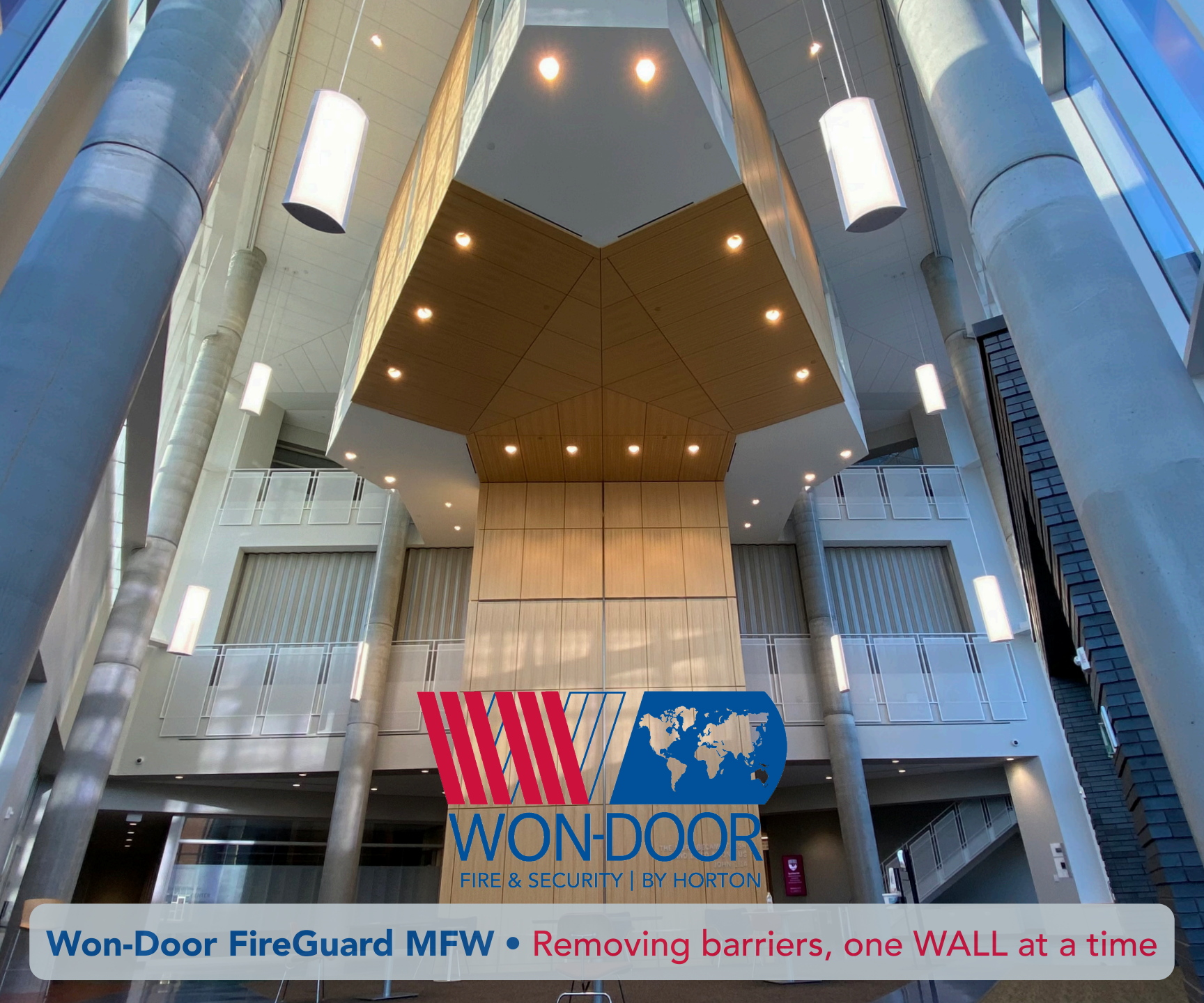


Won-Door FireGuard MFW • Removing barriers, one WALL at a time

The Hagfors Center (below) at Augsburg University in Minneapolis uses four MFW's in the lobby atrium (cover).

The *FireGuard MFW* is the solution!

Won-Door FireGuard Moveable FireWall (MFW) is a U.L. certified product meeting the criteria required by **ANSI/UL263 (ASTM E119)**. The building code restricts the size of openings in a fire barrier (IBC 2021, Section 707.6 ...Openings shall be limited to a maximum aggregate width of 25% of the length of the wall, and the maximum area of any single opening shall not exceed 156 sf). *However*, openings **shall not** be limited in size where the opening protective has been tested in accordance with ASTM E119 or UL263.

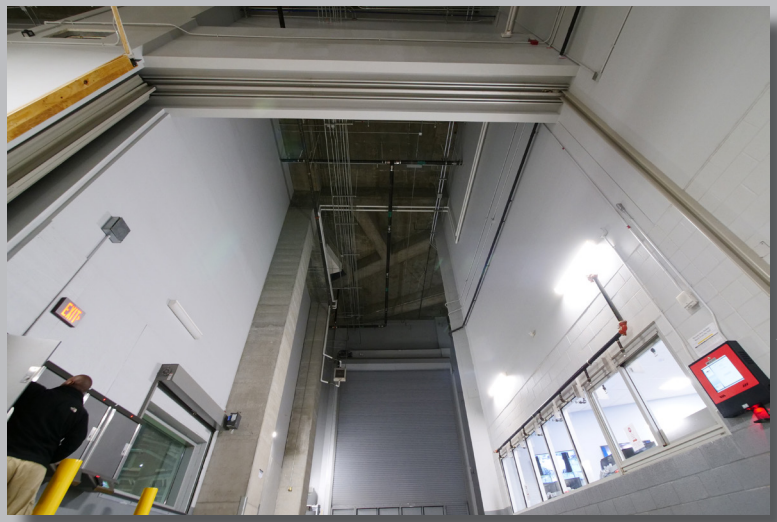
MFW Common Applications

Exit Passageways (IBC 2021, 1024.1) serving as an exit component in a *means of egress* system shall comply with the requirements of this section. An *exit passageway* shall not be used for any purpose other than as a *means of egress* and a *circulation path*.

Atrium (IBC 2021, 404.6) spaces shall be separated from adjacent spaces by a 1-hour *fire barrier* constructed in accordance with Section 707 or a *horizontal assembly* constructed in accordance with Section 711, or both.

MFW Commo

Horizontal Exits (IBC 2021, 1026.2 Separation)
The separation between buildings or refuge areas connected by a *horizontal exit* shall be provided by...a *fire barrier* complying with Section 707... The minimum *fire-resistance rating* of the separation shall be 2 hours. Opening protectives in horizontal *exits* shall also comply with Section 716.

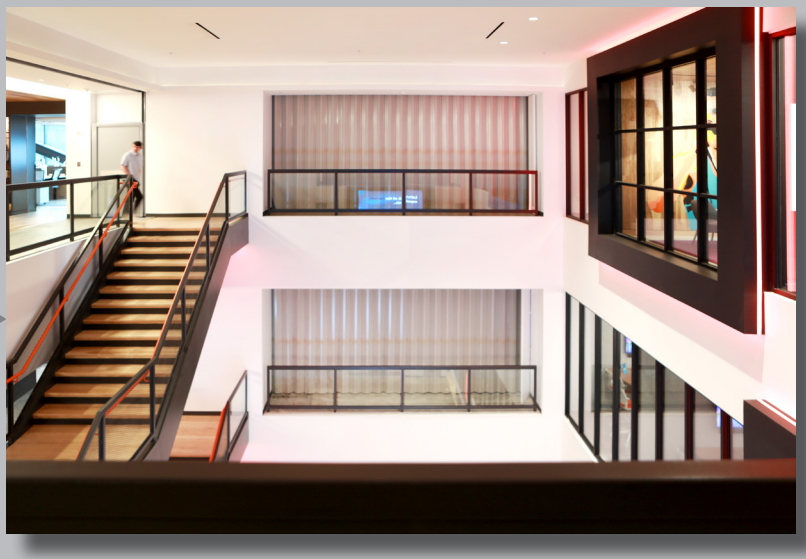


Control Areas (IBC 2021, 414.2)
Control areas shall comply with Sections 414.2.1 through 414.2.5 and the *International Fire Code*. *Control areas* shall be separated from each other by *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both.

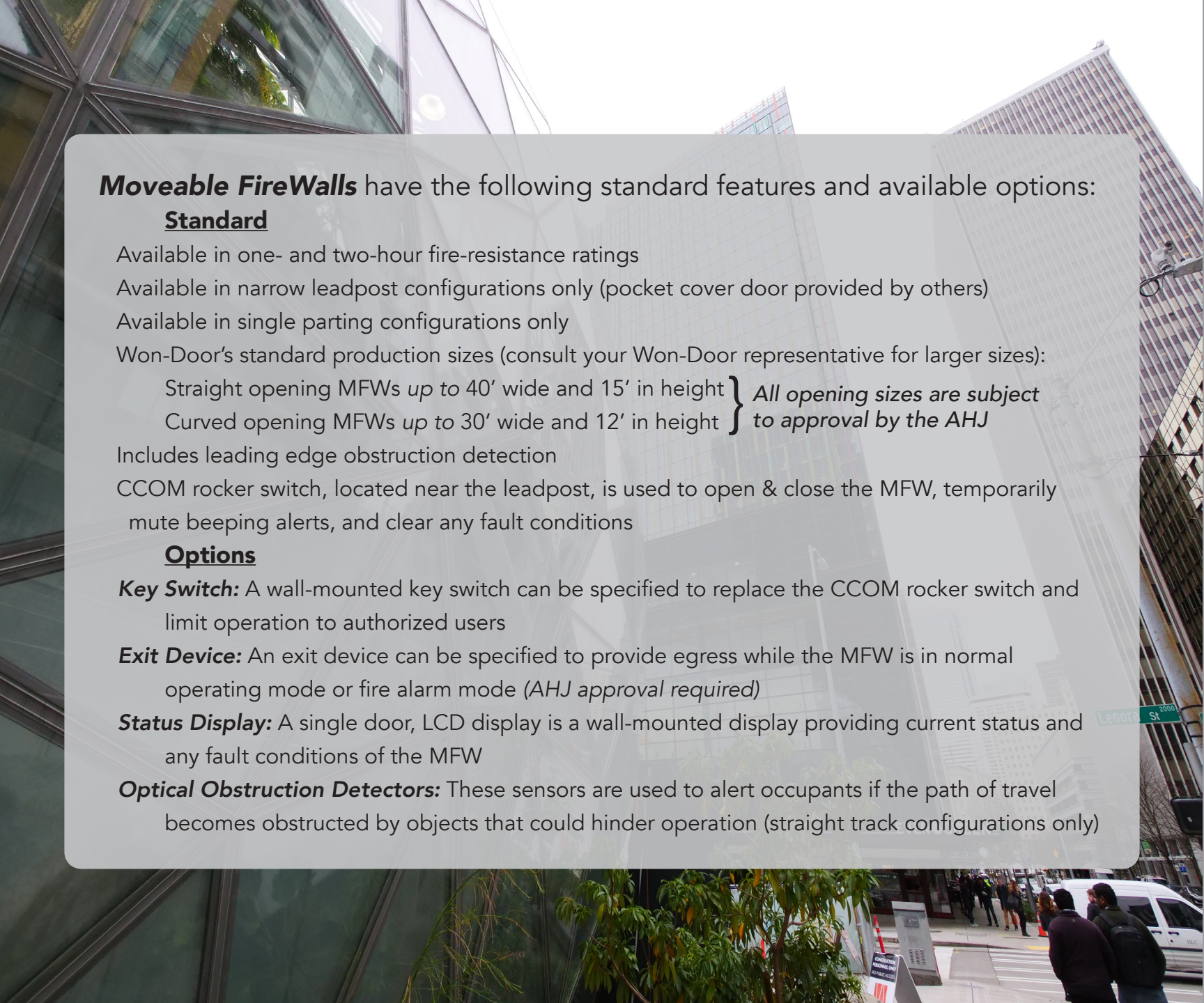
n Applications

Exit Enclosure (IBC 2021, 1020.1)
Corridors serving as an exit access component in a *means of egress* system shall comply with the requirements of Sections 1020.2 through 1020.7.

Mixed Use and Occupancy (IBC 2021, 508.1)
Each portion of a building shall be individually classified in accordance with Section 302.1. Where a building contains more than one occupancy group, the building or portion thereof shall comply with the applicable provisions of Section 508.2, 508.3, 508.4 or 508.5, or a combination of these sections.



Shaft Enclosures (IBC 2021, 713.4) Fire-resistance rating
Shaft enclosures shall have a *fire-resistance rating* of not less than 2 hours where connecting four *stories* or more, and not less than 1 hour where connecting less than four *stories*.



Moveable FireWalls have the following standard features and available options:

Standard

Available in one- and two-hour fire-resistance ratings

Available in narrow leadpost configurations only (pocket cover door provided by others)

Available in single parting configurations only

Won-Door's standard production sizes (consult your Won-Door representative for larger sizes):

Straight opening MFWs *up to* 40' wide and 15' in height
Curved opening MFWs *up to* 30' wide and 12' in height
} ***All opening sizes are subject to approval by the AHJ***

Includes leading edge obstruction detection

CCOM rocker switch, located near the leadpost, is used to open & close the MFW, temporarily mute beeping alerts, and clear any fault conditions

Options

Key Switch: A wall-mounted key switch can be specified to replace the CCOM rocker switch and limit operation to authorized users

Exit Device: An exit device can be specified to provide egress while the MFW is in normal operating mode or fire alarm mode *(AHJ approval required)*

Status Display: A single door, LCD display is a wall-mounted display providing current status and any fault conditions of the MFW

Optical Obstruction Detectors: These sensors are used to alert occupants if the path of travel becomes obstructed by objects that could hinder operation (straight track configurations only)

FAQs

What is ANSI/UL263 (ASTM E119)?

ASTM E119 is the standard fire test for building construction and materials. It includes bearing walls, non-bearing walls and partitions, columns, floor and roof assemblies, loaded and unloaded restrained beams, and protective membranes in wall, partition, floor or roof assemblies. *It is the standard used in testing the Won-Door FireGuard Moveable FireWall.*

When is a Moveable FireWall required vs. a FireGuard door?

There are 45 references in the IBC to ASTM E119. Potentially, the MFW could be used in all of the instances that are non-load bearing, interior walls. FireGuard doors can only be used as opening protectives; the MFW is considered a *wall*. The penetrations in ***fire barriers*** are restricted in total size (156 sf) and length of the opening as a percentage of the overall wall (25%) (IBC Section 707.6). There is an exception to this rule that states that openings shall not be limited...where the opening protective has been tested in accordance with ASTM E119 or UL263... (Exception 3)

What is a fire barrier?

A fire barrier is a fire-resistance-rated wall assembly of materials designed to restrict the spread of fire in which continuity is maintained.

What are the differences between an MFW and a FireGuard door?

From testing criteria to the physical makeup of each product, there are a few crucial differences between the two:

- The MFW carries a fire-resistance rating. Whereas, the FireGuard door carries a fire protection rating.
- Fire-resistance ratings require low back-face temperatures on the non-exposed side of the assembly. The MFW is rated at 250° F at the end of the two-hour test. To a large degree, this is accomplished because the MFW contains internal insulation. The FireGuard door is a non-insulated door.
- The MFW is tested under positive pressure with the neutral plane being ~40" off the floor. The FireGuard door is tested with the neutral pressure plane existing at the top of the door.
- While most MFW's require a 20" wide header assembly and pocket, most FireGuard doors require only 18".

Are there weight factors that should be considered?

The MFW is ~6.5 lbs/sf. Comparatively, the FireGuard door assembly weighs ~5.5 lbs/sf.

Is an MFW permitted to be used for egress?

Won-Door's FireGuard MFW is certainly capable of being used in a means of egress. The same ADA-compliant exit device provided on the FireGuard door assembly *could* also be provided on the MFW. However, the local AHJ should always be consulted to determine whether or not an MFW in a means of egress is appropriate.

Edge - Observation Deck • New York City

Just inside the highest outdoor observation deck in the Western Hemisphere, on the 100th floor at 30 Hudson Yards, a number of FireGuard assemblies, including **Moveable FireWalls**, are installed to satisfy stringent building code requirements and simultaneously allow for breathtaking architectural design.