

# Won-Door FireGuard

THE PERFECT FIT IN A VARIETY OF APPLICATIONS



# Fire Safety By Design

ONLY THE WON-DOOR FIREGUARD CAN ...



*cover wide spans\*...*



*heights up to 4.5 metres\*...*



*even curved openings!*

\*Project specific assessments available on widths and heights where varying dimensions are required by the project.

## Won-Door Corporation

For more than 40 years Won-Door has provided trouble free folding partitions to satisfied customers worldwide. The Won-Door FireGuard system provides a new dimension in architectural expression in a variety of applications while allowing critical safety requirements to be met – a definite advantage given the increasing complexity of the building regulations and statutory requirements.

## Won-Door Accordion-Type Fire Doors

In many situations, such as lift lobby protection/compartmentation, the Won-Door FireGuard doors have proven to be the only practical solution for many clients.

On June 28, 2001 at Warrington Fire Research, Warrington, Cheshire the Won-Door FireGuard was tested to the new European test standard BS EN 1634-1:2000, fire resistance tests for door and shutter assemblies.

Warrington Fire Research is the UK's largest independent fire testing, consultancy, research and certification organisation and has been intimately involved in the development of the new European test standards.

The Won-Door FireGuard has been certified for up to 2 hours.

## Features

### Unique design

The Won-Door FireGuard's patented track and trolley system supports each panel section with a separate pin and roller. This unique design allows the spanning of widths up to 9 metres and heights up to 4.5 metres.

Unlike conventional fire rated doors, only Won-Door FireGuard can be specified in curved openings. With a minimum radius of 1.524 metres, Won-Door FireGuard can accomplish what has previously been impossible.

### Folds out of sight when not in use

Despite its effectiveness as both a fire and smoke barrier, Won-Door FireGuard folds to just millimetres per metre. Pocket cover doors can be designed to blend in with the surrounding decor becoming nearly invisible.

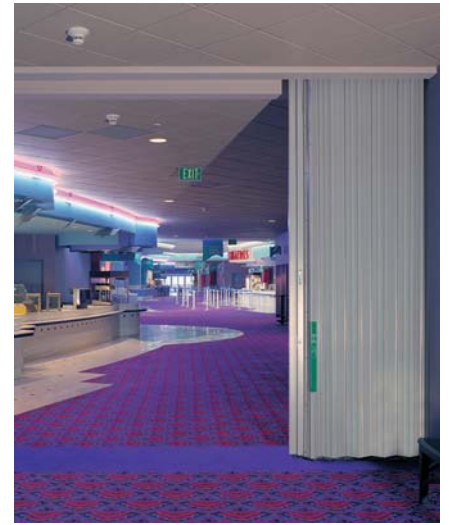
## A N D ...



*simultaneously provide fire separation for atrium, lifts and corridors...*



*replace side-hinged doors for lift lobby protection/compartmentation...*



*be used as an opening protective in fire-rated walls to provide area separation.*

The system may be programmed to close automatically on a failsafe back-up DC power supply activated by any smoke alarm in the building.

### **Smoke and draft control... without a floor track**

A tight fitting floor sweep and fire liner provide an excellent seal for blocking both smoke and toxic fumes.

### **Designed for easy access**

A small amount of pressure applied to the fire exit hardware, in the direction of exit travel, opens the doors to a distance predetermined by the building owner or architect and then recloses it automatically.

Like conventional lift doors, Won-Door FireGuard's pressure sensitive leading edge will cause the door to stop immediately upon contact with an obstruction, pause momentarily, then seek the closed position. The automatic operation can be manually overridden at any time.

### **State-of-the-art microprocessor**

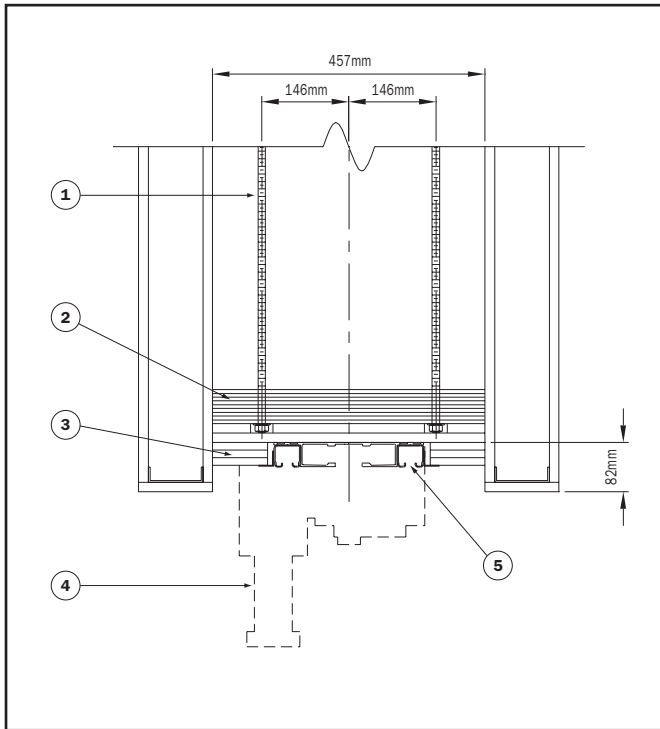
A control unit located behind the door in the wall pocket provides door status monitoring from a central location. The position of each door in the system can be determined at a glance as well as the condition of all back-up DC batteries.

## **Typical Uses**

### **As an opening protective in fire-rated walls to provide:**

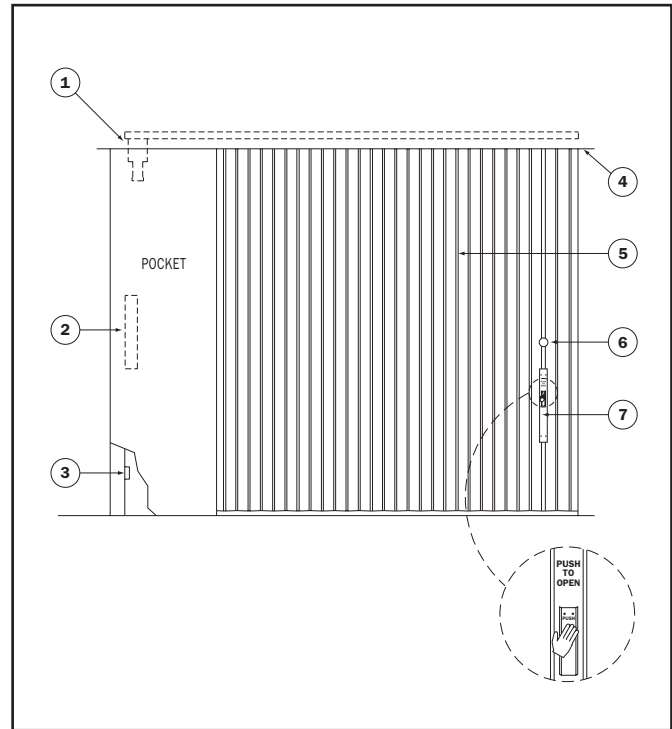
- Area Separation
- Atrium Separation
- Corridor Separation
- Lift Lobby Protection/Compartmentation
- Occupancy Separation
- Smoke Barrier
- Smoke & Draft Control
- Stage Proscenium Protective
- Vertical Opening Protective

# Details & Specifications



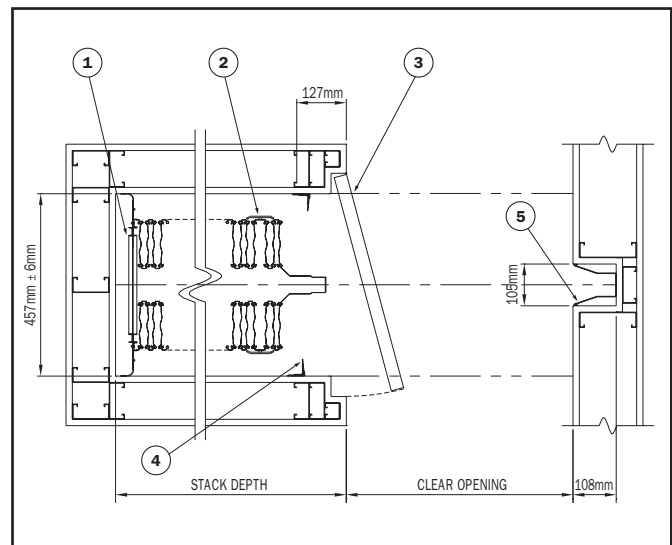
**HEADER DETAIL Typical Pocket Mounted Motor**

1. 12mm dia. threaded rod with nuts & washers at 457mm centres in opening, at 305mm centres in stack area by others
2. (3) layers, 18mm x 457mm x continuous plywood and (2) layers, 16mm (5/8") x 457mm (18") x continuous plasterboard by others
3. (3) layers, 12.7mm (1/2") x 92mm (3 5/8") x continuous plasterboard by others
4. Motor drive assembly
5. Track by Won-Door



**ELEVATION Typical Motor Assembly**

1. Motor drive assembly
2. Control box
3. (2) Junction boxes, surface mounted
4. Ceiling
5. Folding fire door
6. Reset button (optional)
7. Fire exit hardware (optional)



**SINGLE PARTING with Storage Pocket**

1. Floating jamb
2. Exit hardware (optional)
3. Pocket door by others
4. Floating jamb stop
5. Recessed striker
6. Minimum pocket depth 838mm

## Applications

With fire separation up to 2 hours:

- Area separation
- Atrium separation
- Corridor separation providing there is an alternative means of escape in case of fire
- Lift separation
- Occupancy separation providing that each occupancy has an alternative means of escape
- Smoke barriers
- Stage proscenium protection

## Applicable UK Legislation and Codes of Practice for Fire Separation (doors and partitions):

- BS EN 1634-1:2000 Test No. 117771
- Building Regulations 2000 Approved Document B
- Fire Precautions Act 1971
- Building Bulletin No. 7 (Schools & Colleges)
- Health Technical Memorandum (HTM 81) Fire Code (Hospitals)
- BS 5588 – Fire Precautions in the Design, Construction and Use of Buildings
- BS 5588 – Part 5: Code of Practice for Fire-Fighting Stairs & Lifts 1991
- BS 5588 – Part 6: Code of Practice for Places of Assembly 1991
- BS 5588 – Part 7: Code of Practice for the Incorporation of Atria in Buildings 1997
- BS 5588 – Part 10: Code of Practice for Shopping Complexes 1991
- BS 5588 – Part 11: Code of Practice for Shops, Offices, Industrial Storage and Other Similar Buildings 1997

## Other Won-Door FireGuard Listings and Reports

<b>U.L. Laboratories</b>	20 minutes, 1 hour, 1.5 hours, 3 hours, 2 hours FireGuard MFW
<b>I.C.B.O.</b>	Research Rep. 3890
<b>State of California Door Assemblies MFW</b>	3261-357:001; 1080-357:100
<b>San Francisco Dept. of Public Works</b>	387W18.2
<b>Los Angeles Dept. of Building &amp; Safety</b>	RR 24414-T
<b>City &amp; County of Denver</b>	M-8275
<b>State of Wisconsin</b>	811003
<b>City of New York Listed Assemblies</b>	MEA-127-79-M; MEA-124-79M; MEA-383-85-M
<b>Oversized Assemblies</b>	MEA-377-86-M; MEA-70-87-M; MEA-69-87-M

For further information on the unique features of the Won-Door FireGuard please contact our representative by calling + 44 (0)1609 – 883 882 or send a fax to + 44 (0)1609 – 883 733. Send email to [enquiries@beehive-partitions.com](mailto:enquiries@beehive-partitions.com) or visit our websites at [www.beehive-partitions.com](http://www.beehive-partitions.com) or [www.wondoor.com](http://www.wondoor.com).

# Special Applications

ONLY THE WON-DOOR FIREGUARD CAN ...



*preserve a unique design...*



*be equipped with special fire exit hardware for use by persons with disabilities...*



*fold out of sight into wall pockets when not in use so corridors remain clear.*

## New applications in health care

### Easy access for persons with disabilities

While Won-Door FireGuard permits more open and versatile design, its primary function remains one of fire safety. The system was originally designed to accommodate the efficient egress of nonambulatory individuals.

### Fire exit hardware

Fire exit hardware can be configured and placed where appropriate and the automatic closing system permits individual programming for both the width of opening and the duration of the opening time.

Much like a lift door, the FireGuard door continues to try to close until the occupant is clear of the opening. The door can always be overridden and opened manually with a push on the leadpost.

### Assisted living facilities

Sensitivity to the unique needs of the residents is essential when designing assisted living facilities. However, wide, unobstructed corridors; open foyers and improved sightlines – architectural details that facilitate residents' mobility – can make compliance with building regulations a challenge.

A Won-Door FireGuard can be custom made to fit into virtually any floor plan, accommodating wide span as well as curved openings. It stacks away into wall pockets when not in use so corridors remain clear.

## A N D ...



*provide fire separation, emergency exiting and access control without a floor track...*



*protect vertical openings yet be visible only during an emergency situation...*



*be continuously monitored by our state-of-the-art microprocessor with emergency power supply.*

## When a high profile project calls for a low profile product

### Public transit

Providing for passenger safety was a key concern of architects and contractors for the recently completed Portland Light Rail Project, Oregon's most visible public works project. Won-Door FireGuard doors were installed at the Washington Park station to provide the fire separation and emergency exiting between the inbound and outbound train platforms, 74 metres below ground, and the lift lobby area as well as the exit stairwell located in the lobby area. These are the only exits from each platform with an occupancy of approximately

750. The doors are also used to provide access control during routine maintenance.

### Public spaces

The Guggenheim Museum in Bilbao, Spain and the Getty Centre in Los Angeles are two unique environments in which the architects utilized the Won-Door FireGuard system to address a variety of challenging safety issues from protection of vertical openings to occupancy separation. More than 279 square metres of Won-Door FireGuard doors were used in the Guggenheim and more than 613 square metres in the Getty Centre. There was virtually no opening – whether curved or extraordinarily large – that couldn't be spanned by the

patented two-track system. Also Won-Door FireGuard doors are completely concealed when not in use so the grandeur of each interior was never detracted from by the sight of traditional fire doors.

# Won-Door



*Each Won-Door FireGuard is made to order...*



*utilizing state-of-the-art manufacturing procedures...*



*and carefully inspected before shipment to the job site.*

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## A World Leader in the Manufacture of Fire Rated Folding Partitions

The Won-Door FireGuard system incorporates the latest technology and has undergone rigorous testing at the Warrington Fire Research Centre to ensure that it remains on the cutting edge of fire protection products. Won-Door representatives can be contacted through our office on Tel: + 44 (0)1609 – 883 882 or Fax: + 44 (0)1609 – 883 733 or at [enquiries@beehive-partitions.com](mailto:enquiries@beehive-partitions.com) so no matter where your next project is, help is never far away. Learn today how Won-Door products can help you solve critical safety issues and still create exceptional architecture.

Don't start your next project without visiting our websites at [www.beehive-partitions.com](http://www.beehive-partitions.com) or [www.wondoors.com](http://www.wondoors.com) where you'll find additional information about Won-Door FireGuard as well as other Won-Door products.



### **BEEHIVE FOLDING PARTITIONS**

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