# INNA-DOR

Fire-resistant internal steel doors



STEEL DOORS FOR THE REAL WORLD





#### **FIRE DOORS**

Available with 60, 120 and 240 mins fire protection

**TESTED TO** 

BS 476 Parts 20 & 22 BS EN 1634









## Fire-resistant internal steel doors

Robust UK has successfully redesigned steel doors away from their original industrial roots to provide a highly cost-effective single solution offering an aesthetic design, durable construction and fire protection for up to 4 hours.

The doors, fitted in internal applications in a wide variety of wall constructions, are designed to protect personnel and property from the spread of flames and smoke. Robust Doors offer substantial benefits over comparable timber doors in strength, durability & security. The range has been tested to **BS 476 Parts 20 & 22**, and **BS EN 1634**.

#### > VERSIONS

We offer three versions – each providing increased fire protection (latched or unlatched):

### **INNA-DOR 60**

UPTO
1 HOUR
(60 minutes)

#### **INNA-DOR 120**

UPTO
2 HOURS
(120 minutes)

#### **INNA-DOR 240**

UPTO
4 HOURS
(240 minutes)

#### > DOOR LEAF

Production Sizes:  NB: Sizes quoted may exceed manufacturing limitations.		All fire resistant doors are custom made. The maximum size varies			
		according to fire rating as shown below for Mild Steel and 316 or 304 Stainless Steel.			
Single Doors Latched	Max Width	mm	1370	1370	1370
(Single Swing)	Max Height	mm	2830	2830	2830
	Max Area	$m^2$	4.0	4.0	3.56
Single Doors Unlatched	Max Width	mm	1300	1300	1300
(Single Swing)	Max Height	mm	2500	2500	2500
	Max Area	$m^2$	2.96	2.96	2.96
Double Doors	Max Width	mm	2650	2650	2650
(Single Swing - latched or unlatched, equal or unequally split)	Max Height	mm	2830	2830	2830
	Max Area	$m^2$	4.0	4.0	3.56
Double Doors	Max Width	mm	TBC	TBC	TBC
(Double Swing - latched or unlatched, equal or unequally split)	Max Height	mm	TBC	TBC	TBC
	Max Area	$m^2$	TBC	TBC	TBC

Thickness:	54mm
Material:	1.2mm Corrosion resistant Magnelis® sheets as standard with a variety of colours and finishes available.
Infill:	$Self support \ resin \ impregnated \ honeycomb \ core \ with \ option \ of \ mineral \ wool \ available \ for \ improved \ acoustic \ performance.$
Construction:	A non welded construction from 2 skins of Magnelis® folded around a rigid core. Stainless steel 240minute fire rated doors must be fitted with a 'Z' and astragal section to form a rebated meeting stile.

#### > DOOR FRAME

**Construction:** Folded from 1.5mm Magnelis<sup>©</sup>.

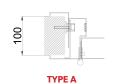
Screw and tab construction with 4 no adjustable fixing feet perjamb.

 $\label{thm:commodate} \mbox{Variable sub frame supplied as standard to accommodate site tolerance of -0/+30mm.}$ 

Frame is fitted with 3 no class 13 hinges with 2 no dog bolts

**Profile:** 

Types A & B available in both Inward & Outward Opening Versions.









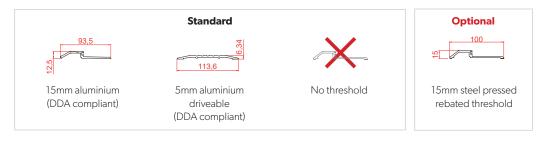


#### > WALL CONSTRUCTION

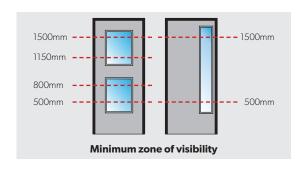
Construction **Types:** 

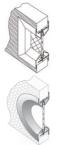
All Robust Fire Doors (INNA-DOR 60, 120 & 240) can be used in all forms of Masonry, Concrete and Flexible Stud Wall (cold wall style). When using Timber or Steel Stud Walls the client must ensure they have adequate evidence that the wall can support steel fire doors under fire conditions. 120 & 240 rated Stud Wall constructions should have the walls' reveal face protected by a fire resting board to protect the wall construction.

#### > THRESHOLD



#### > VISION PANELS









Standard Vision Panels - max size 508x1524mm per leaf. Please contact Sales for other options.



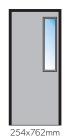




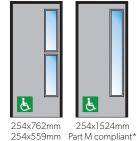
254x254mm



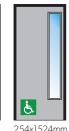
254x559mm







Part M compliant





610x610mm\*

INNA-DOR 120 INNA-DOR 240



610x1219mm\*

**INNA-DOR 60** 

**INNA-DOR 120** 

#### **INNA-DOR 240**

#### \*Exceed maximum area for INNA-DOR 240 and cannot be used at that rating.

# **INNA-DOR 60**

<b>3</b>	SSS	Magnelis <sup>©</sup>		SSS	Magnelis
	396	610		214	214
	1631	1854		1483	1483
	0.35	0.8		0.32	0.32
	8mm Firelite Safety*			8mm l Safe	Firelite ety*

#### Permitted panel sizes: Material SSS Magnelis SSS = Standard Stainless Steel 610 Max Width mm 396 Max Height 1631 1854 Max Area 0.35 8.0 8mm Firelite Standard glazings available: Other configurations and sizes available – please contact the Sales Office. Safety\*

## > FINISHES





Polyester Powder Coated from Non-Standard Colour Range



**PVC** Laminate from Standard Range



Woodgrain PVC Laminate (not available with fire rated doors)



Stainless Steel Brushed, Polished or Patterned



Unfinished for site finishing



#### > LOUVRE PANELS

Construction:	Consists of an intumescent block grille only 14mm thick within the door leaf and an FDLS two-part steel louvre set which fixes to both sides of the door and sandwiches the FB intumescent block.  18g Galvanised steel frame louvre blades. (Stainless steel Grade 304 and Grade 316 available to order.)
Applications:	Designed to be used on fire rated doors fitted to rooms that require ventilation. A standard louvre will allow ventilation but will also allow the passage of flames and smoke, but a Fire Block Louvre System will maintain the integrity of fire doors and prevent the spread of flames. Examples are doors to plant rooms, stores, computer rooms, changing facilities and manufacturing areas. In fact, any area that requires ventilation but is protected by a fire rated door.

		INNA-DOR 60	INNA-DOR 120	INNA-DOR 240
Permitted panel sizes:	Max Width mm	610	610	610
	Max Height mm	610	610	610
	Max Area m²	0.4	0.4	0.35
Allowed panels by relevant British Standard:	457 x 457 mm lower	BS 476 BS EN 1634	BS 476 BS EN 1634	BS 476 BS EN 1634
	457 x 457 mm upper	BS 476	BS 476	BS 476
	457 x 457 mm upper and lower	BS 476	BS 476	
	610 x 610 mm lower	BS 476 BS EN 1634	BS 476 BS EN 1634	BS EN 1634
	610 x 610mm upper	BS 476	BS 476	

#### > SIDE AND OVER PANEL ARRANGEMENTS

Construction:	Panels can be solid or glazed.						
Applications:	Hinged panels, flush or glazed. Other glazing arrangements can be fitted subject to satisfactory evidence of testing in a ste door. Please consult the Sales office with specific requirements						
Solid permitted ov	rerpanel sizes (fixed and hinged):	Max Height Removable Tra	mm nsom	2000 Yes	2000 Yes	2000 Yes	
Permitted sidepanel sizes:		Max Width Max Height	mm mm	1300 2830	1300 2830	1300 2830	
Permitted glazed	overpanel and sidepanel sizes:						
6mm Vetroflam/6mm Spacer/6mm Vetroflam:		Max Height	mm	2000	2000		
		Max Area	m <sup>2</sup>	4.08	3.53	2000	
	8mm Firelite Safety:	Max Height Max Area	mm m²	2060 2.88	2060 2.88	2060 2.88	

#### > REGULATORY REQUIREMENTS FOR FIRE TESTING

The Building Regulations for England and Wales Approved document B ( Fire Safety, Appendix B) requires that all fire doors should have the appropriate performance:

A. By their performance under test to:

BS 476: Fire test on building materials and structures, Part 22 (Methods for determination of the fire resistance of non-loadbearing elements for a period of minutes). OR

B. Part 2 Classification using data from fire resistance tests. They are tested to the relevant European method from the following:

BS EN 1634-1:200, Fire resistance tests for door and shutter assemblies, Part 1 (Fire doors and shutters).

The building regulations further states that: "Any test evidence used to substantiate the fire resistance rating of a door or shutter should be carefully checked to ensure that it adequately demonstrates compliance and is applicable to the complete installed assembly. Small differences in detail (such as glazing apertures,....) may significantly affect the rating".

#### > VERIFICATION AND CERTIFICATION

All ROBUST Fire Resistant Doors have been tested to both BS 476 and BS EN  $^{1634}$ 

All ROBUST steel doors are manufactured strictly in accordance with ISO 9000.

Robust UK undertake a regular programme of testing which may modify the information contained depending on latest test evidence. For project specific requirements please contact the sales office on 01782 592900.



**ROBUST UK LTD** Sutherland Road, Longton, Stoke-on-Trent, Staffordshire ST3 1HZ Tel: +44 (0) 1782 592900 Email: sales@robust-uk.com

