporary certificate of occupancy by the building official.
3. The maintenance of exits and keeping watch for fires and other safety hazards.
4. The use of a building where required fire protection or life safety systems are impaired or out of service, in accordance with Section 901.7.
5. The use of temporary membrane structure, tent or canopy, as provided for in Section 3104.20.

114.2 Standby inspectors. When required by the fire code official, standby inspectors shall be provided to ensure compliance with this code and/or other laws, including ordinances of the jurisdiction. Standby inspectors shall be state-certified fire inspectors who are assigned to the Fire Prevention Bureau of the Houston Fire Department. See Section 113.12.2 for fees for the provision of standby inspectors.

CHAPTER 2 DEFINITIONS

SECTION 202* GENERAL DEFINITIONS

BUILDING CODE. *The City of Houston Building Code, as adopted by this jurisdiction.*

BUILDING OFFICIAL. ~~The officer or other designated authority charged with the administration and enforcement of the International Building Code~~ *The jurisdiction's director of public works and engineering, or a duly authorized representative or representatives.*

CITY CODE. *The Code of Ordinances, Houston, Texas.*

CITY FEE SCHEDULE. *The schedule of fees charged by the city for various permits, licenses, authorizations and services, which schedule is maintained on the city's website.*

COMMERCIAL ENERGY CONSERVATION CODE. *The City of Houston Commercial Energy Conservation Code, as adopted by this jurisdiction.*

CONGREGATE LIVING FACILITIES. *A building or part thereof that contains facilities for living, sleeping and sanitation, as required by this code, and may include facilities for eating and cooking, for occupancy by other than a family. A congregate living facility may be a shelter, convent, monastery, dormitory, fraternity house, or sorority house, but does not include jails, hospitals, nursing homes, hotels or boarding houses.*

CONSTRUCTION CODE. *The City of Houston Construction Code, consisting of the Building Code, Electrical Code, Mechanical Code, Plumbing Code, Residential Code, Commercial Energy Conservation Code, and Residential Energy Conservation Code.*

ELECTRICAL CODE. *The National Electrical Code promulgated by the National Fire Protection Association, as adopted by this jurisdiction, and the City of Houston Electrical Code.*

FAMILY. *An individual or two or more persons related by blood or marriage or a group of not more than 10 persons (excluding servants) who need not be related by blood or marriage living together in a dwelling unit.*

FIRE CODE OFFICIAL. *The fire marshal or a duly authorized representative charged with the administration and enforcement of the code.*

INTERNATIONAL BUILDING CODE. The City of Houston Building Code, as adopted by this jurisdiction.

INTERNATIONAL MECHANICAL CODE. The City of Houston Mechanical Code, as adopted by this jurisdiction.

INTERNATIONAL PLUMBING CODE. The City of Houston Plumbing Code, as adopted by this jurisdiction.

INTERNATIONAL RESIDENTIAL CODE. The City of Houston Residential Code, based on the International Residential Code for One- and Two-Family Dwellings, as adopted by the State of Texas in Subchapter G of Chapter 214 of the Texas Local Government Code, with amendments adopted by this jurisdiction.

JURISDICTION. ~~The governmental unit that has adopted this code under due legislative authority.~~ The City of Houston.

MECHANICAL CODE. The City of Houston Mechanical Code, as adopted by this jurisdiction.

OCCUPANCY CLASSIFICATION. For the purposes of this code, certain occupancies are defined as follows:

[B] Educational Group E. Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade.

Accessory to places of worship. Religious educational rooms and religious auditoriums, which are accessory to places of religious worship in accordance with Section 508.3.1 of the ~~International Building Code~~ and have *occupant loads* of less than 100, shall be classified as Group A-3 occupancies.

Group E, day care facilities. This group includes buildings and structures or portions thereof occupied by more than five children older than 2½ years of age who receive educational, supervision or *personal care services* for less than 24 hours per day.

Within places of worship. Rooms and spaces within places of worship providing such care during religious functions shall be classified as part of the primary occupancy.

Five or fewer children. A facility having five or fewer children receiving such care shall be classified as part of the primary occupancy.

Five or fewer children in a dwelling unit. A facility such as the above within a dwelling unit and having five or fewer children receiving such care shall be classified as a Group R-3 occupancy or shall comply with the ~~International Residential Code~~.

Specific requirements. Daycare and educational occupancies shall not allow children of second grade or lower above the level of exit discharge unless the following provisions are met.

1. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1; and
2. When children above the second grade are located on the same level, the children of the second grade or lower shall have at least two means of egress to the exterior for the exclusive use of those children.

High-hazard Group H. High-hazard Group H occupancy includes, among others, the use of a building or structure, or a portion thereof, that involves the manufacturing, processing, generation or storage of materials that constitute a physical or *health hazard* in quantities in excess of those allowed in *control areas* complying with Section 5003.8.3, based on the maximum allowable quantity limits for *control areas* set forth in Tables 5003.1.1(1) and 5003.1.1(2). Hazardous occupancies are classified in Groups H-1, H-2, H-3, H-4 and H-5 and shall be in accordance with this code and the requirements of Section 415 of the ~~International Building Code~~. Hazardous materials stored or used on top of roofs or canopies shall be classified as outdoor storage or use and shall comply with this code.

Exceptions: The following shall not be classified as Group H, but shall be classified as the occupancy that they most nearly resemble:

1. Buildings and structures occupied for the application of flammable finishes, provided that such buildings or areas conform to the requirements of Chapter 24 of this code and Section 416 of the *International Building Code*.
2. Wholesale and retail sales and storage of flammable and *combustible liquids* in mercantile occupancies conforming to Chapter 57.
3. Closed piping systems containing flammable or *combustible liquids* or gases utilized for the operation of machinery or equipment.
4. Cleaning establishments that utilize *combustible liquid* solvents having a *flash point* of 140°F (60°C) or higher in *closed systems* employing equipment *listed* by an *approved* testing agency, provided that this occupancy is separated from all other areas of the building by 1-hour *fire barriers* in accordance with Section 707 of the ~~International Building Code~~ or 1-hour *horizontal assemblies* in accordance with Section 711 of the ~~International Building Code~~, or both.
5. Cleaning establishments that utilize a liquid solvent having a *flash point* at or above 200°F (93°C).
6. Liquor stores and distributors without bulk storage.
7. Refrigeration systems.
8. The storage or utilization of materials for agricultural purposes on the premises.
9. Stationary batteries utilized for facility emergency power, uninterruptible power supply or telecommunication facilities,

provided that the batteries are equipped with safety venting caps and ventilation is provided in accordance with the ~~International Mechanical Code~~.

10. *Corrosives* shall not include personal or household products in their original packaging used in retail display or commonly used building materials.
11. Buildings and structures occupied for aerosol storage shall be classified as Group S-1, provided that such buildings conform to the requirements of Chapter 51.
12. Display and storage of nonflammable solid and nonflammable or noncombustible liquid hazardous materials in quantities not exceeding the *maximum allowable quantity per control area* in Group M or S occupancies complying with Section 5003.8.3.5.
13. The storage of black powder, smokeless propellant and small arms primers in Groups M and R-3 and special industrial explosive devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements of this code.
14. Any building owned by the jurisdiction, located on any city airport, that is leased and used by a certificated air carrier for the in-transit storage of hazardous materials for a period of time that does not exceed 72 hours from the time such hazardous material is placed in the building until it is permanently removed.

NOTES:

1. *Certificated air carrier* is defined as: a U.S. or foreign airline operating scheduled or non-scheduled commercial services pursuant to certificates or exemptions issued by the United States Department of Transportation pursuant to 49 USC Sections 40109, 41102, 41103, or 41302, and certificates or exemptions issued by the United States Federal Aviation Administration pursuant to 14 CFR Parts 121, 125, 129 or 135.
2. *City airport* is defined in Chapter 9 of the *City Code*.
3. *In-transit storage* is defined as: the storage of materials which will be on-loaded onto or off-loaded from an aircraft owned, leased or operated by a certificated air carrier.

Institutional Group I-4, day care facilities. This group shall include buildings and structures occupied by more than five persons of any age who receive custodial care for less than 24 hours by persons other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

Classification as Group E. A child care facility that provides care for more than five but no more than 100 children 2½ years or less of age,

where the rooms in which the children are cared for are located on a *level of exit discharge* serving such rooms and each of these child care rooms has an *exit door* directly to the exterior, shall be classified as Group E.

Within a place of religious worship. Rooms and spaces within places of religious worship providing such care during religious functions shall be classified as part of the primary occupancy.

Five or fewer occupants receiving care. A facility having five or fewer persons receiving custodial care shall be classified as part of the primary occupancy.

Five or fewer occupants receiving care in a dwelling unit. A facility such as the above within a dwelling unit and having five or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the *Residential Code*.

Specific requirements. Daycare and educational occupancies shall not allow children of second grade or lower above the level of exit discharge unless the following provisions are met.

1. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1; and
2. When children above the second grade are located on the same level, the children of the second grade or lower shall have at least two means of egress to the exterior for the exclusive use of those children.

Residential Group R-3. Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Boarding houses (nontransient) with 16 or fewer occupants

Boarding houses (transient) with 10 or fewer occupants

Buildings that do not contain more than two *dwelling units*

Care facilities that provide accommodations for five or fewer persons receiving care

Congregate living facilities (nontransient) with 16 or fewer occupants

Congregate living facilities (transient) with 10 or fewer occupants

Care facilities within a dwelling. Care facilities for five or fewer persons receiving care, including licensed and registered in home day cares, that are within a single-family dwelling are permitted to comply with the ~~*International Residential Code*~~ provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

PLUMBING CODE. The *City of Houston Plumbing Code*, as adopted by this jurisdiction.

RESIDENTIAL CODE. The City of Houston Residential Code, based on the International Residential Code of One- and Two-family Dwellings, as adopted by the State of Texas in Subchapter G of Chapter 214 of the Texas Local Government Code, including amendments adopted by this jurisdiction.

RESIDENTIAL ENERGY CONSERVATION CODE. The City of Houston Residential Energy Conservation Code, as adopted by this jurisdiction.

SECTION 105 HEARING OFFICIAL. The person or persons designed in writing by the Mayor of the jurisdiction to consider (a) applications by the fire code official to revoke permits issued under authority of Section 105 of the code; (b) appeals of denials of permits authorized by Section 105; and (c) appeals of orders issued under authority of Section 105, except that appeals of orders issued under authority of Section 105.5.3 shall be considered as provided elsewhere in this code. A Section 105 hearing official may be an employee of the Houston Fire Department, except that no person who has taken part, directly or indirectly, in any decision, order, or investigation related to the subject of the hearing shall serve as a Section 105 hearing official. A Section 105 hearing official shall act without bias for or against any hearing participant, including the Houston Fire Department.

SERIOUS AND IMMEDIATE FIRE HAZARD. A condition that violates this code and that in the absence of immediate action by the fire code official or a fire department official in charge of an incident presents a reasonable likelihood of causing serious bodily injury to a human being.

SMOKE DETECTOR:

A listed device that senses visible or invisible particles of combustion.

A smoke alarm with sealed 10 year lithium batteries.

A sealed long life (10 years or more) battery smoke alarm.

STANDBY INSPECTOR. A state-certified fire inspector assigned by the fire code official as deemed necessary to ensure public safety and compliance with this code in accordance with Section 114.

TRADE SHOW. A temporary commercial exhibition or show for the purpose of display of manufactured products to prospective customers. See Section 105.6.4.

TRANSIT SHED. A covered structure erected on a wharf or quay for the temporary storage of goods in transit between ship and land carrier or warehouse.

*{EDITORIAL NOTE: ALL OTHER PORTIONS OF SECTION 202 TO REMAIN AS SET FORTH IN THE 2012 INTERNATIONAL BUILDING CODE.}

SECTION 203
DISTRICTS OF LIMITATIONS

203.1 General. The districts referred to in this code in which the storage of explosives and blasting agents, flammable and combustible liquids, compressed and liquefied natural gases, cryogenic fluids and LP-gases may be prohibited or restricted, are hereby established.

203.1.1 District of Limitations No. 1. Beginning at the intersection of US Highway 59 with Pierce Street; thence, northerly along US Highway 59 to the centerline of Buffalo Bayou; thence, westerly following the meanders of the centerline of Buffalo Bayou to Franklin Street; thence, westerly along Franklin Street to Interstate Highway 45; thence, southerly along interstate Highway 45 to Pierce Street; thence, easterly along Pierce Street to U. S. Highway 59, the place of beginning.

203.1.2 District of Limitations No. 2. Beginning at the intersection of Main Street with Cambridge Street; thence, southerly along Main Street to Holcombe Boulevard; thence easterly along Holcombe Boulevard to Braeswood Boulevard; thence northerly along Braeswood Boulevard to North MacGregor Drive; thence northerly along North MacGregor Drive to Cambridge Street; thence westerly along Cambridge Street to Main Street, the place of beginning.

CHAPTER 3

GENERAL PRECAUTIONS AGAINST FIRE

301.2 Permits. Permits and permit fees shall be required as set forth in the city fee schedule for the activities or uses regulated by Sections 303, 304, 306, 307, 308 and 315.

303.1 Transporting. Asphalt (tar) kettles shall not be transported over any highway, road or street when the heat source for the kettle is operating. Kettle lids shall be closed and latched while in transit. Kettle contents shall be allowed to cool to a viscosity such that they cannot spill should the kettle overturn while in transit.

Exception: Asphalt (tar) kettles in the process of patching road surfaces.

303.2 Location. Asphalt (tar) kettles shall not be located within 20 feet (6096 mm) of any combustible material, combustible building surface or any building opening and within a controlled area identified by the use of traffic cones, barriers or other *approved* means. Asphalt (tar) kettles and pots shall not be utilized inside ~~or on the roof of~~ a building or structure. Asphalt (tar) kettles shall not be used on the roof of a building or structure, except in accordance with Houston Fire Department LSB Standard No. 11, "Roofing Operations." Roofing kettles and operating asphalt (tar) kettles shall not block means of egress, gates, roadways or entrances.

303.3 Location of fuel containers. Fuel containers shall be located at least 10 feet (3048 mm) from the burner. All portable fuel containers shall be adequately secured to prevent containers from falling or being knocked over.

Exceptions:

1. Containers properly insulated from heat or flame are allowed to be within 2 feet (610 mm) of the burner.
2. LP-gas containers connected for use shall be kept a minimum of 15 feet (4572 mm) from burners. LP-gas containers not connected for use shall be kept a minimum of 25 feet (7620 mm) from burners.

304.3.3 Capacity exceeding 1.5 cubic yards. Dumpsters and containers with an individual capacity ~~of between~~ 1.5 cubic yards [40.5 cubic feet (1.15 m³)] and 15 cubic yards (405 cubic feet) (12 m³) or more shall not be stored in buildings or placed within 5 feet (1524 mm) of combustible walls, metal walls, building openings or combustible roof eave lines. Dumpsters and containers 15 cubic yards (405 cubic feet) (12 m³) capacity, or more, shall be a minimum of 10 feet (3 m) from combustible walls, metal walls, building openings, or roof eave lines. Dumpsters and containers shall not be placed on public sidewalks, streets, or other public property. No rubbish or combustible waste shall be placed, stored, or allowed to accumulate outside of dumpsters or containers. Lids of dumpsters shall be kept closed at all times.

Exceptions:

1. Dumpsters or containers in areas protected by an *approved* automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.

2. Storage in a structure shall not be prohibited where the structure is of Type I or IIA construction, located not less than 10 feet (3048 mm) from other buildings and used exclusively for dumpster or container storage.
3. Dumpsters placed in the street right-of-way by government authorities on a temporary basis for neighborhood clean up campaigns, provided neither the roadway, nor fire apparatus access, nor fire hydrants are obstructed and no other location is practicably available.
4. Dumpsters placed on a temporary basis for demolition or construction work under a valid building permit, provided neither the roadway, nor fire apparatus access, nor fire hydrants are obstructed and no other location is practicably available.
5. Approved containers placed for collection on street right-of-way as authorized by Chapter 39 of the City Code.

304.4 Dumpster information required. The name of the dumpster company or responsible party and a contact telephone number shall be placed on dumpsters and other bulk containers as provided by Section 39-97 of the City Code.

305.1 Clearance from ignition sources. Clearance between ignition sources, such as luminaires, heaters, flame-producing devices, and combustible materials, shall be maintained in an *approved* manner. The clearance between combustible materials and unit heaters, radiant heaters, duct furnaces, flues and other heat producing devices shall be in accordance with the clearances shown on the product listing, but in no case shall be less than 3 feet (914.4 mm) in all directions, except as provided for in the Building Code.

307.1 General. A person shall not kindle or maintain or authorize to be kindled or maintained any *open burning or recreational fire* ~~unless conducted and approved in accordance with Sections 307.1.1 and 307.5.~~

Exception: When approved by the fire code official, and where consistent with state, federal and local environmental laws and regulations, open burning shall be conducted in accordance with Houston Fire Department LSB Standard No. 16, "Open Burning and Recreational Fires." A permit is required for any fire authorized under this exception.

307.1.1 Prohibited open burning. Open burning that is offensive or objectionable because of smoke or odor emissions or shall be prohibited when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

311.1.1 Abandoned premises. Buildings, structures and premises for which an *owner* cannot be identified or located by ~~dispatch of a certificate of mailing to the last known or registered address~~, which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized persons or for illegal purposes, or which present a danger of structural collapse or fire spread to adjacent properties shall be considered abandoned, declared unsafe and abated by demolition or rehabilitation in

accordance with the ~~International Property Maintenance Code~~ and the ~~International Building Code~~ procedures set forth in Chapter 10, Articles VIII and IX of the City Code.

{EDITORIAL NOTE: DELETE AND RESERVE ALL OF SECTION 311.5 (311.5.1 THROUGH 311.5.5).}

318.1 Laundry carts with a capacity of 1 cubic yard or more. Laundry carts with an individual capacity of 1 cubic yard [200 gallons (0.76m³)] or more, used in laundries within Group B, E, F-1, I and R-1 occupancies shall be constructed of noncombustible materials or materials having a peak rate of heat release not exceeding 300 kW/m² at a flux of 50 kW/m² when tested in a horizontal orientation in accordance with ASTM E 1354.

Exceptions:

1. Laundry carts in areas protected by an *approved automatic sprinkler system* installed throughout in accordance with Section 903.3.1.1.
2. Laundry carts in coin-operated laundries.

CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS

404.1 General. The fire code official is authorized to require that emergency plans, employee duty assignments, employee training and fire drills be provided in buildings of any occupancy type. When required, emergency plans, employee duty assignments, employee training and fire drills shall be conducted in accordance with this chapter and Houston Fire Department LSB Standard No. 08, "Fire Drills." ~~Fire safety, evacuation and lockdown plans and associated drills shall comply with the requirements of Sections 404.2 through 404.5.1.~~

404.2 Where required. When required by the fire code official, and where local fire marshal approvals are required by regulatory agencies, ~~An~~ an approved fire safety and evacuation plan shall be prepared and maintained for the following occupancies and buildings.

1. Group A, other than Group A occupancies used exclusively for purposes of religious worship that have an occupant load less than 2,000.
- ~~2. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.~~
- ~~3.~~ 23. Group E.
- ~~4.~~ 34. Group F buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
- ~~5.~~ 45. Group H, in accordance with Section 407.
- ~~6.~~ 56. Group I, as required by state, federal and other regulatory agencies.
- ~~7.~~ 67. Group R-1, and High-rise R-1 in accordance with Houston Fire Department LSB Standard No. 07, "High Rise Fire Safety Plans."
- ~~8.~~ 78. Group R-2 college and university buildings.
- ~~9.~~ 89. Group R-4, as required by state regulatory agencies.
- ~~10.~~ 940. High-rise buildings in accordance with Houston Fire Department LSB Standard No. 07, "High Rise Fire Safety Plans.
- ~~101.~~ 1044. Group M buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
- ~~111.~~ 1142. Covered malls exceeding 50,000 square feet (4645 m²) in aggregate floor area.
- ~~121.~~ 1243. Open mall buildings exceeding 50,000 square feet (4645 m²) in aggregate area within perimeter line.
- ~~131.~~ 1344. Underground buildings.
- ~~141.~~ 1445. Buildings with an atrium and having an occupancy in Group A, E or M.

404.3.1 Fire evacuation plans. Fire evacuation plans shall include the following and any additional information as may be required by the fire code official:

1. Emergency egress or escape routes, and alternate routes where available and whether evacuation of the building is to be complete or, where approved, by selected floors or areas only.
2. Procedures for building employees and security personnel who, when it is safe to do so, must remain to operate critical equipment before evacuating.
3. Procedures for assisted rescue for persons unable to use the general *means of egress* unassisted.
4. Procedures for accounting for employees and occupants after evacuation has been completed.
5. Identification and assignment of personnel responsible for rescue or emergency medical aid.
6. The preferred and any alternative means of notifying occupants of a fire or emergency.
7. The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.
8. Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.
9. A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided.
10. All high-rise building evacuation plans shall conform to Houston Fire Department LSB Standard No. 07, "High-Rise Fire Safety Plans."

Exception: Group I high-rise occupancies.

404.4 Maintenance. ~~Fire safety and~~ Emergency evacuation plans shall be reviewed or updated annually or as necessitated by changes in staff assignments, occupancy, or the physical arrangement of the building.

Exception: In high-rise occupancies, the emergency plans within fire depository boxes shall be reviewed and updated every six months to verify mobility impaired persons lists, emergency keys and any other data, in accordance with Houston Fire Department LSB Standard No. 06, "Fire Depository Boxes."

405.1 General. Emergency evacuation drills complying with the provisions of this section shall be conducted in an occupancy when required by the fire code official in accordance with Houston Fire Department LSB Standard No. 08, "Fire Drills." Evacuation drills in high-rise buildings shall be conducted in accordance with Houston Fire Department LSB Standard No. 07, "High Rise Fire Safety Plans." ~~at least annually in the occupancies listed in Section 404.2 or when required by the fire code official. Drills shall be designed in cooperation with the local authorities.~~

405.2 Frequency. Fire drill frequency shall be in accordance with the Houston Fire Department LSB Standard No. 08, "Fire Drills," unless superseded by other regulatory agencies. ~~Required~~

emergency evacuation drills shall be held at the intervals specified in Table 405.2 or more frequently where necessary to familiarize all occupants with the drill procedure.

TABLE 405.2

**FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION**

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group A	Quarterly	Employees
Group B ^e	Annually	Employees
Group E	Monthly ^a	All occupants
Group F	Annually	Employees
Group I	Quarterly on each shift	Employees ^b
Group R-1	Quarterly on each shift	Employees
Group R-2 ^d	Four annually	All occupants
Group R-4	Quarterly on each shift	Employees ^b
High-rise buildings	Annually	Employees

- a. The frequency shall be allowed to be modified in accordance with Section 408.3.2.
- b. Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 408.10.5. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program.
- c. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
- d. Applicable to Group R-2 college and university buildings in accordance with Section 408.3

405.6 Notification. ~~Where required by the fire code official,~~ In buildings having fire alarm monitoring services, prior notification of emergency evacuation drills shall be given to the ~~fire code official~~ jurisdiction immediately prior to the drill by calling the Houston Fire Department Office of Emergency Communications, Telephone: (713) 884-3143, and to the building's fire alarm monitoring service. The Fire Department and the monitoring service shall be immediately notified at the conclusion of emergency evacuation drills, in accordance with Houston Fire Department LSB Standard No. 08, "Fire Drills."

406.1 General. ~~Employees in the occupancies listed in Section 404.2 shall be trained in the fire emergency procedures described in their fire evacuation and fire safety plans. Training shall be based on these plans and as described in Section 404.3. When required by the fire code official,~~ employees shall be assigned duties for emergencies and shall be trained in accordance with this section.

408.2.1 Seating plan and permits. The fire safety and evacuation plans for assembly occupancies, including carnivals, festivals, fair grounds, and trade show exhibitions, shall be submitted when required by the fire code official. Plans shall include the information required by Section 404.3 and a detailed seating plan, occupant load, and occupant load limit. Deviations from the approved plans shall be allowed when approved by the fire code official, provided the occupant load limit for the occupancy is not exceeded and the aisles and exit access ways remain unobstructed.

Permits and plans are required to operate a place of assembly, or a carnival, festival or fair, to use liquid- or gas-fueled vehicles or equipment for competition or display inside an assembly occupancy, to use an assembly area for trade show exhibition purposes, or to use candles or other open-flame devices in assembly areas.

408.3 Group E occupancies and Group R-2 college and university buildings. Group E occupancies shall comply with the requirements of Sections 408.3.1 through 408.3.4 and ~~Sections 401 through 406.~~ Houston Fire Department LSB Standard No. 08, "Fire Drills." Group R-2 college and university buildings shall comply with the requirements of Sections 408.3.1 and 408.3.3 ~~and Sections 401 through 406.~~ Houston Fire Department LSB Standard No. 08, "Fire Drills."

408.3.2 Emergency evacuation drill deferral. ~~In severe climates, the fire code official shall have the authority to modify the emergency evacuation drill frequency specified in Section 405.2.~~ Drills are not required during periods of inclement weather or when state mandated educational assessment testing is being conducted.

408.5 Group I-1 occupancies. Group I-1 occupancies shall comply with the requirements of Sections 408.5.1 through 408.5.5, ~~and Sections 401 through 406,~~ and Houston Fire Department LSB Standard No. 08, "Fire Drills."

408.5.4 Drill frequency. Emergency evacuation drills shall be conducted in accordance with Houston Fire Department LSB Standard No. 08, "Fire Drills." at least six times per year, two times per year on each shift. Twelve drills shall be conducted in the first year of operation. Drills are not required to comply with the time requirements of Section 405.4.

408.6 Group I-2 occupancies. Group I-2 occupancies shall comply with the requirements of Sections 408.6.1 and 408.6.2, ~~and Sections 401 through 406,~~ and Houston Fire Department LSB Standard No. 08, "Fire Drills." ~~Drills are not required to comply with the time requirements of Section 405.4.~~

408.8 Group I-4 occupancies. Group I-4 occupancies shall conform to Sections 401 through 406 and Houston Fire Department LSB Standard No. 08, "Fire Drills."

~~408.8~~ **408.9 Group R-1 occupancies.** Group R-1 occupancies shall comply with the requirements of Sections 408.89.1 through 408.89.3, ~~and Sections 401 through 406,~~ and Houston Fire Department LSB Standard No. 08, "Fire Drills." High-rise R-1 occupancies shall

also be in accordance with Houston Fire Department LSB Standard No. 07, "High-Rise Fire Safety Plans."

~~408.8.1~~ **408.9.1 Evacuation diagrams.** A diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required egress door from each hotel, or motel or dormitory sleeping unit.

~~408.8.2~~ **408.9.2 Emergency duties.** Upon discovery of a fire or suspected fire, hotel, and motel and dormitory employees shall perform the following duties:

1. Activate the fire alarm system, where provided.
2. Notify the public fire department.
3. Take other action as previously instructed.

~~408.8.3~~ **408.9.3 Fire safety and evacuation instructions.** Information shall be provided in the fire safety and evacuation plan required by Section 404 to allow guests to decide whether to evacuate to the outside, evacuate to an *area of refuge*, remain in place, or any combination of the three.

~~408.9~~ **408.10 Group R-2 occupancies.** Group R-2 occupancies shall comply with the requirements of ~~Sections 408.9.1 through 408.9.3~~ and Sections 401 through 406.

~~408.9.1~~ **Emergency guide.** A fire emergency guide shall be provided which describes the location, function and use of fire protection equipment and appliances accessible to residents, including fire alarm systems, smoke alarms, and portable fire extinguishers. The guide shall also include an emergency evacuation plan for each *dwelling unit*.

~~408.9.2~~ **Evacuation diagrams in Group R-2 dormitories.** A diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required egress door from each Group R-2 dormitory sleeping unit.

~~408.9.3~~ **Maintenance.** Emergency guides shall be reviewed and *approved* in accordance with Section 401.2. Evacuation diagrams shall be reviewed and updated in accordance with Section 404.4.

~~408.9.4~~ **Distribution.** A copy of the emergency guide shall be given to each tenant prior to initial occupancy.

~~408.10~~ **408.11 Group R-4 occupancies.** Group R-4 occupancies shall comply with the requirements of ~~Sections 408.10.4~~ 408.11.1 through ~~408.10.5~~ 408.11.5, and Sections 401 through 406, and Houston Fire Department LSB Standard No. 08, "Fire Drills."

~~408.10.1~~ **408.11.1 Fire safety and evacuation plan.** The fire safety and evacuation plan required by Section 404 shall include special staff actions, including fire protection procedures necessary for residents, and shall be amended or revised upon admission of a resident with unusual needs.

~~408.10.2~~ **408.11.2 Staff training.** Employees shall be periodically instructed and kept informed of their duties and responsibilities under the plan. Such instruction shall be reviewed by the staff at least every two months. A copy of the plan shall be readily available at all times within the facility.

~~408.10.3~~ **408.11.3 Resident training.** Residents capable of assisting in their own evacuation shall be trained in the proper actions to take in the event of a fire. The training shall include actions to take if the primary escape route is blocked. Where the resident is given rehabilitation or habilitation training, training in fire prevention and actions to take in the event of a fire shall be a part of the rehabilitation training program. Residents shall be trained to assist each other in case of fire to the extent their physical and mental abilities permit them to do so without additional personal risk.

~~408.10.4~~ **408.11.4 Drill frequency.** Emergency evacuation drills shall be conducted in accordance with Houston Fire Department LSB Standard No. 08, "Fire Drills," ~~at least six times per year, two times per year on each shift. Twelve drills shall be conducted in the first year of operation. Drills are not required to comply with the time requirements of Section 405.4.~~

~~408.10.5~~ **408.11.5 Resident participation.** Emergency evacuation drills shall involve the actual evacuation of residents to a selected assembly point and shall provide residents with experience in exiting through all required exits. All required exits shall be used during emergency evacuation drills.

Exception: Actual exiting from windows shall not be required. Opening the window and signaling for help shall be an acceptable alternative.

~~408.11~~ **408.12 Covered and open mall buildings.** Covered and open mall buildings shall comply with the provisions of Sections ~~408.11.4~~ 408.12.1 through ~~408.11.3~~ 408.12.3.

~~408.11.1~~ **408.12.1 Lease plan.** A lease plan shall be prepared for each covered ~~and open~~ mall building. The plan shall include the following in addition to that required by Section 404.3.2:

1. Each occupancy, including identification of tenant.
2. *Exits* from each tenant space.
3. Fire protection features, including the following:
 - 3.1 Fire department connections.
 - 3.2 *Fire command center.*
 - 3.3 Smoke management system controls.
 - 3.4 Elevators, and ~~elevator machine rooms and~~ controls.
 - 3.5 Hose valve outlets.
 - 3.6 Sprinkler and standpipe control valves.
 - 3.7 Automatic fire-extinguishing system areas.
 - 3.8 Automatic fire detector zones.
 - 3.9 *Fire barriers.*

~~408.11.1.1~~ **408.12.1.1 Approval. Maintenance.** The lease plan shall be ~~submitted to the fire code official for approval, and shall be maintained on site for immediate reference by responding fire service personnel and be available upon request by the fire code official.~~

~~408.11.1.2~~ **408.12.1.2 Revisions.** The lease plans shall be revised annually or as often as necessary to keep them current. ~~Modifications or changes in tenants~~

~~or occupancies shall not be made without prior approval of the fire code official and building official.~~

~~408.11.2~~ **408.12.2 Tenant identification.** Each occupied tenant space provided with a secondary exit to the exterior or exit *corridor* shall be provided with tenant identification by business name and/or address. Letters and numbers of durable materials, at least 2 inches (50 mm) in height, shall be posted and maintained on the *corridor* side of the door, be plainly legible and shall contrast with their background.

Exception: ~~Tenant identification is not required for anchor stores.~~

~~408.11.3~~ **408.12.3 Maintenance.** Unoccupied tenant spaces shall be:

1. Kept free from the storage of any materials.
2. Separated from the remainder of the building by partitions of at least 0.5-inch-thick (12.7 mm) gypsum board or an *approved* equivalent to the underside of the ceiling of the adjoining tenant spaces.
3. Without doors or other access openings other than one door that shall be kept key locked in the closed position except during that time when opened for inspection.
4. Kept free from combustible waste and be broom-swept clean.

CHAPTER 5

FIRE SERVICE FEATURES

501.1 Scope. Fire Service features for buildings, structures and premises shall comply with this chapter.

Exception: Group R-2 Occupancies when in accordance with Chapter 42 of the City Code for those items addressed there in. Items not specifically addressed in Chapter 42 of the City Code for multi-family residential developments shall be as required by this chapter or elsewhere in this code.

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8 and Houston Fire Department LSB Standard No. 03, "Fire Department Access."

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for *approved* security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

Exceptions:

1. When *approved* by the fire code official, vertical clearance may be reduced, provided the reduction does not impair access by fire apparatus and *approved* signs are installed and maintained indicating the established vertical clearance.
2. When *approved* by the fire code official, existing access roads may have an unobstructed width of not less than 15 feet (4572 mm), when the reduction in width will not impair access by fire department equipment, or when, for access roads in existence on June 15, 1976, the designation of a greater width would necessitate structural changes to the building.

503.2.2 Authority. The *fire code official* shall have the authority to require an increase in the minimum access ~~widths~~ dimensions where they are inadequate for fire or rescue operations.

503.3 Marking. Where required by the *fire code official*, *approved* signs or other *approved* notices or markings that include the words NO PARKING—FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Marking of fire apparatus access roads shall be in accordance with Section 503.3 and Houston Fire Department LSB Standard No. 03, "Fire Department Access." ~~The means by which *fire lanes* are designated~~ Signs or notices shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

503.3.1 Alteration, defacing of signs unlawful. A person commits an offense if the person intentionally alters, defaces, injures, knocks down, or removes, or attempts to alter, deface, injure, knock down, or remove, any sign required under the terms of this code.

503.4 Obstruction of fire apparatus access roads.

503.4.1 General. The required width of a fire apparatus access roads, private drive, private street, or private access easement utilized for fire apparatus access shall not be obstructed in any manner, including the parking of vehicles. The minimum required widths and clearances established in Section 503.2.1 shall be maintained at all times.

~~**503.4.1. Traffic calming devices.** Traffic calming devices shall be prohibited unless approved by the fire code official.~~

Exceptions:

1. Access control gates installed in accordance with Houston Fire Department LSB Standard No. 04, "Access Control Gates." See Section 105.6 for permits.
2. Parking shall not include a vehicle that has a licensed vehicle operator in constant attendance in the vehicle, provided that the licensed operator has the ability to immediately remove the vehicle in case of an emergency.

503.4.2 Removal of vehicles and obstructions. Vehicles parked and obstructions placed in violation of this code may be removed at the vehicle owner's expense by or at the direction of the fire chief, any peace officer or the property owner in accordance with applicable provisions of the City Code and state law.

503.4.3 Presumption of ownership. In any prosecution arising under this code that relates to the unlawful parking, standing, or stopping of a motor vehicle, it shall be presumed that the person who is the registered owner of the motor vehicle is the person who parked or stopped the vehicle at the date and time of the offense charged.

503.5 Required gates or barricades. The *fire code official* is authorized to require the installation and maintenance of gates or other *approved* barricades across fire apparatus access roads, trails or other accessways, not including public streets, alleys or highways. Access control gates and barriers shall be installed and maintained in accordance with Houston Fire Department LSB Standard No. 04, "Access Control Gates." For required permits see Section 105.6.2. Electric gate operators, where provided, shall be *listed* in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

503.6 Security gates. The installation of security gates across a fire apparatus access road shall be *approved* by the ~~fire chief~~ *fire code official* in accordance with Houston Fire Department LSB Standard No. 04, "Access Control Gates." Where security gates are installed, they shall have an *approved* means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Repairs shall be in accordance with original specifications and approvals. Electric gate operators, where provided, shall be *listed* in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

504.1.1 Key box required. When required by the fire code official, security gates and barriers on access walkways shall be provided with approved "9-1-1" key boxes to

facilitate emergency access into the property or building where emergency access is not readily available because of property or building design or because of distances from approved access roadways or drives to the building entrance. Key boxes shall be installed in accordance with Houston Fire Department LSB Standard No. 05, "Key Boxes." See Section 105.6 for required permit.

504.3 Stairway access to roof. New buildings four or more stories ~~above grade plane in height~~, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3-percent slope), shall be provided with a *stairway* to the roof. *Stairway* access to the roof shall be in accordance with Section 1009.13. Such *stairway* shall be marked at street and floor levels with a sign indicating that the *stairway* continues to the roof. Where roofs are used for roof gardens or for other purposes, *stairways* shall be provided as required for such occupancy classification. See Appendix H for stairway identification sign requirements.

505.1 Address identification. New and existing buildings and occupancies therein under construction shall have *approved* address numbers, building numbers or *approved* building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Where required by the *fire code official*, address numbers shall be provided in additional *approved* locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm). Where access is by means of a private road and the building cannot be viewed from the *public way*, a monument, pole, or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

All new and existing buildings are required to be numbered as provided in Chapter 10, Article V, of the City Code.

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the *fire code official* is authorized to require a key box or a fire depository box to be installed in an *approved* location. The key box shall be of an *approved* type listed in accordance with UL 1037₇ and shall contain keys to gain necessary access as required by the *fire code official*. Key boxes shall be provided in accordance with Houston Fire Department LSB Standard No. 05, "Key Boxes."

506.1.1 Locks. An *approved* lock shall be installed on gates or similar barriers when required by the *fire code official*. Key boxes shall be provided in accordance with Houston Fire Department LSB Standard No. 05, "Key Boxes."

506.1.2 Key boxes for nonstandardized fire service elevators keys. Fire depository boxes for all high-rise facilities shall be installed and maintained in accordance with Houston Fire Department Standard No. 06, "Fire Depository Boxes." Key boxes provided for other nonstandardized fire service elevator keys shall comply with Section 506.1 and all of the following:

1. The key box shall be compatible with an existing rapid entry key box system in use in the jurisdiction and *approved* by the *fire code official*.
2. The front cover shall be permanently labeled with the words "Fire Department Use Only—Elevator Keys."

3. The key box shall be mounted at each elevator bank at the lobby nearest to the lowest level of fire department access.
4. The key box shall be mounted 5 feet 6 inches (1676 mm) above the finished floor to the right side of the elevator bank.
5. Contents of the key box are limited to fire service elevator keys. Additional elevator access tools, keys and information pertinent to emergency planning or elevator access shall be permitted when authorized by the *fire code official*.
6. In buildings with two or more elevator banks, a single key shall be permitted to be used when such elevator banks are separated by not more than 30 feet (9144). Additional key boxes shall be provided for each individual elevator or elevator bank separated by more than 30 feet (9144 mm).

Exception: A single key box shall be permitted to be located adjacent to a *fire command center* or the nonstandard fire service elevator key shall be permitted to be secure in a key box used for other purposes and located in accordance with Section 506.1.

506.3 Fire depository box. A fire depository box shall be provided within all high-rise occupancies, as defined in the *Building Code*, or other facilities as may be required by the *fire code official*. Fire depository boxes shall be installed and maintained in accordance with Houston Fire Department LSB Standard No. 06, "Fire Depository Boxes."

506.4 Permit required. A permit is required to install and maintain a key box and/or fire depository box. See Section 105.6.

507.5.7 Removal of vehicles parked near fire hydrants. Vehicles parked within 15 feet of a fire hydrant in violation of a state law or ordinance may be removed at the vehicle owner's expense by or at the direction of the fire chief, *fire code official* or any peace officer in accordance with applicable provisions of the *City Code* and state law.

510.3 Permit required. A construction permit, when required, shall be issued by the building official in accordance with the *Construction Code*. ~~for the installation of or modification to emergency responder radio coverage systems and related equipment is required as specified in Section 105.7.5.~~ Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

510.4.2.6 Minimum qualifications of designer. An amplification system shall be designed by a registered professional engineer licensed by the State of Texas.

510.5.3 Acceptance test procedure. When an emergency responder radio coverage system is required, and upon of completion of installation, the building *owner* shall have the radio system tested to ensure that two-way coverage on each floor of the building is a minimum of ~~90~~95 percent. The test procedure shall be conducted as follows:

1. Each floor of the building shall be divided into a grid of 20 approximately equal test areas.
2. The test shall be conducted using a calibrated portable radio of the latest brand and model used by the agency talking through the agency's radio communications system.
3. Failure of a maximum of two nonadjacent test areas shall not result in failure of the test.
4. In the event that three of the test areas fail the test, in order to be more statistically accurate, the floor shall be permitted to be divided into 40 equal test areas. Failure of a maximum of four nonadjacent test areas shall not result in failure of the test. If the system fails the 40-area test, the system shall be altered to meet the ~~90~~ 95 percent coverage requirement.
5. A test location approximately in the center of each test area shall be selected for the test, with the radio enabled to verify two-way communications to and from the outside of the building through the public agency's radio communications system. Once the test location has been selected, that location shall represent the entire test area. Failure in the selected test location shall be considered failure of that test area. Additional test locations shall not be permitted.
6. The gain values of all amplifiers shall be measured and the test measurement results shall be kept on file with the building *owner* so that the measurements can be verified during annual tests. In the event that the measurement results become lost, the building *owner* shall be required to rerun the acceptance test to reestablish the gain values.
7. As part of the installation of a spectrum analyzer or other suitable test equipment shall be utilized to ensure spurious oscillations are not being generated by the subject signal booster. This test shall be conducted at time of installation and subsequent annual inspections.

CHAPTER 6

BUILDING SERVICES AND SYSTEMS

601.2 Permits. Permits shall be obtained for ~~refrigeration systems,~~ stationary lead acid battery systems and solar photovoltaic power systems as set forth in Sections 105.6 and 105.7.

603.9 Gas meters and piping.

603.9.1 Protection of meters and piping. Above-ground gas meters, regulators and piping subject to damage shall be protected by a barrier complying with Section 312 or otherwise protected in an *approved* manner.

603.9.2 Testing of piping and systems.

603.9.2.1 Routine testing. All gas piping systems in Groups A, E, I, R-1 and R-2 occupancies shall be tested at least every five years by a licensed plumber. Systems shall be tested in accordance with the *Plumbing Code*. A written record shall be maintained and shall be made available to the *fire code official* upon request.

603.9.2.2 Testing for leaks. The *fire code official* is authorized to require a test of the gas piping system in any building or structure, of any occupancy type, when there is reason to believe a leak may exist in the system.

604.3.1 Schedule. Inspection, testing and maintenance of emergency and standby power systems shall be in accordance with an *approved* schedule established upon completion and approval of the system installation and Houston Fire Department LSB Standard No. 02, "Inspection and Testing of Fire Protection and Life-Safety Equipment."

605.12 Protection of lighting fixtures and devices. All permanent or temporary lighting fixtures and devices used in mechanical spaces, service areas, exit accessways, stairways, and parking garages shall be provided with an *approved* protective device designed to prevent accidental breakage, contact with readily ignitable materials, or creation of electrical shock hazard.

Exceptions:

1. Listed devices *approved* for use in hazardous locations in accordance with the *Electrical Code*.
2. Listed incandescent bulbs or fluorescent tubes provided with *approved* shatter- or break-resistive protective coatings.
3. Listed devices for exterior use, with *approved* weather resistant bulbs.
4. Fixtures so located as to be suitably protected from accidental damage or breakage.

607.2 Emergency signs. An *approved* pictorial sign of a standardized design shall be posted adjacent to each elevator call station on all floors instructing occupants to use the *exit stairways* and not to use the elevators in case of fire. The sign shall read: IN FIRE EMERGENCY, DO NOT USE ELEVATOR. USE EXIT STAIRS. The lettering shall be at least ½ inch (13 mm) block letters on a background of contrasting color so that the lettering is clearly visible.

Exceptions:

1. ~~_____~~ The emergency sign shall not be required for elevators that are part of an accessible ~~means of egress complying with Section 1007.4.~~
2. ~~_____~~ The emergency sign shall not be required for elevators that are used for occupant self-evacuation in accordance with Section 3008 of the ~~International Building Code.~~

607.4 Elevator key location. Keys for the elevator car doors and firefighter service keys shall be kept in an *approved* location in accordance with Houston Fire Department LSB Standard No. 06, "Fire Depository Boxes," for immediate use by the fire department.

607.5 Standardized fire service elevator keys. Buildings with elevators equipped with Phase I emergency recall, Phase II emergency in-car operation, or a fire service access elevator shall be equipped to operate with a standardized fire service elevator key *approved* by the *fire code official*, in accordance with the applicable Houston Fire Department LSB Standard No. 06, "Fire Depository Boxes," for immediate use by the fire department. See Section 506.1.

Exception: The owner shall be permitted to place the building's nonstandardized fire service elevator keys in a key box installed in accordance with Section 506.1.2.

CHAPTER 7

FIRE-RESISTANCE-RATED CONSTRUCTION

703.1.1 Fireblocking and draftstopping. Required *fireblocking* and draftstopping in combustible concealed spaces shall be maintained to provide continuity and integrity of the construction. Including attics in existing Group R-2 apartments, the fire code official is authorized to require installation of draft stops in Group R-2 occupancies that do not exceed four stories in height in any building undergoing roof work that involves replacement of more than 25 percent of the roof sheathing. The attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m²) or above every two dwelling units whichever is smaller.

703.4 Testing. Horizontal and vertical sliding and rolling fire doors shall be inspected and tested annually to confirm proper operation and full closure. Fire doors, fire dampers, and other similar equipment shall be inspected and tested in accordance with Houston Fire Department LSB Standard No. 02, "Inspection and Testing of Fire Protection and Life-Safety Equipment." A written record shall be maintained and be available to the *fire code official*.

CHAPTER 9

FIRE PROTECTION SYSTEMS

901.1 Scope. The provisions of this chapter and the *Building Code* shall specify where *fire protection systems* are required and shall apply to the design, installation, inspection, operation, testing and maintenance of all *fire protection systems*.

901.2 Construction documents. The *fire code official* shall have the authority to require *construction documents* and calculations ~~for all *fire protection systems* and to require permits to be issued~~ for the installation, rehabilitation or modification of any *fire protection system*. *Construction documents* for *fire protection systems* shall be submitted for review and approval in accordance with the *Building Code* prior to system installation.

901.3 Permits. Permits shall be required as set forth in Sections 105.6 ~~and 105.7~~ of the *Building Code*.

901.4.5 Appearance of equipment. Any device that has the physical appearance of life safety or fire protection equipment but that does not perform that life safety or fire protection function, shall be prohibited. Systems or devices that are permanently out of service or any non-required life safety system or fire protection system that no longer functions as originally installed shall be removed or the appearance changed so as not to be mistaken for functioning life safety or fire protection equipment.

901.5 Installation acceptance testing. Fire detection and alarm systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains and all other *fire protection systems* and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as *approved* by the *fire code official*. ~~The *fire code official* shall be notified before any required acceptance testing.~~

The location of all fire department connections shall be *approved* by the fire code official.

Inspection of fire-extinguishing systems shall be conducted by the fire code official, upon payment of all applicable fees stated in the city fee schedule. The inspection and reports shall be forwarded to the building official for posting to occupancy records. No building or structure requiring a fire-extinguishing system shall be permanently occupied without first obtaining the fire code official's approval.

Exception: The building official shall have the authority to issue a temporary certificate of occupancy for the use of a portion or portions of a building prior to the completion of the entire structure.

901.5.1 Occupancy. It shall be unlawful to occupy any portion of a building or structure until the required fire detection, alarm and suppression systems have been tested and *approved*.

Exception: The building official is authorized to issue a temporary certificate of occupancy in accordance with the *Building Code*.

901.6.1 Standards. *Fire protection systems* shall be inspected, tested and maintained in accordance with the referenced standards listed in Table 901.6.1 and in accordance with Houston Fire Department LSB Standard No. 02, "Inspection and Testing of Fire Protection and Life-Safety Equipment" and LSB Standard No. 01, "Installation and Maintenance of Portable Fire Extinguishers."

901.6.2 Records. Records of all system inspections, tests and maintenance required by the referenced standards in Table 901.6.1, and all major repairs to the life safety and fire protection equipment systems, shall be maintained on the premises for a minimum of three years and shall be copied to the *fire code official* upon request.

Exception: Where inspection or testing may be on a 4- or 5- year cycle, the records shall be maintained until the next testing cycle has been completed.

901.7 Systems out of service. Where a required life safety or fire protection system is out of service, the fire department and the *fire code official* shall be notified immediately in accordance with Section 901.14 and, where required by the *fire code official*, the building shall either be evacuated or an approved fire watch or standby inspector, in accordance with Section 112, shall be provided for all occupants left unprotected by the shutdown until the life safety or fire protection system has been returned to service.

Where utilized, fire watches shall be provided with at least one *approved* means for notification of the fire department, and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

901.11 Fire pumps. Fire pumps shall be listed by Factory Mutual, Underwriters Laboratories or another approved agency. Such pumps shall be automatic operation, and the system flow and pressure shall be sized based on the requirements of NFPA 20. See the Electrical Code for additional requirements. When such pumps are not approved for direct connection to the city main, the source of supply for such pumps shall be a suction tank served from the city main sized in accordance with NFPA 20. A smaller tank may be provided when an engineering analysis can show that the refill of the tank will maintain the 150% design flow of the fire pump.

901.12 Outside sprinkler control valve. Outside control in the form of a wall post indicator valve or post indicator valve shall be provided for each sprinkler system. An indicating-type gate valve shall be required when sprinkler systems are supplied by the standpipe system.

901.13 Two-way standpipe connections. Class I and Class III standpipe systems shall be equipped with a two-way fire department inlet connection. Systems with three or more standpipes shall be provided with not less than two two-way fire department inlet connections.

901.14 Notification of fire department. The Houston Fire Department Office of Emergency Communications shall be immediately notified by telephone, at (713) 884-3143, whenever the required fire protection or life safety system is placed out of service for emergency or non-scheduled repairs, replacements, or service. The Fire Department shall be provided with the following information:

1. Correct street address and name of the building or structure.
2. The caller's name and contact phone number.
3. The identity of system that is impaired or shut down, and if known, the nature of impairment or failure.

4. Estimated length of time system is to be out of service for repairs.

The Fire Department Office of Emergency Communications shall again be notified when the system is restored to normal operational status.

903.2 Where required. *Approved automatic sprinkler systems* in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12.

Exceptions:

1. Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour *fire barriers* constructed in accordance with Section 707 of the ~~International Building Code~~ or not less than 2-hour *horizontal assemblies* constructed in accordance with Section 711 of the ~~International Building Code~~, or both.
2. In other than Group H occupancies, a sprinkler system shall not be required in open buildings.

903.2.1.3 Group A-3. An *automatic sprinkler system* shall be provided for Group A-3 occupancies where one of the following conditions exists:

1. The *fire area* exceeds 12,000 square feet (1115 m²).
2. The *fire area* has an occupant load of 300 or more.
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

Exception: In lieu of a sprinkler system for a temporary use occupancy, the applicant may agree to provide a fire watch program under which one or more fire fighters of this jurisdiction will be present on the premises at all times when the amusement occupancy is open for use. The fire marshal shall promulgate regulations regarding the qualifications, deployment and numbers of fire fighters, which regulations shall be predicated upon public safety for the purpose of preventing fires and allowing safe egress in the event of a fire. The jurisdiction shall not be obligated to provide fire fighters for this purpose.

903.3.6 Hose threads. Fire hose threads and fittings used in connection with *automatic sprinkler systems* shall be as ~~prescribed by the fire code official~~ National Standard hose threads.

903.3.7 Fire department connections. The location of fire department connections shall be approved by the fire code official. Fire department connections shall have 2½-inch (64 mm) hose connections. Fire department connections shall be located on the street side of the building, unobstructed, fully visible, and recognizable from the street or nearest point of fire department vehicle access or as otherwise approved by the fire code official.

905.8 Dry standpipes. Dry standpipes shall not be installed.

Exception: ~~Where subject to freezing and in accordance with NFPA 14.~~

905.12 Design pressure. Design pressure at the uppermost valve for a Class II standpipe system shall be 35 psi.

908.7 Carbon monoxide alarms. Group I-~~or~~R occupancies located in a building containing a fuel-burning appliance or in a building which has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2 of the *International Building Code*, or an enclosed parking garage ventilated in accordance with Section 404 of the *International Mechanical Code* shall not be considered an attached garage.

Exception: *Sleeping units or dwelling units* which do not themselves contain a fuel-burning appliance or have an attached garage, but which are located in a building with a fuel-burning appliance or an attached garage, need not be equipped with single-station carbon monoxide alarms provided that:

1. The *sleeping unit* or *dwelling unit* is located more than one story above or below any story which contains a fuel-burning appliance or an attached garage;
2. The *sleeping unit* or *dwelling unit* is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance or to an attached garage; and
3. The building is equipped with a common area carbon monoxide alarm system.

CHAPTER 11

CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS

1103.2 Emergency responder radio coverage in existing buildings. Existing buildings that do not have *approved* radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building, shall be equipped with such coverage according to one of the following:

1. Whenever an existing wired communication system cannot be repaired or is being replaced, or where not *approved* in accordance with Section 510.1, Exception 1.
2. Within a time frame established by the adopting authority.
3. In facilities where emergency responder radio coverage is required and such systems, components or equipment required could have a negative impact on the normal operations of that facility, the fire code official shall have the authority to accept an automatically activated emergency responder radio coverage system.

1103.7.6 Group R-2. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in existing Group R-2 occupancies more than three stories in height or with more than 16 *dwelling* or *sleeping units*.

Exceptions:

1. Where each living unit is separated from other contiguous living units by *fire barriers* having a *fire-resistance rating* of not less than 0.75 hour, and where each living unit has either its own independent *exit* or its own independent stairway or ramp discharging at grade.
2. A separate fire alarm system is not required in buildings that are equipped throughout with an *approved* supervised *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2 and having a local alarm to notify all occupants.
3. A fire alarm system is not required in buildings that do not have interior *corridors* serving *dwelling units* and are protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that *dwelling units* either have a *means of egress* door opening directly to an exterior exit access that leads directly to the *exits* or are served by open-ended *corridors* designed in accordance with Section 1026.6, Exception 4.
4. Condominiums, as defined by Chapter 82 of the Texas Property Code.
5. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units (or in any dwellings that do not exit into an interior corridor) unless rehabilitation work is performed in the building with a cost that is equal to or exceeds

twenty five percent (25%) of the market value of the building.

1103.7.6.1 Monitoring. The fire alarm system required by this section shall not be required to be monitored by a third party. This fire alarm system only requires pull stations that will produce a local audible alarm and activate in an on-site management office, if the property in which the building is located has an on-site management office.

1103.7.6.2 Construction documents. Construction documents for fire alarm systems shall be submitted for review and approval prior to system installation. Construction documents shall include but not be limited to the requirements of Section 907.1.1.

1103.8.1 Where required. Existing Group I-1 and R occupancies shall be provided with single-station alarms in accordance with Section 907.2.11, except as provided in Sections 1103.8.2 and 1103.8.3. After January 1, 2017, as a battery-operated single-station alarm is replaced, that smoke alarm shall be replaced with a tamper-resistant battery-operated single-station smoke alarm. Provided, however, nothing in this section shall require an owner to replace an operational battery-operated single-station smoke alarm. For the purposes of this provision, a tamper-resistant battery-operated single-station smoke alarm shall mean a sealed, single-station smoke alarm with a long-life lithium or similar battery.

Exceptions:

1. Where the code that was in effect at the time of construction required smoke alarms and smoke alarms complying with those requirements are already provided.
2. Where smoke alarms have been installed in occupancies and dwellings that were not required to have them at the time of construction, additional smoke alarms shall not be required provided that the existing smoke alarms comply with requirements that were in effect at the time of installation.
3. Where smoke detectors connected to a fire alarm system have been installed as a substitute for smoke alarms.

1103.8.1.1 Group R owner and tenant duties. The owner or manager of a residential building shall ensure that each smoke detector required by Section 1103.8.1 are installed and operational when the tenant first occupies the unit. After the tenant takes possession of the unit, it shall be the duty of the tenant to regularly test each smoke detector in the unit, and the tenant shall notify the owner immediately in writing of any problem, defect, malfunction or failure of any detector in the unit. Upon notification by the tenant, or upon notification by an inspector of the jurisdiction, that a smoke detector in the residential unit is not in proper working order, the owner shall have the detector repaired or replaced.

Exception: The provisions of this section do not apply to dwelling units governed by Subchapter F of Chapter 92 of the *Texas Property Code*.

1103.9 Carbon monoxide alarms. Existing Group I-~~or~~R occupancies located in a building containing a fuel-burning appliance or a building which has an attached garage shall be

equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034, and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in the ~~International Building Code~~, or an enclosed parking garage ventilated in accordance with Section 404 of the ~~International Mechanical Code~~ shall not be deemed to be an attached garage.

Exception: *Sleeping units or dwelling units* which do not themselves contain a fuel-burning appliance or have an attached garage, but which are located in a building with a fuel-burning appliance or an attached garage, need not be equipped with single-station carbon monoxide alarms provided that:

1. The *sleeping unit* or *dwelling unit* is located more than one story above or below any story that contains a fuel-burning appliance or an attached garage;
2. The *sleeping unit* or *dwelling unit* is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance or to an attached garage; and
3. The building is provided with a common area carbon monoxide alarm system.

CHAPTER 23

MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES

2303.2 Emergency disconnect switches. An *approved*, clearly identified and readily accessible emergency disconnect switch shall be provided at an *approved* location to stop the transfer of fuel to the fuel dispensers in the event of a fuel spill or other emergency. An emergency disconnect switch for exterior fuel dispensers shall be located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from, the fuel dispensers. The sign lettering shall be not less than 2 inches (50 mm) in height on a background of contrasting color so that the lettering is clearly visible. Signs shall be provided in *approved* locations and distinctly labeled as: EMERGENCY FUEL SHUTOFF. For interior fuel-dispensing operations, the emergency disconnect switch shall be installed at an *approved* location. Such devices shall be distinctly *labeled*. Signs shall be provided in *approved* locations.

2306.2.3 Above-ground tanks located outside, ~~above-grade~~. Above-ground tanks shall not be used for the storage of Class I, II or III liquid motor fuels, except as provided by this section and Houston Fire Department LSB Standard No. 13, "Outside Protected Aboveground Tanks for Generators and Fire Pumps."

1. Above-ground tanks used for outside, above-grade storage of Class I liquids shall be *listed* and *labeled* as protected above-ground tanks in accordance with UL 2087 and shall be in accordance with Chapter 57. Such tanks shall be located in accordance with Table 2306.2.3.
2. Above-ground tanks used for outside, above-grade storage of Class II or IIIA liquids shall be *listed* and *labeled* as protected above-ground tanks in accordance with UL 2085 *approved* and shall be installed in accordance with Chapter 57. Tank locations shall be in accordance with Table 2306.2.3.

Exception: Other above-ground tanks that comply with Chapter 57 where *approved* by the *fire code official*.

3. Tanks containing fuels shall not exceed 12,000 gallons (45 420 L) in individual capacity or 48,000 gallons (181 680 L) in aggregate capacity. Installations with the maximum allowable aggregate capacity shall be separated from other such installations by not less than 100 feet (30 480 mm).
4. Tanks located at farms, construction projects, or rural areas shall comply with Section 5706.2.
5. Above-ground tanks used for outside above-grade storage of Class IIIB liquid motor fuel shall be *listed* and *labeled* in accordance with UL 142 or *listed* and *labeled* as protected above-ground tanks in accordance with UL 2085 and shall be installed in accordance with Chapter 57. Tank locations shall be in accordance with Table 2306.2.3.

CHAPTER 24

FLAMMABLE FINISHES

2404.2 Location of spray-finishing operations. Spray finishing operations conducted in buildings used for Group A, E, I or R occupancies shall be located in a spray room protected with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 and separated vertically and horizontally from other areas in accordance with the ~~*International Building Code*~~. In other occupancies, spray-finishing operations shall be conducted in a spray room, spray booth or spraying space *approved* for such use. Outside spraying or spray-finishing operations in basements or sub-basements are prohibited except when *approved* by the *fire code official*.

Exceptions:

1. Automobile undercoating spray operations and spray-on automotive lining operations conducted in areas with *approved* natural or mechanical ventilation shall be exempt from the provisions of Section 2404 when *approved* and where utilizing Class IIIA or IIIB *combustible liquids*.
2. In buildings other than Group A, E, I or R occupancies, *approved* limited spraying space in accordance with Section 2404.9.
3. Resin application areas used for manufacturing of reinforced plastics complying with Section 2409 shall not be required to be located in a spray room, spray booth or spraying space.

CHAPTER 31

TENTS AND OTHER MEMBRANE STRUCTURES

3103.2 Approval required. Tents, canopies, and membrane structures having an area in excess of ~~400~~ 1,200 square feet (~~37~~ 112 m²), or an aggregate area in excess of 1,200 square feet (112 m²), shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the *fire code official*.

Exceptions:

1. ~~_____~~ Tents used exclusively for recreational camping purposes.
2. ~~_____~~ Tents open on all sides which comply with all of the following:
 - 2.1. ~~_____~~ Individual tents having a maximum size of ~~700~~ square feet (~~65~~ m²).
 - 2.2. ~~_____~~ The aggregate area of multiple tents placed side by side without a fire break clearance of ~~12~~ feet (~~3658~~ mm), not exceeding ~~700~~ square feet (~~65~~ m²) total.
 - 2.3. ~~_____~~ A minimum clearance of ~~12~~ feet (~~3658~~ mm) to all structures and other tents.

3104.8 Fireworks. Fireworks shall not be used within 100 feet (30 480 mm) of tents, canopies or membrane structures except as approved by the fire code official.

CHAPTER 32

HIGH-PILED COMBUSTIBLE STORAGE

3206.6 Building access. Where building access is required by Table 3206.2, fire apparatus roads in accordance with Section 503 shall be provided within 150 feet (45 720 mm) of all portions of the *exterior* walls of buildings used for high-piled storage.

Exceptions:

1. Where fire apparatus access roads cannot be installed because of topography, railways, waterways, non-negotiable grades or other similar conditions, the *fire code official* is authorized to require additional fire protection.
2. The *fire code official* may authorize deviations from the provisions of this section to allow fire apparatus access roads to front not less than 60 percent of the perimeter of the entire building for new buildings and 50 percent of the perimeter of the entire building for existing buildings, provided that the building is completely protected with an *approved* automatic fire sprinkler system, access doors compliant with Section 3206.6.1 are provided to eligible exterior wall spaces that are not fronting the fire apparatus access roads, and the building is provided with either:
 - 2.1 An *approved* wet firefighting system that utilizes 2½-inch (64 mm) discharge hose connections installed adjacent to the strike side of each fire department access door not fronting an access road and is capable of delivering a minimum of 500 gallons per minute (1893 L/m) through the 2½-inch (64 mm) discharge connections, in accordance with NFPA standards; or
 - 2.2 An *approved* dry firefighting system that incorporates each of the following:
 - 2.2.1 2½-inch (64 mm) discharge hose connections installed adjacent to the strike side of each fire department access door not fronting an access road.
 - 2.2.2 Minimum 4-inch (102 mm) iron pipe size (IPS) pipe for up to and including 1,000 feet (305 m) in length, or 6-inch (152 mm) IPS pipe for over 1,000 feet (305 m) in length.
 - 2.2.3. Fire department connection(s) (FDC) installed at each *approved* location, identified by signage stating: “DRY PIPE HOSE SYSTEM” installed on or immediately adjacent to each FDC. Signs shall be permanent, durable and reflective in nature with letters not less than 2 inches (50 mm) in height and legible.

3206.6.1.4 Marking of access doors. Firefighter access doors shall be labeled with “HFD” on the exterior in the top left-hand corner. The letters shall be not less

than 4 inches (100 mm) in height on a contrasting background. Lettering shall be legible, durable and reflective in nature.

CHAPTER 33

FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

3304.2 Waste disposal. Combustible debris shall not be accumulated within buildings. Combustible debris, rubbish and waste material shall be removed from buildings at the end of each shift of work. Combustible debris, rubbish and waste material shall not be allowed to accumulate around or overflow from dumpsters. Combustible debris, rubbish and waste material shall not be disposed of by burning on the site unless approved. Combustible waste storage dumpsters shall be used and maintained in accordance with Section 304.

3317.1.1 Permits. Permits are required for the use of asphalt kettles and for torching operations. See Section 105.6.

3317.4 Torches and other flame-producing devices. Use of torches or other flame-producing devices for application of roofing membranes is prohibited.

Exception: When approved by the fire code official, roofing operations shall be conducted in accordance with Houston Fire Department LSB Standard No. 11, "Roofing Operations."

CHAPTER 35

WELDING AND OTHER HOT WORK

3503.7 Roofing operations utilizing flame-producing devices. Use of torches or other flame-producing devices for application of roofing membranes is prohibited. See Section 3317.4

Exception: When *approved* by the *fire code official*, roofing operations shall be conducted in accordance with Houston Fire Department LSB Standard No. 11, "Roofing Operations."

Part V—Hazardous Materials

CHAPTER 56 EXPLOSIVES AND FIREWORKS

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling ~~or~~ and use of fireworks are prohibited.

Exceptions:

1. Storage and handling of fireworks as allowed in Section 5604.
2. ~~Manufacture, assembly and testing of fireworks as allowed in Section 5605.~~
3. ~~The use of fireworks for fireworks display as allowed in Section 5608.~~
4. ~~The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided such fireworks comply with CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR Parts 100-185, for consumer fireworks.~~
3. Fireworks being transported in international, intrastate, or interstate commerce through the jurisdiction between points of origin and destination outside of the jurisdiction in accordance with all applicable municipal or state laws, ordinances, and regulations, provided the fireworks comply with federal regulations CPSC 16 CFR Parts 1500–1507, and DOTn 49 Parts 100–178, for consumer fireworks. The provisions of this exception shall extend only to bona fide commercial transportation and distribution of fireworks in commercial quantities among manufacturers, wholesalers and dealers. Transportation shall be by way of established hazardous materials transportation routes through and around the jurisdiction.

5601.1.3.1 Seizure of fireworks. The presence of any fireworks within this jurisdiction in violation of this chapter is hereby declared to be a common and public nuisance. The *fire code official* is directed and required to seize and cause to be safely destroyed any fireworks found in violation of this code. Any member of the Life Safety and Fire Prevention Bureau of the Houston Fire Department or any police officer of the jurisdiction is empowered to stop the transportation of and detain any fireworks found being transported illegally.

CHAPTER 57

FLAMMABLE AND COMBUSTIBLE LIQUIDS

5703.6.9.2 Swing joints. *Approved swing joints shall be installed on all underground liquid, vapor and vent piping where the piping leaves the dispensing island or location and just before where the pipe connects to any underground tank fittings. Swing joints shall also be installed on piping that is rigidly supported or connected between fixed points and that is subject to thermal expansion or differential movements. No pipe nipple used in connection with a double swing joint or where piping joins tanks shall exceed 12 inches (300 mm) in length.*

Exception: *Listed flexible connectors are allowed in lieu of swing joints when approved by the fire code official.*

5704.2.9.6.1 Location where above-ground tanks are prohibited. *Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited ~~(see Section 3 of the Sample Legislation for Adoption of the International Fire Code on page xxi)~~ in accordance with Section 203, unless approved by the fire code official. See Houston Fire Department LSB Standard No. 13, "Outside Protected Aboveground Tanks for Generators and Fire Pumps."*

5704.2.12.3 Existing tanks and testing. *The fire code official is authorized to require leak-testing for existing underground storage tanks and piping when there is reasonable cause to believe that a leak exists. The method of testing shall be approved by the fire code official.*

5704.3.4.4 Special provisions for liquids used ~~Liquids for maintenance and operation of equipment.~~ *In all occupancies, quantities of flammable and combustible liquids in excess of 10 gallons (38 L) used for maintenance purposes and the operation of equipment shall be stored in liquid storage cabinets in accordance with Section 5704.3.2. Quantities not exceeding 10 gallons (38 L) are allowed to be stored outside of a cabinet when in approved containers ~~safety cans~~ located in private garages or other approved locations.*

In other than Group H Occupancies, quantities of flammable and combustible liquids used for demonstration, treatment and laboratory work exceeding 10 gallons (38 L) shall be stored in storage cabinets in accordance with Section 5704.3.2. Quantities not exceeding 10 gallons (38 L) shall be stored in approved safety cans located in approved locations.

5704.4.8 Empty containers and tank storage. *The storage of empty tanks and containers previously used for the storage of flammable or combustible liquids, unless*

free from explosive vapors, shall be stored as required for filled containers and tanks. Tanks and containers when emptied shall have the covers or plugs immediately replaced in openings. Empty tanks and containers that have been rendered free of explosive vapors shall be visibly marked as "EMPTY," or the area where containers are stored shall be marked with an *approved* sign indicating "EMPTY CONTAINERS." Containers marked as "EMPTY" shall be separated from filled containers.

5706.2.4.4 Location where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks is prohibited within the limits established by law as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Legislation for Adoption of the *International Fire Code* on page xxi) in accordance with Section 203, unless *approved* by the *fire code official*. See Houston Fire Department LSB Standard No. 13, "Outside Protected Aboveground Tanks for Generators and Fire Pumps."

CHAPTER 61

LIQUEFIED PETROLEUM GASES

6101.2 Permits. Permits shall be required as set forth in Sections 105.6 and 105.7 to store, use, handle or dispense LP-gas, or to install or maintain any LP-gas container in excess of 125 gallons (473 L) aggregate water capacity. A permit is required to use any amount of LP-gas for demonstrations, public exhibitions, portable heating (excluding R occupancies) or temporary commercial cooking or on mobile food units. As used in this chapter, the term *mobile food unit* shall have the meaning set forth in Chapter 20 of the *City Code*.

Distributors shall not fill an LP-gas container for which a permit is required unless a permit for installation has been issued for that location by the *fire code official*.

6101.3 Construction documents. Where a single LP-gas container is more than 2,000-500 gallons (7570-1893 L) in water capacity or the aggregate capacity of LP-gas containers is more than 4,000-2000 gallons (15-140-7570 L), the installer shall submit *construction documents* for such installation.

6103.2.1 Portable containers. Portable LP-gas containers, as defined in NFPA 58, shall not be used in or on buildings except as specified in NFPA 58, ~~and~~ Sections 6103.2.1.1 through 6103.2.1.78, and Houston Fire Department LSB Standards No. 10, "LP-Gas and Open Flame Use" and No.11, "Roofing Operations."

6103.2.1.2 Construction and temporary heating. Portable LP-gas containers are allowed to be used in buildings or areas of buildings undergoing construction or for temporary heating as set forth in Sections 6.19.4, 6.19.5 and 6.19.8 of NFPA 58 when attached to approved torches. The aggregate capacity of LP-gas containers inside a building shall not exceed 250 pounds (113 kg) water capacity. Containers connected for use shall be promptly removed from the building when the torch is not in use. Containers not connected for use shall be stored outside the building in accordance with Table 6104.3. Portable LP-gas containers shall not be attached to temporary or portable heating appliances as set forth in Sections 6.19.4, 6.19.5 and 6.19.8 of NFPA 58.

6103.2.1.3 Group F occupancies. In Group F occupancies, portable LP-gas containers are allowed to be used to supply quantities necessary for processing, research or experimentation. The aggregate capacity of LP-gas containers inside a building shall not exceed 250 pounds (113 kg) water capacity. Containers connected for use shall not be stored inside a building or structure unless stored within a room constructed in accordance with the requirements of Section 6109.10. Containers not connected for use shall be stored outside the building in accordance with Table 6104.3.

6103.2.1.7 Use for food preparation inside buildings. Where approved, listed LP-gas commercial food service appliances are allowed to be used for food-

preparation within restaurants and in attended commercial food-catering operations in accordance with the *International Fuel Gas Code*, the *International Mechanical Code* and NFPA 58. LP-gas containers shall not be used for residential or commercial food preparation inside of a building or structure.

Exception: When approved, listed LP-gas commercial food service appliances are allowed to be used for food preparation within restaurants and in attended commercial food catering operations, provided that an individual appliance shall not have more than two 10-oz (0.3 L), non-refillable LP-gas containers connected directly to the appliance any time. Containers shall comply with nationally recognized standards, have a maximum water capacity of 1.08 lbs (0.5 kg) per container and shall not be manifolded. The appliance's fuel containers shall be an integral part of the listed commercial food service device and shall be connected without the use of a rubber hose. The aggregate amount of LP-gas used or stored shall not exceed 60 lbs (27 kg) LP-gas capacity. In educational occupancies, portable LP-gas containers shall not be used or stored except as permitted by Sections 6103.2.1.5 and 6103.2.1.6.

6103.2.1.8 Use for food preparation outside buildings. When approved, LP-gas containers may be used for commercial cooking outside buildings or in the operation of a mobile food unit in accordance with Houston Fire Department LSB Standard No. 10, "LP-Gas and Open Flame Use." For permits, see Section 105.6.

6103.2.2 Industrial vehicles and floor maintenance machines. LP-gas containers on industrial vehicles and floor maintenance machines shall comply with Sections 11.13 and 11.14 of NFPA 58. Industrial lift trucks stored inside of buildings shall be kept in an approved area. LP-gas containers not attached for use shall be stored outside of the building in accordance with Table 6104.3.

6104.2 Maximum capacity within established limits. Within the limits established by law in Section 203 restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 L) (see Section 3 of the Sample Legislation for Adoption of the *International Fire Code* on page xxi).

Exception: In particular installations, this capacity limit shall be determined by the fire code official, after consideration of special features such as topographical conditions, nature of occupancy, and proximity to buildings, capacity of proposed LP-gas containers, degree of fire protection to be provided and capabilities of the local fire department. See also Houston Fire Department LSB Standard No. 10, "LP-Gas and Open Flame Use."

SECTION 6112 **MOBILE FOOD UNITS**

6112.1 General. No permit for the use of LP-gas in connection with a mobile food unit shall be issued unless the operator provides to the fire department: (1) proof of a current mobile food unit medallion issued by the health officer, (2) a detailed description of the means and methods by which the operator will secure the LP-gas container against shifting (bracing) and will protect the LP-gas container against damage (blocking) by third parties, which means and methods are

approved by the fire department, and (3) pays the applicable administrative and permit fees stated in the city fee schedule. In addition to complying with the applicable requirements of this chapter, the operator of a mobile food unit in, on or in conjunction with which LP-gas is used to cook or otherwise prepare food shall obtain from the fire department a permit for the use of LP-gas and LP-gas equipment for each mobile food unit and shall make the permit available for inspection and/or copying upon the request of any peace officer, *fire code official*, or health officer.

6112.2 Filling. Distributors shall not fill an LP-gas container for which a permit is required unless a permit for installation has been issued for that location by the *fire code official*.

6112.3 Spacing. The operator of a mobile food unit in, on, or in conjunction with which any amount of LP-gas is used to prepare food shall not operate such unit within 60 feet of another mobile food unit.

6112.4 Transport. The *fire code official* is authorized and directed to take action as may be reasonably necessary to protect the public health, safety and welfare where any operator of a mobile food unit engaged in the transportation of LP-gas within the city is suspected of violating any state or federal laws, rules and regulations, as amended from time to time, specifically Title 49, Part 173.6 of the Code of Federal Regulations.

Part VI – Referenced Standards

**CHAPTER 80
REFERENCED STANDARDS**

NFPA

<u>Standard reference number</u>	<u>Title</u>	<u>Referenced in code section number</u>
11A – 99	Medium- and High-expansion Foam Systems.....	904.7, 5704.2.9.2.2

Part VII – Appendices

APPENDIX A BOARD OF APPEALS

~~The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.~~

~~**A101.2 Membership Organization.** The membership of the board shall consist of five voting members having the qualifications established by this section. Members shall be nominated by the *fire code official* or the chief administrative officer of the jurisdiction, subject to confirmation by a majority vote of the governing body. Members shall serve without remuneration or compensation, and shall be removed from office prior to the end of their appointed terms only for cause. There is hereby created a Board of Appeals, consisting of 11 members. Five members at a meeting shall constitute a quorum. The positions on the board shall be filled as follows:~~

~~Position 1. By a well-respected citizen of the jurisdiction.~~

~~Position 2. By the *fire code official* or his duly authorized representative, who shall provide a board secretary.~~

~~Position 3. By the fire chief or his duly authorized representative.~~

~~Position 4. By the director of the jurisdictions department of public works and engineering (the "PWE director") or his duly authorized representative.~~

~~Position 5. By a well-respected citizen of the jurisdiction, who shall serve as chairman.~~

~~Position 6. By a professional engineer registered as such under the laws of Texas, who shall be actively engaged in the practice as a fire protection engineer.~~

~~Position 7. By a person who is a member of the Building Owners and Managers Association of Houston.~~

~~Position 8. By a person who is engaged or employed in the chemical or petroleum industry.~~

~~Position 9. By a person who is a member of the Houston Apartment Association.~~

~~Position 10. By a person who is fire protection contractor.~~

~~Position 11. By a person who is an architect registered by the State of Texas.~~

~~The legal department shall have an attorney present for each board meeting, who shall advise the board on legal matters relative to topics under board jurisdiction.~~

~~The fire chief, the *fire code official*, and the PWE director may each designate in writing a person under his supervision to act in his place as his duly authorized representative. The representative designation shall be filed in the minutes of the board.~~

~~With the exception of the fire chief, the *fire code official*, and the PWE director, members of the board shall be appointed by the mayor, subject to confirmation by the city council, and~~

shall serve for a term of two years. The terms of the appointees for Positions 1, 6, 7, and 9 commence on January 1 of each odd-numbered year and end on December 31 of the following even-numbered year. The terms of the appointees for Positions 5, 8, 10 and 11 commence on January 1 of each even-numbered year and end on December 31 of the following odd-numbered year. Members shall hold over until a successor is appointed and qualified.

Whenever any position on the board becomes vacant by reason of death, resignation or removal, the vacancy shall be filled for the unexpired term of the member being replaced. Should a vacancy occur on the board, the mayor shall appoint, subject to confirmation by the city council, another qualified person to serve the unexpired term of the vacancy. Any member of the board may be removed at any time by the mayor without consent of the city council.

~~**A101.2.1 Design professional.** One member shall be a practicing design professional registered in the practice of engineering or architecture in the state in which the board is established.~~

~~**A101.2.2 Fire protection engineering professional.** One member shall be a qualified engineer, technologist, technician or safety professional trained in fire protection engineering, fire science or fire technology. Qualified representatives in this category shall include fire protection contractors and certified technicians engaged in *fire protection system* design.~~

~~**A101.2.3 Industrial safety professional.** One member shall be a registered industrial or chemical engineer, certified hygienist, certified safety professional, certified hazardous materials manager or comparably qualified specialist experienced in chemical process safety or industrial safety.~~

~~**A101.2.4 General contractor.** One member shall be a contractor regularly engaged in the construction, *alteration*, maintenance, repair or remodeling of buildings or building services and systems regulated by the code.~~

~~**A101.2.5 General industry or business representative.** One member shall be a representative of business or industry not represented by a member from one of the other categories of board members described above.~~

~~**A101.3 Per Diem Terms of office.** Members shall be appointed for terms of four years. No member shall be reappointed to serve more than two consecutive full terms. Each member of the board shall be compensated at the rate of \$50.00 per diem for each meeting the member attends at which a quorum is present; provided, however, no member shall be paid for more than three meetings in any one month. A jurisdiction employee who is a member of the board shall be paid only for those meetings that the employee attends at which a quorum is present and that are not held during, or that continue beyond, the employee's regular working hours.~~

~~**A101.3.1 Initial appointments.** Of the members first appointed, two shall be appointed for a term of 1 year, two for a term of 2 years, one for a term of 3 years.~~

~~**A101.3.2 Vacancies.** Vacancies shall be filled for an unexpired term in the manner in which original appointments are required to be made. Members appointed to fill a vacancy in an unexpired term shall be eligible for reappointment to two full terms.~~

~~**A101.3.3 Removal from office.** Members shall be removed from office prior to the end of their terms only for cause. Continued absence of any member from regular meetings of the board shall, at the discretion of the applicable governing body, render any such member liable to immediate removal from office.~~

~~**A101.4 Duties of the Board of Appeals. Quorum.** Three members of the board shall constitute a quorum. In varying the application of any provisions of this code or in modifying an~~

~~order of the *fire code official*, affirmative votes of the majority present, but not less than three, shall be required. The duties of the board shall be to hear appeals from decisions of the *fire code official* as to the suitability of alternate materials and types of construction and to provide for reasonable interpretations of the provisions of this code. In cooperation with the *fire code official*, the board shall submit an annual report to the mayor and the city council containing a summary of the actions of the board during the preceding year. The board may make recommendations to the mayor for amendments to this code.~~

~~**A101.5 Procedures. Secretary of board.** The *fire code official* shall act as secretary of the board and shall keep a detailed record of all its proceedings, which shall set forth the reasons for its decisions, the vote of each member, the absence of a member and any failure of a member to vote. The board shall adopt reasonable rules and regulations for conduct of its duties. Petitions for hearings before the board shall be in writing, filed with the *fire code official*, and heard by the board within 30 days after the date that the petition was filed. A majority of the members present, constituting a quorum, shall conduct business of the board. All decisions and findings shall be rendered in writing with copies to the *fire code official*, petitioner and all other parties to the hearing. Subject to compliance with Rule 12 of the city council's rules of procedure (see Section 2-2 of the *City Code*), any interested person who is aggrieved by a decision of the board may appeal to the city council, provided that written notice to the city council for the appeal is delivered to the city secretary within 10 days after the date the board renders the decision. All appeals to the city council are subject to Rule 12 of the city council's rules of procedure. Parties wishing to preserve their right of appeal must comply with Rule 12.~~

~~**A101.6 Posting of agenda. Legal counsel.** The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties. The board shall prepare and post an agenda in compliance with the Texas Open Meetings Law.~~

~~**A101.7 Meetings.** The board shall meet at regular intervals, to be determined by the chairman. In any event, the board shall meet within 10 days after notice of appeal has been received.~~

~~**A101.8 Conflict of interest.** Members with a material or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.~~

~~**A101.9 Decisions.** Every decision shall be promptly filed in writing in the office of the *fire code official* and shall be open to public inspection. A certified copy shall be sent by mail or otherwise to the appellant, and a copy shall be kept publicly posted in the office of the *fire code official* for two weeks after filing.~~

~~**A101.10 Procedures.** The board shall be operated in accordance with the Administrative Procedures Act of the state in which it is established or shall establish rules and regulations for its own procedure not inconsistent with the provisions of this code and applicable state law.~~

APPENDIX D

FIRE APPARATUS ACCESS ROADS

~~The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.~~

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of this code, as well as Houston Fire Department LSB Standards No. 03, "Fire Department Access" and No. 04, "Access Control Gates."

D103.5 Fire apparatus access road gates. For fire apparatus access road gate requirements refer to Houston Fire Department LSB Standard No. 04, "Access Control Gates." ~~Gates securing the fire apparatus access roads shall comply with all of the following criteria:~~

- ~~1. The minimum gate width shall be 20 feet (6096 mm).~~
- ~~2. Gates shall be of the swinging or sliding type.~~
- ~~3. Construction of gates shall be of materials that allow manual operation by one person.~~
- ~~4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.~~
- ~~5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.~~
- ~~6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location.~~
- ~~7. Locking device specifications shall be submitted for approval by the fire code official.~~
- ~~8. Electric gate operators, where provided, shall be listed in accordance with UL 325.~~
- ~~9. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.~~

D103.6 Signs. For fire apparatus access road/fire lane sign requirements, refer to Houston Fire Department LSB Standard No. 03, "Fire Department Access." ~~Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.~~

APPENDIX H

{EDITORIAL NOTE: DELETE ENTIRE TEXT OF APPENDIX H AND REPLACE WITH THE FOLLOWING TEXT.}

STAIRWAY IDENTIFICATION

SECTION H101

GENERAL

H101.1 Signs in stairways. Standardized signs shall be provided in buildings that are four or more stories in height. The signs shall be installed in stairways to identify each stair, floor level number, roof access information, the upper and lower termination of the stairway, and reentry information. Signs within stairways shall be located above the floor landing in a position that is readily visible when the door is in the open or closed position and in accordance with the Texas Accessibility Standards. See also Chapter 10.

SECTION H102

OCCUPANCY SIDE OF STAIRWAY DOORS

H102.1 Signs on occupancy (tenant) side of stairway doors. Standardized identification signs shall be located at each level on the occupancy (tenant) side of all enclosed stairways, regardless of the height of the building.

H102.2 Details for signs installed on the occupancy (tenant) side of doors.

H102.2.1 Stairway identification. Stairway identification signs shall have an alphabetic letter or name identification. The name identification shall precede the word "STAIR" and any alphabetic letter shall follow the word "STAIR", such as "STAIR A" or "WEST STAIR," to be placed at the top of the sign in 2-inch (50 mm) high block lettering. Numerical and written numbers shall not be used for stairwell identification. See Section H105.

H102.2.2 Reentry. Where stairway doors are locked from the stairway side to prohibit reentry to a floor, "NO REENTRY" shall be placed at the bottom of the sign in 1-inch (25 mm) high block lettering.

SECTION H103

SIGNS INSTALLED IN STAIRWAYS

H103.1 Stairway identification. Stairway identification signs shall have an alphabetic letter or name identification. The name identification shall precede the word "STAIR" and any alphabetic letter shall follow the word "STAIR", such as "STAIR A" or "WEST STAIR," to be placed at the top of the sign in 1-inch (25 mm) high block lettering. Numerical and written numbers shall not be used for stairwell identification. See Section H105.

H103.2 Roof access. The roof access condition, such as ROOF ACCESS LOCKED or NO ROOF ACCESS, shall be placed under the stairway identification in 1-inch (25 mm) high block lettering.

H103.3 Floor level number. The floor level number shall be placed in the middle of the sign in 2-inch (50 mm) high block lettering. Mezzanine levels shall have the letter "M" preceding the

floor number. Basement levels shall have the letter “B” preceding the floor number. No other designation for mezzanine and basement levels shall be used.

H103.4 Lower and upper terminus. The lower and upper terminus designation of the stairway shall be placed under the floor number in 1-inch (25 mm) high block lettering.

H103.5 Reentry. Where stairway doors are locked from the stairway side to prohibit reentry to a floor, “NO REENTRY” shall be placed under the lower and upper terminus designation in 1-inch (25 mm) high block lettering. Additionally, the nearest floor above and below where a person can reenter from the stairway shall be placed at the bottom of the sign in 1-inch (25 mm) high block lettering.

SECTION H104 **COMPLIANCE WITH TEXAS ACCESSIBILITY STANDARDS (TAS)**

H104.1 Raised and braille characters/character proportions. Stairway identification, floor level number and reentry information on signs shall comply with TAS requirements for raised and Braille characters. All other letters and numbers on the sign shall comply with TAS requirements for character proportions.

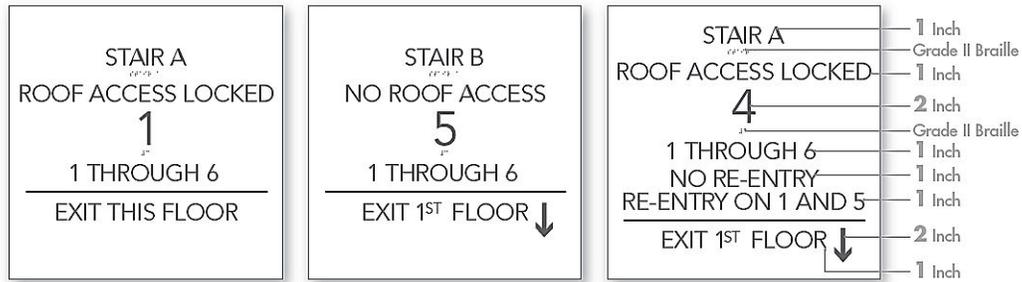
H104.2 Finish and contrast. All characters and backgrounds of signs shall comply with TAS requirements for finish and contrast.

H104.3 Mounting location and height. All signs shall comply with TAS requirements for mounting location and height.

SECTION H105 **SIGN EXAMPLES**

{On following pages.}

STAIRWELL INTERIOR SIGN TYPE



FLOOR OF EXIT DISCHARGE

UNRESTRICTED RE-ENTRY

RESTRICTED RE-ENTRY

Front Elevation

OPTION A
SCALE: 3"=1'

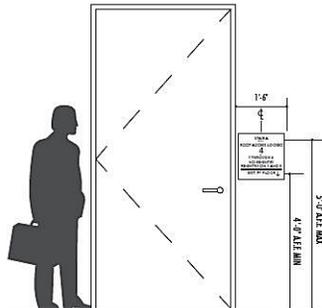
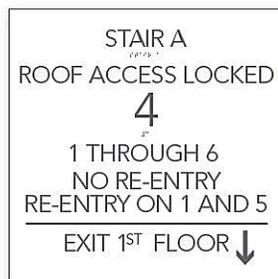
Front Elevation

OPTION B
SCALE: 3"=1'

Front Elevation

OPTION C
SCALE: 3"=1'

STAIRWELL INTERIOR SIGN TYPE



RESTRICTED RE-ENTRY

MOUNTING PLACEMENT

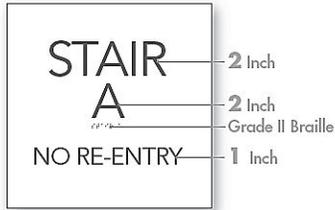
Front Elevation

OPTION C
SCALE: 3"=1'

Location Elevation (2012 TAS Code Mounting Height)

OPTION C
SCALE: 1/2"=1'

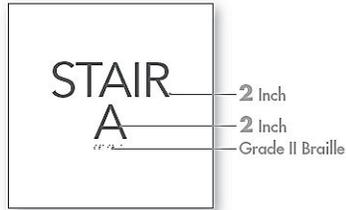
OCCUPANCY SIDE STAIR ID



RESTRICTED RE-ENTRY

Front Elevation

OPTION A
SCALE: 3"=1'



UNRESTRICTED RE-ENTRY

Front Elevation

OPTION B
SCALE: 3"=1'

APPENDIX I

{EDITORIAL NOTE: DELETE ENTIRE TEXT OF APPENDIX I AND REPLACE WITH THE FOLLOWING TEXT.}

AUTOMATIC SPRINKLER SYSTEMS, FIRE ALARM AND DETECTION SYSTEMS IN EXISTING NON HIGH-RISE ATRIUM BUILDINGS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION I101 GENERAL

I101.1 Purpose. The purpose of this appendix chapter is to provide a reasonable degree of safety to persons occupying existing atrium buildings by providing for the installation of automatic sprinkler systems or fire alarm and detection systems in buildings that do not already have such systems in compliance with this appendix.

I101.2 Application. This appendix chapter shall apply to any atrium building annexed into the corporate limits.

Exception: The provision of this appendix shall not apply to the following:

1. Atrium buildings built in accordance with Section 1717 as added to the *City of Houston Building Code* by Ordinance 81-879 or subsequent versions of that Section.
2. Existing high-rise buildings, as defined in Appendix J.

SECTION I102 DEFINITION

I102.1 Definition. The following term shall, for the purposes of this appendix, have the meaning ascribed in this section.

ATRIUM. An opening connecting three or more stories other than enclosed stairways, elevators, hoistways, escalators, plumbing, electrical, air-conditioning or other equipment, which is closed at the top and not defined as a mall. Stories, as used in this definition, do not include balconies within assembly groups or mezzanines that comply with Section 505 of the *Building Code*.

SECTION I103 FIRE PROTECTION AND DETECTION SYSTEMS

I103.1 Required. All existing atrium buildings shall be equipped with one of the following:

1. An automatic and manual fire alarm system in accordance with NFPA 72 and smoke detectors installed in every room exceeding 40 square feet as well as all common areas according to the compliance schedule set forth in Section I104.
2. An automatic sprinkler system with total coverage throughout the building in accordance with NFPA 13 and with the capability to alarm all occupants

throughout the building using alarm notification appliances as required by Section 907. Such sprinkler system shall be installed according to the compliance schedule set forth in Section I104.

SECTION I104 **COMPLIANCE SCHEDULE**

I104.1 Letter of intent. Within six months after the date of annexation of the building into the jurisdiction, owners of existing atrium buildings shall provide the fire code official with a letter expressing the owner's intent to comply with this section.

I104.2 Compliance check points. Except as provided by this section, owners of existing atrium buildings shall comply with the following schedule:

1. If the owner chooses to install an alarm system and smoke detectors in accordance with subsection 1 of Section I103.1, the total square footage of the building shall be equipped with an operational automatic and manual fire alarm system and smoke detectors within two years after the date of annexation into the jurisdiction.
2. If the owner chooses to install a sprinkler system in accordance with subsection 2 of Section I103.1:
 - 2.1 Fifty percent of the building shall be equipped with an operational automatic sprinkler system with the capability to alarm all occupants throughout the building within five years after the date of annexation of the building into the jurisdiction.
 - 2.2 The total square footage of the building shall be equipped with an operational automatic sprinkler system with the capability to alarm all occupants throughout the building within seven years after the date of annexation of the building into the jurisdiction.

APPENDIX J

{EDITORIAL NOTE: DELETE ENTIRE TEXT OF APPENDIX J AND REPLACE WITH THE FOLLOWING TEXT.}

AUTOMATIC SPRINKLER SYSTEMS IN EXISTING HIGH-RISE BUILDINGS

SECTION J101 **GENERAL**

J101.1 Purpose. The purpose of this appendix chapter is to provide a reasonable degree of safety to persons occupying existing high-rise buildings by providing for installation of automatic sprinkler systems in such buildings that do not already have such systems.

J101.2 Application. This appendix chapter shall apply to and the term "existing high-rise building" shall be construed to mean any high-rise building existing within the corporate limits of the city on December 31, 2005, and any high-rise building annexed into the corporate limits after that date.

Exceptions: The provisions of this appendix shall not apply to the following:

1. Airport traffic control towers in accordance with Sections 412 and 907.2.22 of the *Building Code*.
2. Open parking garages in accordance with Section 406.5 of the *Building Code*.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303 of the *Building Code*.
4. Low-hazard special industrial occupancies in accordance with Section 503.1.1 of the *Building Code*.
5. Buildings with an occupancy in Group H in accordance with Section 415 of the *Building Code*.
6. Individually-owned individual dwelling units in high-rise buildings.

SECTION J102 **DEFINITION**

J102.1 Definition. The following term shall, for the purposes of this appendix, have the meaning ascribed in this section.

HIGH-RISE BUILDING. A building of any type of construction that has floors that are used for human occupancy located more than 75 feet above grade plane, as measured from the top of the floor surface.

SECTION J103 **AUTOMATIC SPRINKLER SYSTEMS**

J103.1 Required. All existing high-rise buildings shall be equipped with an automatic sprinkler system in accordance with NFPA 13 according to the compliance schedule set forth in Section J104.

SECTION J104
COMPLIANCE SCHEDULE

J104.1 Letter of Intent. On or before December 31, 2006, or within one year after the date of annexation of the building into the jurisdiction, owners of existing high-rise buildings shall provide the *fire code official* with a letter expressing the owner's intent to comply with this section.

J104.2 Compliance check points. Except as provided by this section, owners of existing high-rise buildings shall comply with the following schedule for installation of automatic sprinkler systems:

1. On or before December 31, 2009, or within four years after the date of annexation of the building into the jurisdiction, a water supply in accordance with NFPA 13 shall be installed to all floors of the building, and the owner shall provide the *fire code official* with written plans for compliance with this appendix and schedules for completion of the work stated in the written plan
2. On or before December 31, 2014, or within nine years after the date of annexation of the building into the jurisdiction, a minimum of 50% of the building shall be equipped with an operational automatic sprinkler system.
3. On or before December 31, 2017, or within twelve years after the date of annexation of the building into the jurisdiction, the total square footage of the building shall be equipped with an operational automatic sprinkler system.