CITY OF HOUSTON
Fire Marshal, Houston Fire Department
Apartment Team
Questions, Comments, Concerns
(832) 394-6900

Dear Apartment Management/Maintenance,

In order to service your property in a more efficient and effective manner, please review the following information with your maintenance staff. The following information should be used to assess your property on an ongoing basis and to help keep the property fire code compliant.

This information should be used as a guide to help recognize and correct potential hazards.

It is mutually beneficial to property owners, management and the Fire Marshal's Office to work together to make all corrections necessary in order to provide a safe environment and in an emergency to help limit potential damage.

All information in this guide is believed to be reliable, but not guaranteed and should be independently verified. Information in this guide is subject to change and may have additions at a future date.

Thanks in advance for your cooperation, immediate attention and dedication to making your property and Houston a safer place to live.

Sincerely,

Apartment Team

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Apartment Manager Checklist Guide for Fire Inspection Survey

The following is a list of documents we will be requesting along with some of the most common deficiencies found during our inspections. Following your site inspection a report will be generated and will be issued to you at a later date which will indicate a date for required compliance. If desired, this checklist can be used to assist in a more timely compliance.

_____ Certificate of Occupancy / Certificate of Life Safety Compliance on site?

_____ Multi-Family Registration Certificate filed?

_____ Required permits – current / expired?

_____ Street address visible?

_____ Directory of apartments posted?

_____ Address on buildings and units?

_____ Access gate approved plans on site?

_____ Access gates / 911 Key Box(es) working as approved?

_____ Hydrant signage / pavement markers? (Where applicable)

_____ Gas test within last five (5) years?

_____ Smoke dectectors and fire extinguishers in all occupied units?

_____ Fire protection system / sprinkler system annual test? (Where applicable)

_____ All draft stops intact?

_____ Penetrations in boiler / mechanical / electrical rooms?

_____ Storage of combustibles in boiler / electrical / mechanical rooms?

_____ Boiler / electrical / mechanical rooms and FDC locations labeled?

_____ Electrical breaker boxes display unit numbers?

_____ Electrical breaker cover plates missing on any buildings?

_____ Code compliance regarding cooking devices on porches and balconies?

Codes and Standards:

This guide will reference the Houston Fire Code and Life Safety Standards. The Standards that management / maintenance personnel for apartments might want to reference are:

- **Installation and Maintenance of Portable Fire Extinguishers**
- **Fire Department Access**
- **Access Control Gates**
- **Key Boxes**
- **Inspection and Testing of Fire Protection and Life-Safety Equipment**
- **Marking of Fire Hydrant Locations**

The Standards can be found on the web at www.houstontx.gov. On the home page look on the top menu bar and click Departments, on the drop down list click on Fire. Once you have reached the Fire Department screen look on the left side and select the Forms and Permits icon. Then under Business Info on the left side list select Standards & Codes, there you will find the Standards listed above with all the information you will need to bring the property into compliance with the Standards.

<u>Access Control Gates and Key Boxes:</u> (Refer to the Houston Fire Code Section 503.6 and LSB Standard 04; Section 504.1.1 and LSB Standard 05).

503.6 Security Gates. The installation of security gates across a fire apparatus access road shall be approved by the 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, or secured in the open position. Repairs shall be in accordance with original specifications and approvals.

Contact Inspector REGINALD WOODS for compliance: 281-922-2306
Reginald.Woods@HoustonTX.gov

CITY OF HOUSTON

CITY OF HOUSTON FIRE DEPARTMENT
FIRE PREVENTION BUREAU PERMIT OFFICE

A permit is required to install and maintain a **fire apparatus access-control gate or barrier** on a fire apparatus access road, or a private drive or private street utilized for fire apparatus access. A permit is also required to install and maintain a **"9-1-1" Key Box**; this permit **shall be renewed annually**. Permit applications shall be obtained at the City of Houston Permit Office.

Fire Prevention Permit Office
1002 Washington Ave. Houston, TX 77002 (832) 394-8811
E-mail permits_office@houstontx.gov

****Payments can be made in person or online at**

https://www.pdinet.pd.houstontx.gov/permits/index.asp .

4.3.7 Approval Requirement.

4.3.7.1 Letter of Explanation.

A letter of explanation is required to fully explain what is being submitted for approval.

- What type of operation (function) is applicable to the "9-1-1" Box?

  (Mortise cylinder, toggle switch, key, etc.)
- How the ""Fail-safe"" system works. (The "Fail-safe" must be able to be activated on the *same side of the gate* as the "9-1-1" Box. Firefighters *shall not* be required to insert their arm through a gate to use a "Fail-safe" key or other device.)
- Manual override operations are required on electrically operated gates.
- Gates must open without delay.
- Other necessary information.

4.3.7.2 Requirements for Drawings (*3 sets of Plans*) of Gates/barriers.

The following must be included:

- Width of the gate/barrier openings.
- Type of gate or barrier operation: (slide, swing, etc.)
- Distance from the access roads to the gates/barriers.
- Distance from the gate to the reader.
- Location of the reader (card reader, key pad, telephone entry, etc.)
- Location of the "9-1-1" Box, with **White** numbers (9) (1) (1) on the box contrasting to the **Red** "9-1-1" Box.
- Location and type of the hold open devices.
- Location and type of the automatic opening device(s).
- Any vertical clearance obstructions.
- Gates are to automatically open and remain open until closed manually.
- Gates/barriers must remain open at all times until a fire prevention inspector has made a final "on-site" inspection and approval.

4.3.7.3 Additional information as may be required.

1. It is recommended by the Fire Marshal that the "9-1-1" system be equipped with access capability (such as a reset button or similar device) on the project side of the property so that the property management can close the gate after emergency responders leave the property.
2. Gate width openings during *NORMAL* or *FAIL-SAFE* operations shall be the same as required for the width of the private street, private drive or access road. The full-required width of the private street, private drive or access road shall be available for use.
3. Gates/barriers shall open towards the project property, opening away from the emergency responders that may be entering the property.
4. When a pin is used in a "Fail-safe" assembly and the lock is removed, the pin shall be installed such that it will fall toward the ground (automatic swing arm gates.)
5. The holes in "9-1-1" systems such as the lock hole in the "9-1-1" Box, the pinhole in some "Fail-safe" systems that use a lock, pin, or similar device shall be large enough that the lock, pin, or similar device can be easily removed.
6. Readers, telephone entry devices or other entry devices installed within the width of a private street, private drive or access road shall be made readily visible by means of reflective material. At least 50 percent (50%) of the height of the mounting device, pole, column, etc., shall have the reflective material provided.

Example Letter for Gate Operations:

Project Name: Access Gates for ABC Apartments
Location of Project: 1234 Main Street, Houston, TX 77000
Construction Contractor/Manager: Anyone USA 713 555-0000

Entry Gate: Main Gate

The entry gate is an automated sliding gate with a fourteen (14) foot opening width. An approved 9-1-1 Key Box is to be installed near the entry gate at an approved location not to exceed five (5) feet in height. This 9-1-1 Key Box shall provide a toggle switch, which upon activation will cause the entry gate(s) to open and remain open until closed by returning the toggle switch to the original position.

A manual disconnect option is also provided on the entry gate. To operate pull the handle provided inside the fail-safe box. The chain will disconnect from the gate frame and allow for manual operations.

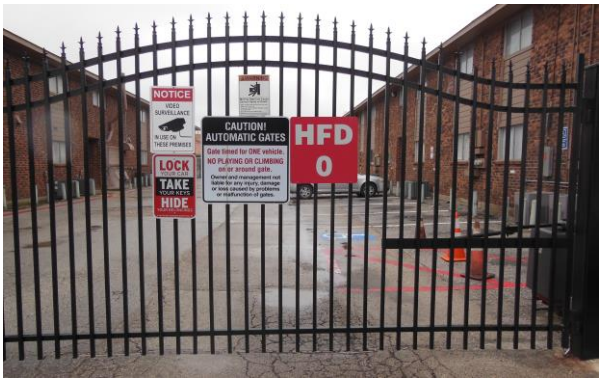
Fire Gate: Gate(s) 2, 3, & 4

Three (3) manual swing fire gates with fourteen (14) foot openings are provided at these access points see site map provided. All manual swing gates open toward the property and away from emergency responders. An approved 9-1-1 Key Box provided near the gates in an approved location will house a labeled key that will open a padlock that shall be removed from the connecting arm causing the gate to automatically swing open and be held open by a catch bar until manually closed and returned to operation.

Exit Gate: Gate 5

This exit gate is a manual sliding gate that has a fourteen (14) foot opening width. An approved 9-1-1 Key Box is to be installed near the exit gate at an approved location not to exceed five (5) feet in height. This 9-1-1 Key Box shall provide a labeled key to operate the padlock provided.

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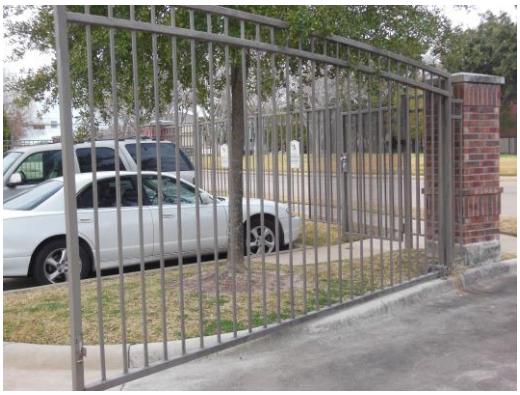
Motorized Swing Gate with HFD Hydrant Signage



Motorized Gate Controller



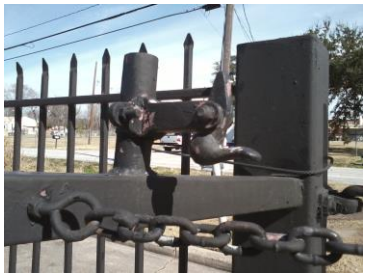
Manual override for Motorized Gates



Manual Swing Gate in open position

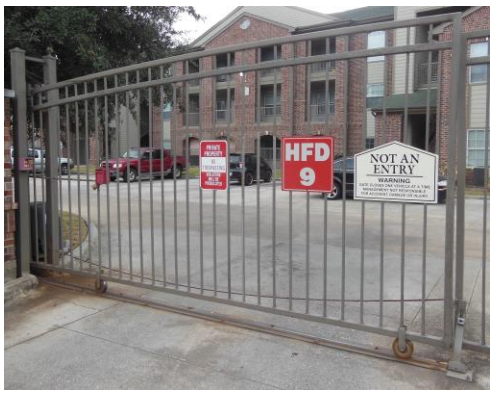


Manual hold open device





Duckbill – Hold Open Device



Motorized Slide Gate with HFD Hydrant Signage



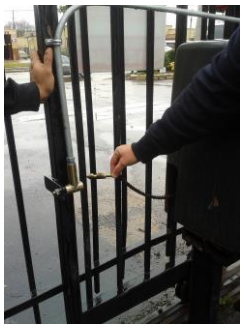
Motorized Slide Gate Motor



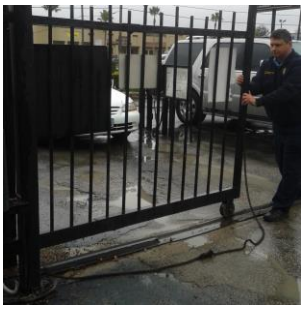
Motorized Slide Gate Housing off



Fail-Safe Box



Magnetic Disconnect



Motorized Slide Gate – Manual Operation





911 Key Box with Falcon Lock and Micro Switch





Fail-Safe Box with Falcon Lock and manual override

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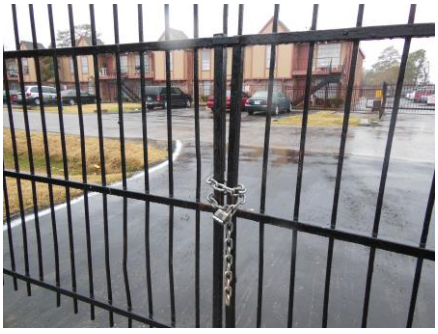
3200 Hinged-Door Series Knox-Box with Houston Key



Pedestrian Gate



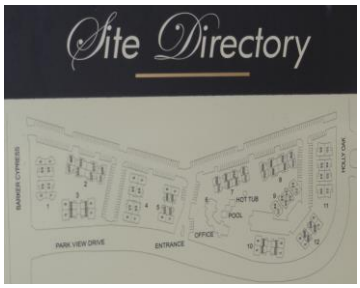
Compliant Locking Device



Improper Locking Device

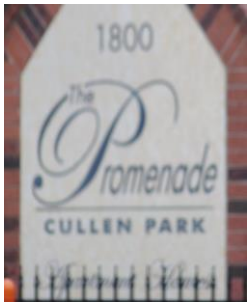
Apartment Building Numbering:

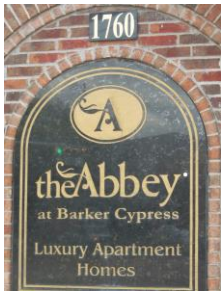
The City of Houston Code of Ordinances may be located via www.houstontx.gov, search under the Business heading, then Code of Ordinances, click the link Searchable Code of Ordinances & City Charter then select Houston Code of Ordinances to view the list of City of Houston Code of Ordinances.





Site Directory Close-up and Mounted at Entrance Gate





Code Compliant Address Identification Signs



Non-Compliant Address Identification Signage
Fails to contrast color of background

Management Office:

A responsible person, manager or owner must reside upon the premises of every apartment house in which there are sixteen (16) or more apartments. If the owner or management does not reside upon the premises of any apartment house in which there are more than four (4), but less than sixteen (16) apartments, a notice stating the name and address, emergency phone number and the name and address of the agent in charge of the apartment house must be posted in a conspicuous place on the premises.

Managers please maintain the following information within a binder. Label your binder *Houston Fire Department* and make sure it is accessible upon arrival of the Fire Code Official.

- Certificate of Occupancy or Life Safety Compliance Certificates for all buildings.
- All current Fire Marshal Permits (911 Key box, Access Gate, Cutting and Welding, Flammable/Combustible Liquids, Hazardous Materials, etc…).
- Copy of the Fire Marshal Approved Gate Plans.
- Copy of the Gas Test (Must be within the last 5 years), if applicable.
- Site Map with the units that have attic access marked or a list of units with attic access, if applicable.
- Copy of a typical Smoke Detector and Portable Fire Extinguisher addendums.

Compressed Gas Cylinders: Typically used for balloons **(Refer to the Houston Fire Code)**

An annual operational permit is required for the storage, use or handling at normal temperature and pressure (NTP) of compressed gases in excess of the amounts listed in Table 105.6.8.

Compressed gas containers, cylinders and tanks shall be secured to prevent falling caused by contact, vibration or seismic activity. Securing of compressed gas containers, cylinders and tanks shall be by one of the following methods:

1. Securing containers, cylinders and tanks to a fixed object with one or more restraints.
2. Securing containers, cylinders and tanks on a cart or other mobile device designed for the movement of compressed gas containers, cylinders or tanks.
3. Securing of compressed containers, cylinders or tanks to or within a rack, framework, cabinet or similar assembly designed for such use.

<u>Portable Fire Extinguishers:</u> (Refer to HFD LSB Standard 01 – Installation & Maintenance of Portable Fire Extinguishers)

1.4.3.8 Residential – Group R Occupancies.
Group R - Residential occupancies shall be classified as **ordinary hazards**. At least one portable fire extinguisher with a minimum rating of 2-A, 10-B:C shall be provided for each 3000 square feet of floor space, or fraction thereof. Portable fire extinguishers shall be so located that no point in the building is located more than 75 feet, by an unobstructed path of travel, from a portable fire extinguisher.
EXCEPTION:

1) R-2 Apartment occupancies shall be provided with at least one portable fire extinguisher. Such extinguisher shall have a gauge showing the charge and a minimum rating of 1-A, 10-B:C. A fire extinguisher shall be provided for and properly placed within each occupied apartment unit. Location and placement of the fire extinguisher shall be placed in accordance with the manufactures guidelines or Section 1.3.8, near the kitchen entryway, accessible and no closer than 5 feet from the cooking appliance. The extinguisher shall be placed so that the top of the extinguisher is not more than five feet above floor and the clearance between the bottom of the extinguisher and the floor is not less than 4 inches. The fire extinguisher may be placed within an unlocked pantry or cabinet. Fire extinguishers shall comply with Section 1.3.1 for annual maintenance and tagging. Fire extinguishers that are not serviceable, such as an extinguisher with a 1A, 10B:C rating, should be visually inspected at least monthly for loss of pressure (as indicated on the extinguisher's gauge) or for other damage to the fire extinguisher that might affect its performance.
2) R-2 Apartment (Garden-Type) properties equipped with automatic fire protection sprinkler systems may also exclude the portable extinguishers with a minimum rating of 2A, 10BC, required above and the extinguisher with a minimum rating of 1A, 10BC, referenced in Exception 1 above.

R-2 Residential occupancy offices, game rooms, physical fitness areas, storage rooms, maintenance shops, boiler rooms, laundry facilities, mail rooms, club houses, commons, and public assembly areas shall be classified as ordinary hazards. At least one portable fire extinguisher with a minimum rating of 2-A, 10-B:C shall be provided for each 3000 square feet of floor space, or fraction thereof. Portable fire extinguishers shall be so located that no point in the room or area is located more than 75 feet, by an unobstructed path of travel, from a portable fire extinguisher.

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2006 International Fire Code 308.3.1 - OPEN FLAME COOKING DEVICES:

Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within **10 feet** (3048 mm) of combustible construction.

Exceptions:

1. One and Two family dwellings.
2. Where buildings, balconies, and decks are protected by an automatic sprinkler system.

2006 International Fire Code 308.3.1.1 – LIQUEFIED-PETROLEUM-GAS-FUELED COOKING DEVICES:

LP gas burners having an LP-gas container with a water capacity greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity] shall not be located on combustible balconies or within **10 feet** (3048 mm) of combustible construction.

Exception:

1. One and Two family dwellings.

In keeping in compliance with the Houston Fire Code mentioned above, tenants residing in non-sprinkled apartment buildings are allowed to only store on patios or balconies charcoal type pits and tabletop style propane gas grills that use no more than a 2.5 lbs. propane cylinder.

REMOVAL OF BOTH PROPANE GRILLS AND CYLINDERS FROM THE PROPERTY IS REQUIRED. UNDER NO CIRCUMSTANCES IS STORAGE ALLOWED INSIDE UNITS.

Residents Printed name: _____ Unit # _____

Residents Signature:_____ Date:____/____/____





Open Flame LPG Cooking Devices



Example of a 2.5 lb propane cylinder

<u>Draft Stops:</u> (Refer to the Houston Fire Code)

Draft Stops in attics and penetrations in Laundry, Boiler, Electrical and Mechanical Rooms

Fire-resistance-rated partitions, fire barriers and fire walls separating vacant tenant spaces from the remainder of the building shall be maintained. Openings, joints and penetrations in fire-resistance-rated assemblies shall be protected in accordance with Chapter 7.

The required fire-resistance rating of fire-resistance-rated construction (including walls, fire stops, shaft enclosures, partitions and floors) shall be maintained. Such elements shall be properly repaired, restored or replaced when damaged, altered, breached or penetrated. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer openings and holes made for any reason shall be protected with approved methods capable of resisting the passage of smoke and fire. Openings through fire-resistance-rated assemblies shall be protected by self-closing or automatic-closing doors of approved construction meeting the fire protection requirements for the assembly.

Required fire blocking and draft stopping in combustible concealed spaces shall be maintained to provide continuity and integrity of the construction.




Typical unprotected penetration into attic draft stop




Typical draft stop seal near roof decking and ceiling joists

<u>Electrical:</u> (Refer to the ICC Electrical Code)

All electrical wiring and appliances must be maintained in accordance with the electrical code. All repairs must be performed by a licensed electrician. Exposed electrical wiring must be in conduit and cover plates over breaker boxes, electrical junction boxes, switches and outlets must be in good repair and be in place. Extension cords shall not be used as permanent wiring. Also, electrical wiring cannot be held in place by nails or staples.



Temporary wiring with staples on Structure



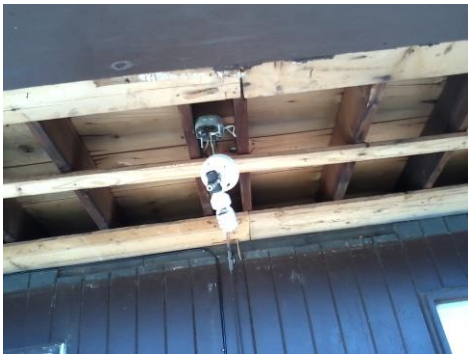
Open electrical fixture



Missing protective panel



Missing deadfront panels





Exposed electrical fixture and wiring

Combustible Storage: Attics, Mechanical, Electrical and Boiler Rooms

Combustible materials shall not be stored in attic areas. Combustible materials shall not be stored at any time in mechanical rooms, electrical rooms, or boiler rooms.

Mechanical, Electrical, Storage and Laundry Rooms:

Doors into Mechanical, Electrical, Storage and Laundry Rooms Shall be marked with a plainly visible and legible sign stating the room designation i.e. (Electrical, Electrical 1, Boiler, Boiler 1, etc…)

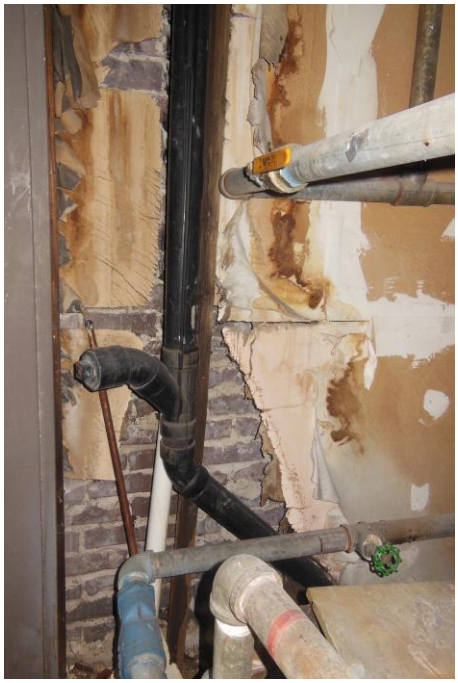


Labeled Electrical and Boiler Room Door

Venting of Gas Appliances:
All gas fired appliances, such as gas operated dryers, boilers and water heaters shall be vented to the outside of the building to prevent hazardous accumulations of carbon monoxide.

Laundry Rooms:
Accumulations of lint or trash should be removed from laundry rooms. Inspect and clean dryer filters and vents on a regular basis to prevent unnecessary accumulations of lint to prevent potential fire hazards.

Penetrations and Damage to Fire Resistant Walls and Ceilings:
Penetrations in walls, partitions, ceilings and floors shall be properly repaired, restored, or replaced when damaged, altered, breached or penetrated. Openings made therein for passage of pipes, electrical conduit, wires, ducts, air transfer openings and holes made for any reason shall be protected with approved methods capable of resisting the passage of smoke and fire. Openings through fire resistance rated assemblies shall be protected by self-closing or automatic doors of approved construction meeting fire protection requirements for the assembly.





Breached openings in fire resistant barriers.

Portable Fire Extinguishers with a minimum rating of 2-A, 10-B:C shall be provided in these areas.



Mounted Portable Fire Extinguishers with inspection tag

Gas Test:
A pneumatic test of gas piping shall be conducted at least every five (5) years by a licensed plumber. Systems shall be tested in accordance with the Plumbing Code. A written record and permit shall be maintained and shall be made available to the code official upon request.

Vehicle Impact Protection: (Refer to the Houston Fire Code, Section 312)
Gas piping and fixtures near residence parking shall be protected by barrier/bollards to prevent accidental collision and potential explosion.



Unprotected Gas Meter with resident parking


Bollard protection of gas meter

<u>Fire Protection Systems:</u> (Refer to the Houston Fire Code and NFPA 13)

An automatic sprinkler system shall be provided throughout all buildings with a Group R-2 fire area more than two stories in height, including basements or where having more than 16 dwelling units. Exception: A residential sprinkler system installed in accordance with Section 903.3.1.2 shall be allowed in buildings or portions thereof of Group R-2.

903.3.1.2 NFPA 13R sprinkler systems. Where allowed in buildings of Group R, up to and including four stories in height, automatic sprinkler systems shall be installed throughout in accordance with NFPA 13R.

903.3.1.2.1 Balconies and decks. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of dwelling units where the building is of Type V construction. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25mm) to 6 inches (152mm) below the structural members and a maximum distance of 14 inches (356mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

A fire alarm system shall be installed in existing Group R-2 apartment buildings with more than three stories or with more than 16 dwelling units. Exceptions: 1. Where each living is separated from other contiguous living units by fire barriers having a fire-resistance rating of not less than ¾ 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.



Fire Alarm Panel with pull station

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Red Tag applied by a Inspection Company
These corrections should be made promptly



Annunciator Panel with Annual Alarm Permit

<u>Pools</u>: (Refer to Code of Ordinances City of Houston, TX Chapter 43) and the Houston Fire Code

Most apartment complexes have outside pool service companies that provide pool services, however for apartment complexes that maintain their own pools review the following: The City of Houston Code of Ordinances may be located via www.houstontx.gov, search under the Business heading, then Code of Ordinances, click the link Searchable Code of Ordinances & City Charter then select Houston Code of Ordinances to view the list of City of Houston Code of Ordinances. Pools and Spa Safety can be found in Chapter 43.

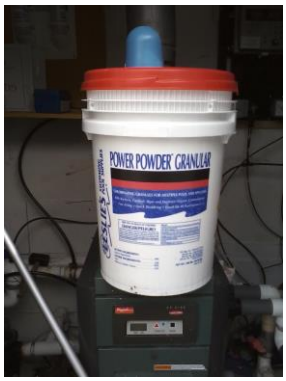


Self-Closing Gate Handle



Emergency Call Signage



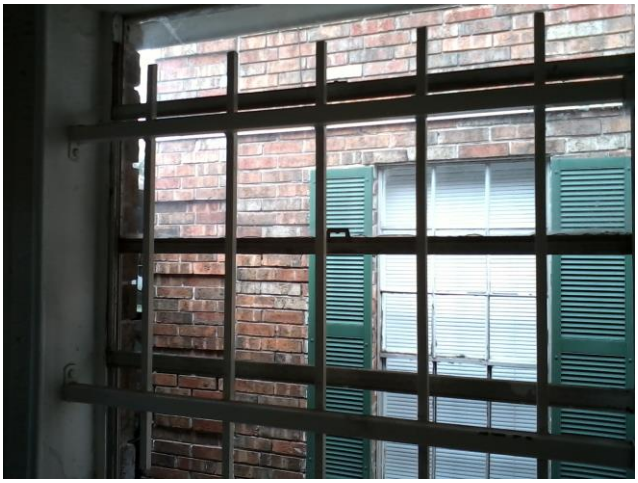


911 Emergency Phone and Pool Chemicals stored in original container

Bars, Grilles, Grates or Similar Devices: (Refer to the Houston Fire Code Sections 1028.6 and 1027.8)

Bars, grilles, grates or similar devices may be installed on emergency escape windows or rescue windows and doors provided:

1. The devices shall be operational from the inside of the room without use of keys or tools.
2. Such devices shall be releasable or removable from the inside without the use of keys or tools, special knowledge or force greater than that which is required for normal operation of escape and rescue opening.
3. The minimum net clear opening size complies with the code that was in effect at the time of construction.
4. Shall be equipped with smoke detectors.



Window bars on Laundry Room Window.



Hinged outward opening window bars



Exterior securing device

<u>Vacant Premises:</u> (Refer to the Houston Fire Code Section 311)

Persons owning, or in charge or control of, a vacant building or portion thereof shall remove therefrom all accumulations of combustible materials, flammable or combustible waste or rubbish and shall securely lock or otherwise secure doors, windows and other openings to prevent entry by unauthorized persons. The premises shall be maintained clear of waste or hazardous materials. Exception: Buildings or portions of buildings undergoing additions, repairs or change of occupancy in accordance with the Building Code, where waste is controlled and removed as required by Section 304 of the Houston Fire Code.



Vacant unit door improperly secured



Vacant unit window improperly secured







Vacant units properly secured