

Houston: High-rise Fire Drills
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Houston High-Rise Office Buildings Pre-Fire Drill Requirements **EXCERPT** from the **City of Houston - Conducting Fire Drills in High-rise Buildings rev.2012** document: ([Click to view online PDF](#))

The main purpose of a total building fire drill is to allow the people in the building to hear what the fire alarm tone sounds like, hear the public address system (where provided), and to learn where the exits/stairs are located.

Another purpose is to witness if management personnel can activate the entire building into an alarm condition from the fire alarm control panel (*Fire Drill buttons do not perform this requirement*), operate the public address system and properly recall the elevators using the elevator fire service recall keys (Phase I).

1. Building management must provide **advance written notification** to all management employees who are on staff and/or contracted, as well as, to the building's tenants, guests and/or residences of the date, the exact time, duration and particulars of the fire drill. When the alarm is activated for the scheduled fire drill, the fire department should not be called.
2. Instruction in the notice must state that during the fire drill, all personnel must go to the stairs and standby outside the stairway, but **not go into the stairs**.
5. During the drill if anyone cannot hear the alarm or understand the public address announcement (where provided), they should notify the building management in writing as soon as possible.
6. At least 15 minutes before the exact time of the fire drill, the UL Listed monitoring service and/or telephone answering service (if no monitoring service) should be called and directed to put the building's fire alarm system in a fire marshal fire drill mode (off-line) due to the scheduled semi-annual fire drill. They must be told that when the alarm comes on for the fire drill that they are not to call the fire department. Also, ask for the operator's name that will be putting the system on "fire marshal fire drill mode" (testing mode).
7. **Note:** If the monitoring service, answering service or anyone from the building calls the fire department when the fire alarm sounds for the drill, the fire department will send a fire truck in emergency mode. This is considered a false alarm.

When the drill is over the alarm monitoring service and/or answering service should be called back, as soon as possible, to put the building back on-line.

8. Send an email to the Houston Fire Department's Office of Emergency Communications at hfd.dispatch3@houstontx.gov at least 2 days before the fire drill to inform them of the fire drill particulars. Just prior to the fire drill notify the Houston Fire Department Office of Emergency Communications again by calling **713-884-3143**, to inform them of the fire drill, and to provide them with the building's name, street address, call-back telephone number and contact person's name, and the time the drill is to start. The Fire Department Emergency Communication officer should be asked what the time is at his office, and the fire drill should be conducted using the fire dispatch time. You should also again contact the Fire Department Office of Emergency Communication when the fire drill has concluded.

9. The fire alarm technician and the elevator technician should be present for the drill to assist management personnel and to monitor their equipment.
10. All building elevators should be called down in the Emergency Fire Service Recall mode (Phase I) one minute before the drill. Management should ride the elevators during the drill to spot check floors and check the operation of the elevators in Elevator Fire Service mode (Phase II). The elevator technician should verify elevators are functioning properly in all fire service modes.
11. **Everyone** must participate in the drill (mobility-impaired persons may be excused if they have notified building management in writing prior to the drill). Management should conduct drills at a convenient time for tenants, if possible (ex: after stock market closes, before doctors' offices become full of patients, around attorney's depositions, etc.).
12. During the fire drill, if phones must be answered or where it is difficult for everyone to participate, the drill participation can be done in shifts. Some persons may go to the stair, then return to their offices to relieve others so that everyone can participate in the drill. Everyone must participate the drill.
14. Pre-recorded messages in fire alarm systems should be by-passed during fire drills. The same fire tone must be used during drills that will be sounded when the building is in an actual alarm.

Fire Drills witnessed by Daniel Salazar of DSAL Consultants L.L.C. will comply with all City of Houston fire drill requirements and perform them as stated below.

Notify your tenants of the fire drill as stated in the **City of Houston - Conducting Fire Drills in High-rise Buildings**.

1. DSAL Recommended Instructions for Tenants:

- 1.1 Instructions for tenants are to respond to the fire alarms sounding on their floor by immediately going to the nearest fire-rated enclosed stairwell and standby outside the stairway until further noticed by the building fire safety director via the Public Address System, but do not go into the stairwell. This response "Staged Evacuation Level 1" is the initial response to an actual alarm on their floor when smoke or fire has not yet been verified on their floor.
- 1.2 Standby outside the stairway until the fire drill conclusion is announced via the Public Address PA system.
- 1.3 Fire Wardens on your floor will be assisting in the required fire drill and will be asking questions of all occupants at their stairway staging location to relay back to the building management/Building Fire Safety Director. Please have all your employees answer questions from Fire Wardens.
- 1.4 A pre-drill message notification and fire drill instructions may be announced before and during the fire drill via the Public Address PA announcement speakers near the stairwell door. The fire drill should be completed between 5-10 minutes. All occupants must participate in the fire drill or risk the fine imposed by a City of Houston fire inspector. Presiding judges may impose fines of \$2000 for "failure to participate in a required high-rise fire drill" on the person responsible for the failure to participate.

2. DSAL Recommendation Fire Warden instructions during fire drills, fire alarms, and fire on their floor:

2.1 Fire Wardens should participate in the fire drill by asking the occupants at their staging area outside the fire-rated enclosed stairwells on their floor the following questions and respond back to the building management/Fire Safety Director with results after the fire drill:

2.1.1 Fire Wardens should ask tenants, “were the fire alarm tones audible in all areas of their floor?”

2.1.2 Fire Wardens should ask tenants, “were all visual fire alarm strobe lights flashing on their floor?”

2.1.3 Was the Public Address (PA) message audible and understood by the staging location next to the exit stairwell or the building exit door, if occupants are on the building exit floor?
• If not, was the Public Address (PA) message too loud, not loud enough, not audible at all, sounded garbled, or was static sounding?

2.1.4 Did all occupants on their floor participate in the fire drill by going to the stairwell exit door to standby for further instruction or the building exit door, if occupants are on the building exit floor?

2.1.5 Fire Wardens should update the list of employees on their floor that desire to have firefighters assist them if vertical evacuation rescue is needed during a fire on their floor. Forward the updated list to property management immediately after the fire drill to update the building Mobility-Impaired list that will be given to firefighters upon their arrival.

2.1.6 Fire Warden instructions after asking the questions in 2.1.1 – 2.1.5:

Note: Before disseminating the following instructions to Fire Wardens, building management should remove emergency phones and emergency intercoms information if their building features do not have emergency phones and emergency intercoms that communicate to on-site security or the fire command room.

2.1.6.1 Fire Wardens above the 7th floor:

Should continue to tell the occupants on their floor who have gathered by their stairwell door -

2.1.6.1.1 During fire drills and fire alarms when there is no smoke or fire on our floor we should wait right here for further instructions from the building Fire Safety Director or firefighters via the PA system.

2.1.6.1.2 The fire-rated enclosed stairwells have two-hour fire-rated walls and 90-minute fire-rafted doors. **When there is a fire or smoke ON OUR FLOOR**, the fire-rated enclosed stairwells are a fire and smoke protected safe place of refuge for us, Fire Wardens, to stay with the mobility-impaired. It is also a fire and smoke protected exit-way for the physically able to relocate to our designated reentry floor at least 3 floors below the fire-floor. Building re-entry signs are posted inside the stairwell on the wall by each door to our building re-entry floors. Firefighters will give further instructions as the need presents itself.

2.1.6.1.2.1 (**Management should make this applicable to your building*) To the physically-able who are relocating to our building reentry floor, use the *emergency phone or emergency intercom* by the building reentry door to call on-site firefighters or on-site security to inform them of known

fire and smoke on our floor and any mobility-impaired persons on our floor that need vertical evacuation assistance, before you reenter the building. According to the fire department procedures for us in high-rise buildings, 3 floors below our fire-affected floor is generally safe from the fire and smoke.

2.1.6.1.3 Those who need assistance evacuating down the fire-rated enclosed stairwells, remember that I will stay with you inside the stairwell to wait for firefighters who will come and assist in evacuating down to the designated building re-entry floor or out if they decide that is the best option for the situation.

2.1.6.2 Fire Wardens on the 7th floor and below:

Should continue to tell the occupants on their floor who have gathered by their stairwell door -

2.1.6.2.1 During fire drills and fire alarms when there is no smoke or fire on our floor, we should wait right here for further instructions from the building Fire Safety Director or firefighters via the PA system.

2.1.6.2.2 The fire-rated enclosed stairwells have two-hour fire-rated walls and 90-minute fire-rafted doors. **When there is a fire or smoke ON OUR FLOOR,** the fire-rated enclosed stairwells are a fire and smoke protected safe place of refuge for us, Fire Wardens, to stay with the mobility-impaired. It is also a fire and smoke protected exit-way for the physically able to **walk down and out of the building** to our company designated assembly area away from firefighters controlled area.

2.1.6.2.2.1 (**Management should make this section applicable to your building*)

The exception to evacuating down to the building exit floor may be because the **stairwell exits discharge into the building exit floor when the fire and smoke is on the building exit floor.** In this case we will get into the fire-rated enclosed stairwell, if fire or smoke is on our floor, and wait for firefighter assistance inside the stairwells.

2.1.6.2.3 Those who need assistance evacuating down the fire-rated enclosed stairwells, remember that Fire Wardens will stay with you inside the stairwell to wait for firefighters who will come and assist in evacuating down and out of the building to our company designated assembly area away from firefighters controlled area.

2.1.7 Fire Warden instructions after the fire drill:

After the fire drill, Fire Wardens should send the results of the fire drill questions to Fire Safety Director/Property Management for documentation and potential building safety feature repairs.

3. Pre-Fire Drill

3.1 Pre-corded message: per *City of Houston - Conducting Fire Drills in High-rise Buildings*

3.1.1 Either have Fire Alarm Maintenance company override the fire alarm pre-recorded message before the fire drill, or

3.1.2 Manually override the pre-recorded message by keying the microphone to give the

fire drill message each time the pre-recorded message starts to play, and repeat the process for the duration of the fire drill to ensure that the tenants do not hear the fire alarm pre-recorded message during the fire drill.

- 3.1.3** Notify your fire alarm system monitoring company of the scheduled fire drill with instructions, “Do Not Call Fire Department”, to avoid firefighter response.
- 3.1.4** Notify Houston Fire Department Office of Communications Dispatch Office by email at hfd.dispatch3@houstontx.gov, and then 15 minutes before the fire drill call them at **713-884-3143** to inform them of the fire drill. Provide your contact name, the building name and address, the scheduled fire drill time, and your call back phone number. Ask the Houston Fire Department Office of Communications Officer what their name is and what their time is. Document HFD’s name and time.

The Fire Drill, **Insert any building specific details appropriately within the following procedures pertaining to your fire alarm control panel as needed.*

1. Activate the Elevator Firefighter Service Phase 1 in the elevator lobby, manually.
2. Give the pre-drill notification announcement via the PA Public Address System, if desired, or continue to step 3.
3. Select and activate an upper floor fire alarm pull station. Have the person activating the pull station:
 - 3.1** Immediately reset the pull station to facilitate resetting the fire alarm panel upon fire drill completion.
 - 3.2** If applicable, verify if the stairwell pressurization system activated.
 - 3.3** If applicable, then verify if the building re-entry lock system unlocked on the building re-entry floors.
 - 3.4** If applicable, when stairwell emergency phone or emergency intercom are on the building re-entry floors, call the on-site fire command room or on-site security to verify if the communication system is working properly.
4. As soon as the Fire Safety Director (fire alarm panel operator) sees the fire alarm indicators light up the 3 alarmed floors on the fire alarm panel, the Fire Safety Director should activate the General Alarm for the entire building from the fire alarm panel to immediately activate alarms, strobes, etc. in the entire building.
5. Let the audible tones sound, then key the microphone to give the fire drill message,
 - 5.1** If manually overriding the pre-recorded message, key the microphone to give the fire drill message right when the pre-recorded message begins to play, and repeat the process for the duration of the fire drill to ensure that the tenants do not hear the pre-recorded message during the fire drill.

State the message below with P.A. in the “All Call Mode” (100% PA.):

FIRE DRILL ANNOUNCEMENT

*“At this time we are conducting a required fire drill.
I repeat, this is a drill.
Please proceed to the exit stairwells and stand by.
Do not go into the stairs.”*

Allow the fire alarm to sound 5 more times and then repeat the message.

Allow the fire alarm to continue to sound and repeat the message about every 30 seconds during the drill, or each time the pre-recorded message is about to play.

6. Un-key the microphone after the fire drill message has been spoken over the pre-recorded message, and repeat the alarm tones and fire drill message a series of approximately 5 times.
7. The PA speakers are loud, after the alarm tones and fire drill message series of approximately 5 times, **silence the alarm audible tones but leave the PA active to say:**

*"This does not conclude the fire drill, please standby for further instruction.
I repeat, this does not conclude the fire drill, please standby for further instruction."*

Continue this PA message until the fire drill has lasted 5 minutes.

8. **After the fire drill has lasted 5 minutes and all of Step 3 (above) has been completed, announce via the PA, before resetting the fire alarm system:**

*"This concludes the fire drill, thank you for your participation.
I repeat, this concludes the fire drill.
Thank you for your participation."*

(You may need to hold the microphone keyed to your chest so other statements do not go throughout the building and reset the alarm system.)

9. The elevator doors will immediately close when the elevators Phase 1 recall is reset to normal operating mode. If anyone is on the lobby floor waiting to use the elevators, tell them to enter the elevator before resetting the elevators back into the normal operating mode so they will not miss accessing the elevator.
10. Immediately after completing the fire drill,
 - 10.1 Call HFD back at **713-884-3143** to inform them that the fire drill is complete. Again provide your contact name, the building name and address, the scheduled fire drill is over, and your call back phone number. Ask the Houston Fire Department Office of Communications Officer what their name is and what their time is. Document HFD's name and time.
 - 10.2 Fire Safety Director/Property Management must retrieve the Mobility-Impaired updates from Fire Wardens to update the Master Fire Department Mobility-Impaired list.
 - 10.3 Fire Safety Director/Property Management must retrieve all notes from Fire Wardens & staff to document fire drill efficiencies and building safety feature issues that need correction for a post fire drill meeting immediately after the fire drill.
 - 10.3.1 Fire Safety Director/Property Management shall verify discrepancies and make all needed repairs, as soon as possible, to document and provide all fire drill records for Daniel