Door Safety

March 2023

Doors are one of the first lines of defense in the event of a fire. They help to slow the spread of smoke, heat, and flame allowing occupants time to evacuate. Doors also help reduce the potential damage to the building. The common practice of propping a door open has led to complacency about fire safety and security. Doors are being found propped open when nobody is in the space, after hours, during weekends, holidays, extended breaks, etc. The failure of one door can have far reaching impacts to the rest of the building. It doesn't have to be a fire. For example, a large fan unit in a gym may fail and generate a large amount of smoke. If the gym doors are wedged open, the smoke will spread throughout the adjoining halls and continue to other areas where doors have been left open.

Question:
What doors cannot be wedged or propped open?

Answer:
Doors that are self-closing cannot be wedged or propped open.

Question:
What doors can be left unlocked?

Answer:
All classroom doors should remain locked. However, these doors can remain open as long as they do not have a hold open device or automatic closer on them. Classroom doors should be closed and locked when unattended.

Question:
My door has a magnet that holds it open, can it remain open?

Answer:
Yes. The magnet is designed to hold the door open and release the door when the fire alarm in the building goes off.

Question:
I need to move furniture, equipment, boxes, or other large items out of the space, can I prop open the door?

Answer:
Yes. The door may TEMPORARILY be propped open to facilitate the movement of the items in or out of a space, but the doorstop must be removed immediately following the activity. NOTE: Don't use wooden wedges. People ultimately put them in the doorjamb causing significant damage to the door frame.

Use a weight or a pylon to hold the door open then remove it immediately when done.

Question:
The room is too hot, can I prop the door open?

Answer:
No, not if it is a self-closing door. You should contact your caretaker to have them check on the HVAC system for the space or have them turn the temperature down.

Question:
I don't like that my door shuts automatically, can I disconnect the door closer?

Answer:
No. The door was designed to close automatically as part of the building fire safety design. Altering the door is a violation of Fire Code.

Question:
There is a student with a mobility problem coming to the room, can I prop the door open to make it easier for them to come in?

Answer:
Yes. The door can be propped or held open to facilitate the ease of a student coming in or out of the space, but the doorstop must be removed immediately after student has entered or exited the room.

Question:
My classroom door is not a self-closing door, but it tends to close on its own anyway. Can I prop it open?

Answer:
Yes: However, the device used to hold it open must be fail-safe and easy to use during a "Lockdown" or "Hold and Secure" event. "Kick-down" door holders should be avoided, as they are hard to pull up (and they damage the floors), resulting in difficulty when closing the door during an emergency. Because of their tendency to fail they may only be used with the approval of the school Principal and/or Facilities and Operations departments for those divisions that have them. Also, they must be checked for correct operation on a regular basis.

Question:
There are large doors in the middle of the school hallway. Can they be propped open?

Answer:
No. Any self-closing door must be always closed unless they are interlocked to the fire alarm system. These door must close when the fire alarm sounds even during fire drills. In some cases, these doors may have been fitted with kick-down door holders or even "Hook and Eye Latch" holders. They must be removed. Magnetic door holders for these type of doors could be considered during Capital planning. If not so equipped, use magnetic door closers.

Question:
Can I prop my gym door open during the day as long as I remove the door holder when classes are over?

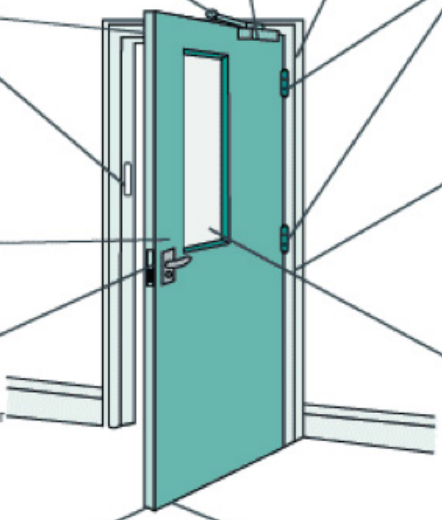
Answer:
No. Self closing doors must always remain closed.

Question:
What is the difference between an interior fire door and a smoke door? Can they be propped open?

Answer:
FIRE-RATED DOORS help slow or prevent the spread of both fire and smoke, but they are not designed to be completely fireproof. These doors will eventually burn through in a fire. However, they will slow the fire for a specified time period, which will provide additional time for anyone to exit the structure. Fire-rated doors usually have an additional latch to keep the door from opening under the pressure generated by the high temperatures of the flames. Fire rated doors will be labeled on the door and/or frame, have positive-latching hardware, a door closer or automatic-closing device, and gasketing. All of the hardware will be listed/labeled for use on a fire door assembly, and any glazing in the door or sidelight would be subject to the limitations of the manufacturer's listings. These doors are typically installed in walls which also bear a fire rating – equal to or greater than the rating of the fire door assembly. These types of doors can not be propped open. See pictures on next two pages.

SMOKE DOORS, on the other hand, are made to stop smoke from spreading into fire escape routes, providing occupants with a clear, non-toxic route to exit the building. The door, frame, and hardware do not have to be listed or labeled for use as components of a fire door assembly are, and the door is not required to be self-closing or automatic closing. Vision panels are not limited in size and are not required to have fire-protection-rated glazing removed.

The Anatomy of a Fire Door



Coordinator
- Coordinates" the sequence of the doors closing.
- The Inactive door needs to close first, then the active leaf.
- Normally used on Double Door openings that are fire rated - due to each leaf required to be self latching and self closing.

Door Closer
- Fire rated
- Fitted with the correct intumescent protection and hardware
- Adjusted to ensure the door closes snugly against frame and that the door easily operates

Fire & Smoke Seals
- Full perimeter seal (top bottom, sides)
- Seals made with correct material and to manufacturer's size and specification for the assembly
- Rated to match fire rating of door leaf
- Smoke seals gaps between door and frame when closed and entire perimeter of door leaf

Labels
- Labels must be clearly visible and legible and notate the fire rating for the door or frame

Hinges
- Suitable for use on the fire door with the correct identification markings
- Fitted with the correct fire rated hardware
- Fitted in the correct location on the fire doors

Door Leaf
- Fire rated door leaf with label or mark
- Fitted with compatible fire rated components
- Fitted to ensure sufficient gaps between the door leaf and frame when the door closes

Frame
- Tested and certified fire door frame
- Correct fire rated material and dimensions for the opening
- Securely fitted
- Silencer

Lock or Latch
- Compatible for use on specific fire door
- Fitted with cored fire rated components
- Fitted in the correct location per manufacturer's location on the door certificate

Vision Panel
- Fitted using ALL of the correct components (fire rated glass, glazing bead system, etc.)
- Fitted in the correct location and not exceeding any size limitation of the door
- No broken or exposed areas in glass
- No broken seals

Threshold Seals
- Seal suitable for use on the specific fire door leaf
- Smoke seal completely fills the gap when the door is closed

Kickplate
- No to exceed 16" tall
- Correct UL Label


CERTIFIED FIRE DOOR FD 30
1. Check it is a fire door
Look for labels or similar markings that show the door is certificated.
Fire door keep shut
2. Signage
Check the door is marked correctly with the appropriate signage.
9. Electro-mechanical Hold Open Devices
The only legal way of holding fire doors open. Should be linked to fire alarm systems.
3. Door levers and furniture
Check they operate smoothly and return to position.
8. Mechanical Door Closer
Check its fitted securely, free from damage and not leaking oil.
4. Locks and Latches
The latch should hold the fire door firmly in place without rattling to work properly.
7. Gaps
There should be an even gap all around the door and frame of no more than 3mm.
6. Hinges
Fire doors must have three certified hinges, fitted firmly with no missing screws.
5. Intumescent Fire and Smoke Seals
Swell up and expand in a fire to stop smoke and toxic gases from getting through gaps.