

Shieldoor

Lead Lined Single Swing Door Systems

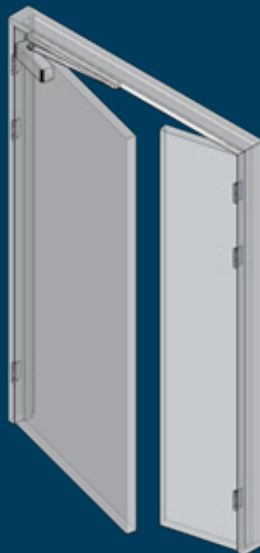
SSS

- Lamdoor
- Single Door
- Single Swing



SUS

- Lamdoor
- Unequal Pair
- Single Swing



SDS

- Lamdoor
- Double Door
- Single Swing



SDS Door System Explained

Every year thousands of brand-new fire doors have their certification invalidated from the moment they are fitted! Mostly this happens inadvertently but is hardly surprising when you consider that a compliant fire door is not just a door and frame. In order for a fire door to be compliant – the door leaf, the glazing, the door frame, the ironmongery, the fixings, the fire stopping materials, the intumescent products and the fire signage must not only be compatible, but must also be backed up with fire test evidence to prove the use of all components when fitted together. The most common mistake amongst the fire industry is to assume that an individual component with fire test evidence can automatically be fitted to a fire door. Sadly, this is not the case, and as a result many fire doors – although they are made up of fire rated components – are not fire compliant as a complete assembly.

At Specialist Door Solutions, we have created a number of Door Systems which have been compiled based on our experience in the industry and are designed to offer a one-stop solution for compliant high-performance doorsets comprising of doors, frames, vision panels and ironmongery solutions, all of which are fully backed up by the relevant test data and certification.



The SSS, SUS & SDS Door Systems

The **SSS, SUS & SDS** Door Systems are all single swing doorsets. They are hung on hinges and are designed to open in one direction only.

The **SSS, SUS & SDS** Door Systems are all part of the Shieldoor range of doors. The SDS Shieldoor is an incredibly resilient, hard wearing and hygienic doorset, with integral lead lining designed to shield against harmful radiation. As well as being extremely tough, with minimal maintenance requirements compared to timber and laminate products.

The SDS Shieldoor range has a very comprehensive range of glazing options, colour options, door leaf sizes, and also offers the ability to customise with items such as edge protectors and kickplates. These details are explained in more detail in the following pages.

Operational / Warranty

An incredibly resilient, hard wearing, and hygienic doorset. Shielddoor doors are supplied encapsulated with 2mm thick PVC, and are designed for high use in healthcare, pharmaceutical, hospitality and education sectors. Supplied with 10 Year Warranty.

Fire Rating Options

NFR – No Fire Rating

FD30 – 30 Mins Fire Resistance

FD30s – 30 Mins Fire & Smoke Resistance

FD60 – 60 Mins Fire Resistance

FD60s – 60 Mins Fire & Smoke Resistance

Acoustic Performance

0 – 20dB – without any acoustic seals

21 – 32dB – with the addition of batwing & dropdown seals

33 – 35dB – with the addition of batwing & dropdown seals and a 54mm core

Lead shielding

All Shielddoors are lead lined to achieve effective shielding from X-rays. Depending on the level of protection needed, lead thickness can range from code 3 up to code 8.

Lead manufactured to BS EN 12588:2006

Enviromental

Formaldehyde Release Rating Class E1, according to BS EN 13986(2004).

FSC Certified – Certificate Registration No. SA-COC-005235.

Durability

Severe Duty Rating. All door cores have been tested to 1,000,000 cycles to BS EN 1191 (with classification according to BS EN 12400). This is the highest grading possible in the British Standard of Mechanical Tests for 'hinged or pivoted doors'. Judged on how they perform in tests, door assemblies are awarded one of four classifications, ranging from Light, Medium or Heavy to Severe Duty. In independent tests, These door cores achieved SEVERE DUTY – the highest grading possible in the British Standard of Mechanical Tests for 'hinged or pivoted doors'.

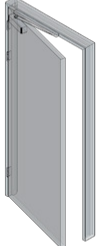


Maximum Leaf Sizes

Here are the maximum leaf sizes available for the **SSS, SUS & SDS** Door systems. These sizes are based on our primary fire test evidence.

Maximum sizes are noted for both the Width and Height of the door, as the width and height of a door are relative to each other. A very wide door is restricted by height, and a very tall door is restricted in width.

When a fire test is carried out – a door without a lock or latch is considered more onerous than a door with a latch. The reason for this is that the latch serves to hold the door in the closed position against the pressure build up within the furnace. This therefore creates two categories of permissible door sizes – those tested with a latch and those tested without a latch:

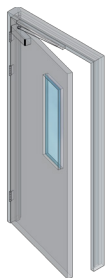
		Up to:	
		Height	Width
SSS Doors 	NFR - with or without latch	2320	1170
	FD30 - with or without latch	2150	950
	FD60 - with or without latch	2150	950

SUS Doors 	NFR - with or without latch	2320	1170
	FD30 - with or without latch	2150	950
	FD60 - with or without latch	2150	950

SDS Doors 	NFR - with or without latch	2320	1170
	FD30 - with or without latch	2150	950
	FD60 - with or without latch	2150	950

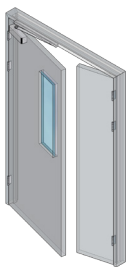
Vision Panels

All of the following vision panel options are available on the **SSS, SUS & SDS** Door Systems. Vision panels are supplied fully factory fitted, and will be supplied as follows;



SSS Doors

Vision Panel of choice



SUS Doors

Vision Panel of choice is supplied in the main leaf only.

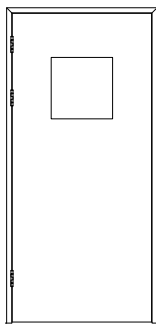


SDS Doors

Vision Panel of choice is supplied in both door leaves.

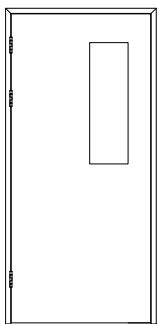
The following configurations are available providing a number of different size and layout options. These options have been compiled following many years of experience in the industry. Those noted with 'Part M' below comply with the Building Regulations Approved Document Part M (BS8300) – Minimum Zones of Visibility, and the Equality Act (EA) 2010.

VPA10



VPA10 = 408 x 408mm
(Central on Door Width)

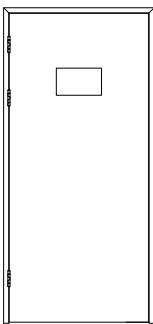
VPA11



VPA11 = 805 x 255mm
(150mm From Door Edge)

VPA11A = 805 x 255mm
(200mm From Door Edge)

VP/WL



VPA12 = 180mm x 300mm

Beading Types

The following beading options are available on the **SSS, SUS & SDS** Door Systems, which are fitted with the relevant glazing seals as standard to ensure fire integrity and acoustic properties are maintained. As standard, all fixing points are concealed.

Flush

Where infection control is paramount, this option provides a second-to-none solution. The PVC door faces are entirely flush with the vision panel, with only a silicone joint between the PVC and the glass.



Glass Types

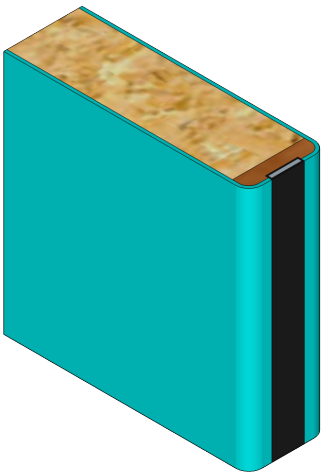
All of the following glass types are available on the **SSS, SUS & SDS** Door Systems (noting size restrictions below). These are available in NFR or fire rated options, and also for acoustic or non-acoustic doors. Simply select a glass type, and we will take care of ensuring that the correct variation of the following glass types, matches up with the desired fire and/or acoustic rating. Since glazing within doors is categorised as glazing within 'Critical Locations' under Building Regulations, all glass types will conform to British Standard BS 6262: Part 4: 1994.

All SSS, SUS & SDS systems incorporate lead shielding/ glazing to the correct specified lead code.

Name	Clearglaze	Warning light	Priviglaze	Priviglaze +
				
Comments	A Clear glass triple glazed unit, finishing flush with both faces of the door. Please note: lead glass has a slight yellow tint.	12 volt LED warning light that is recessed into one face of the door. Please note: available for NFR and 30 minute only.	A double glazed unit incorporating an integral blind. Finishing flush with both faces of the door.	A double glazed unit finishing flush with both faces of the door, incorporating an integral blind & LED Warning light.
Beading System (see below for more details)	Flush 	Flush 	Flush 	Flush 
Size Options	Available in VP10 & VP11	Available in VP/WL	Available in VP10 & VP11	Available in VP10 & VP11

Door Edges

All door edges on the **SSS, SUS & SDS** Door Systems are Postformed. This means that the PVC sheets on the faces of the doors are heated up and formed around the edges of the door. This provides the ultimate solution for both impact protection and hygiene, as there are no joints, no unprotected edges, and no loose components. The joint between the two faces of PVC is fitted with an intumescent strip.



Frame Types

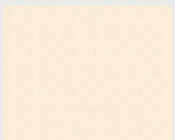
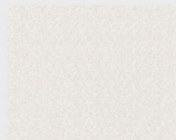
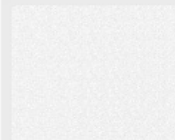
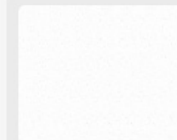
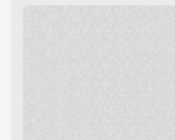
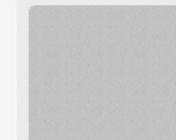
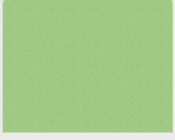
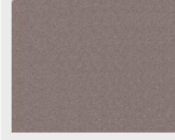
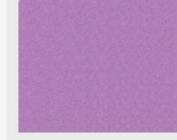
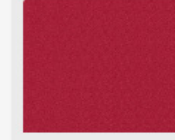
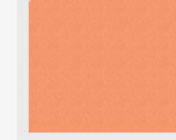
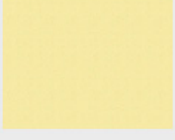
The following frame types are available on the **SSS, SUS & SDS** Door Systems;

Frame Type	Image	Comments	Notes	Wall Depths
Traditonal Frame	A 3D perspective illustration of a traditional door frame. It shows a dark blue frame with a light green architrave and a yellow doorstop. The doorstop is a curved, wedge-shaped piece that fits into the frame. The architrave is a flat, rectangular piece that covers the joint between the door and the frame.	Our most common frame type, comprising of separate door stops and architraves.	This frame type allows for the frame fixings to be positioned behind the doorstops. The architraves and doorstops are supplied with loose PVC covers. This means that the PVC covers can be applied after the architraves and doorstops are fitted giving a completely fixing-free finish. All frames, doorstops and architraves will incorporate lead lining to the code specified. The design provides universal lead shielding regardless of wall construction or doorset orientation.	110 - 250mm Extension lining available for frames deeper than 250mm

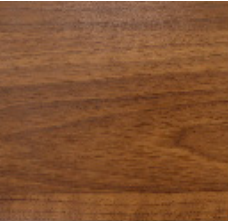
Finishes

All of the following colours are available on the **SSS, SUS & SDS** Door Systems.
Doors and frames can be in the same colour, or in contrasting colours.

DFend – Textured Finish

 Buttermilk LRV 69; RAL 1015	 Mushroom: LRV 68; RAL 1013	 Chalk: LRV 78; RAL 9001	 Snowflake: LRV 81; RAL 9003	 Gunpowder: LRV 51; RAL 7035	 Cobble: LRV 36; RAL 9006
 Flint: LRV 21; RAL 7037	 Midnight: LRV 5; RAL 5003	 Lupin: LRV 23; RAL 5024	 Denim: LRV 41	 Peppermint: LRV 49	 Jade: LRV 36
 Verdure: LRV 56	 Aqua: LRV 20; RAL 6033	 Carbon: LRV 22	 Grape: LRV 22; RAL 4008	 Claret: LRV 8; RAL 3032	 Mandarin: LRV 33
 Primrose: LRV 65					

Woodgrains

 American Black Walnut: LRV 40	 Swiss Elm: LRV 22	 Trojan Oak: LRV 37	 American White Oak: LRV 43	 Ellmau Beech: LRV 46
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Ironmongery Sets

There's no hiding it - ironmongery is sometimes one of the most complicated aspects of a doorset. Apart from ensuring all components of an ironmongery set are compatible - there's also Fire Regulations, Fire certification, HTM compliance, DDA compliance and Building Regulations to consider!

Here at Specialist Door Solutions we have combined our many years of experience with doors and ironmongery in the healthcare sector, and created an industry pioneering range of 'Standard Ironmongery Sets'. All of these standard sets are 100% compliant with all of the above mentioned regulations, and are designed to take the hard work out of choosing ironmongery - whilst still offering a huge range of options.

Here's a few notes about what's in these sets, and on the following pages you will find full details of the ironmongery sets, listed under the relevant Door Systems.

Ironmongery Finishes

We offer our ironmongery sets in 3 finishes - each designed to offer different levels of hygiene. All of these different finishes are brushed stainless steel in appearance making them visually the same. This makes it possible to mix-and-match different ironmongery finishes in different areas of a project, according to the clinical sensitivity of the room/area.

• Define Range - Stainless Steel

Made from Stainless Steel - this is our Go-To option for most doorsets. Stainless Steel is extremely tough and offers excellent corrosion resistance to most oxidising acids making it easy to sanitise - ideal for the rigorous demands of hospital environments.

• Define⁺ Range - Anti-Microbial

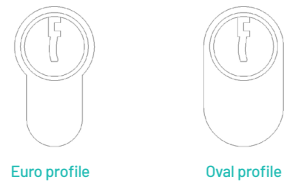
A range of ironmongery with an Anti-Microbial coating containing silver ions. The silver ions in the coating continuously fight against harmful bacteria by disrupting the bacteria's metabolism which inhibits its survival and reproduction. The coating is extremely tough and remains operative even when subjected to the normal cleaning regimes of a hospital. Note - only 'touch-point' items will be coated. This includes Pull Handles, Push Plates, Lever Handles, Escutcheons and Bathroom Thumbturns. Where an ironmongery set is specified as Anti-Microbial, all 'non-touch-point' items will be Stainless Steel. Please also note, Digi-Locks are not available in Anti-Microbial finish.

• Define Copper Range - Copper Nickel

A range of ironmongery made from solid copper alloy. The key difference with this range is that it is not coated - it is made from solid copper alloy which continuously kills 99.9% of harmful bacteria, whilst maintaining the clinical aesthetic of stainless steel. Copper is the first and only elemental solid surface material registered with the U.S. Environmental Protection Agency to actively kill bacteria. The antibacterial properties work 24/7, never washing out or wearing away, making it the ideal choice where infection control is paramount. Our Copper Nickel range of ironmongery is manufactured using a 70-30 copper-nickel alloy, which makes the range tarnish-resistant and will not oxidize and patinate like pure copper. Note - only 'touch-point' items will be made from Copper Nickel. This includes Pull Handles, Push Plates, Lever Handles, Escutcheons and Bathroom Thumbturns. Where an ironmongery set is specified as Copper Nickel, all 'non-touch-point' items will be Stainless Steel. Please also note, Digi-Locks are not available in Copper Nickel.

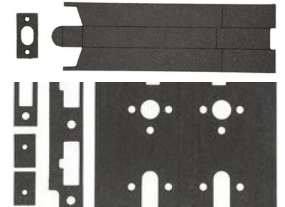
Lock Profile Options

We offer our lockcases & cylinders in two profile options - Oval or Euro profile. Euro profile is the default choice as this is the most common in the UK. Oval profile is available on request.



Intumescent Jackets

Many ironmongery components will require 1mm or 2mm intumescent protection around the hardware in order to protect the cut-out in the door leaf in the event of a fire. These components are not listed in the ironmongery sets but the correct intumescent products are included automatically based on the fire rating of the door. This makes it simpler when selecting your ironmongery - you tell us what ironmongery set you want, and we take care of the intumescent if required!



Fire Signage

Under building regulations, all fire doors must be fitted with mandatory fire signage. There are numerous types of mandatory signage, and the exact sign required depends on the type of door, and also depends on what other hardware is being fitted to the doorset. Mandatory fire signage is not listed in the ironmongery sets as this is required in order to meet building regulations, but it will automatically be included according to the fire rating of the doorset, and according to the other hardware items on the door.



Door Closers

All SSS, SUS, SDS doorsets will be specified with scissor arm closers due to the additional weight associated with lead lined doors.



Hinges

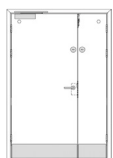
All of our **SSS, SUS & SDS** doors will be supplied with extremely high quality concealed bearing hinges. These hinges utilise advanced polymer bushes to provide an oil free, maintenance free hinge. These hinges have been tested to the European Standard EN1935, and meet the highest grade possible - Grade 14. Our hinges are designed to take door weights of up to 160kg and have been independently tested to over 1,000,000 cycles.



SSS Ironmongery Sets (Shieldoor, Single Door, Single Swing)

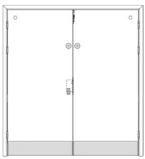
Handle Type	Locking Option	Closer Type	Image	Typical Room Types	Set NO.	Set contents
Pull Handle and Push Plate 	Non Locking	Scissor arm closer 		Multiple	005	Push Plate, Pull Handle, Scissor arm closer, Kickplates
				WC Circulation	009	Push Plate, Pull Handle, Scissor arm closer, Unisex WC Sign, Kickplates
				Male WC Circulation	010	Push Plate, Pull Handle, Scissor arm closer, Male WC Sign, Kickplates
				Female WC Circulation	011	Push Plate, Pull Handle, Scissor arm closer, Female WC Sign, Kickplates
Cylinder Pull 	Deadlock 	No Closer		Riser/Service Duct	019-L	Escutcheon, Cylinder Pull, Cylinder, Deadlock, Kickplates
Lever Handle 	Sashlock 	Scissor arm closer 		Multiple	007-L	Lever Handle, Escutcheon, Scissor arm closer (included if door is Fire Rated), Cylinder, Sashlock, Floor Door Stop [unless door closer included), Kickplates
	Latch 	Scissor arm closer 		Multiple	008	Lever Handle, Latch, Scissor arm closer (included if door is Fire Rated), Floor Door Stop (unless door closer included), Kickplates
	Bathroom 	Scissor arm closer 		WC	012	Closer (included if door is Fire Rated), Floor Door Stop (unless door closer included), Unisex WC Sign,
				Male WC	013	Closer (included if door is Fire Rated), Floor Door Stop on non closer doors, Male WC Sign, Kickplates Closer (included if door is Fire Rated), Floor Door Stop on non closer doors, Female WC Sign, Kickplates Closer (included if door is Fire Rated), Floor Door Stop on non closer doors, Shower Sign, Kickplates
				Female WC	014	Closer (included if door is Fire Rated), Floor Door Stop on non closer doors, Disabled WC Sign, Kickplates
				Shower	015	Codelock. Scissor arm closer included it door is Fire Rated), Floor Door Stop (unless door closer included),
				Dis. WC	016	Kickplates
Digi Lock 		Scissor arm closer 		Multiple	020	Codelock, Scissor arm closer (included if door is Fire Rated), Floor Door Stop (unless door closer included),
				Male Changing Rm.	022	Male WC Sign, Kickplates
				Female Changing Rm	023	Codelock. Scissor arm closer included it door is Fire Rated). Floor Door Stop (unless door closer included) Female WC Sign, Kickplates

SUS Ironmongery Sets (Shielddoor, Unequal Pair, Single Swing)

Handle Type	Locking Option	Closer Type	Image	Typical Room Types	Set NO.	Set contents
Pull Handle and Push Plate 	Non Locking	Scissor arm closer 		Multiple	003	Push Plate Pull Handle Scissor Arm Closer* Flush Bolt, Kickplates (*Option to change to Automatic Door Opener)
	Deadlock 	Scissor arm closer 		Multiple	003-L	Push Plate, Pull Handle, Escutcheon, Cylinder, Deadlock, Flush Bolt, Scissor Arm Closer, Kickplates
Lever handle 	Bathroom 	Scissor arm closer 		WC	025	Lever Handle, Latch, Thumbturn, Bathroom Lock, Flush Bolt, Scissor arm closer (included if door is Fire Rated), Floor Door Stop (unless door closer (included), Unisex WC Sign, Kickplates
	Latch 	Scissor arm closer 		Multiple	026	Lever Handle, Latch, Scissor Arm Closer (included if door is Fire Rated), Floor Door Stop (unless door closer (included), Unisex WC Sign, Kickplates
	Sashlock 	Scissor arm closer 		Multiple	027-L	Lever Handle, Escutcheon, Cylinder, Sashlock, Flush Bolt, Scissor Arm Closer (included if door is Fire Rated), Floor Door Stop (unless door closer (included), Kickplates
Digi Lock 		Scissor arm closer 		Multiple	021	Flush Bolt, Scissor Arm Closer (included if door is Fire Rated), Kickplates, Code lock

Note: All sets will include in the relevant intumescent and fire signage based on the fire rating of the door. See notes on page 10

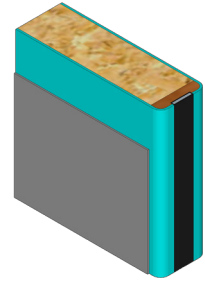
SDS Ironmongery Sets (Shielddoor, Double Door, Single Swing)

Handle Type	Locking Option	Closer Type	Image	Typical Room Types	Set NO.	Set contents
Pull Handle and Push Plate 	Non Locking	Scissor arm closer 		Multiple	001	Push Plate Pull Handle Scissor Arm Closer* Flush Bolt, Kickplates (*Option to change to Automatic Door Opener)
	Deadlock 	Scissor arm closer 		Multiple	001-L	Push Plate, Pull Handle, Scissor Arm Closer, Escutcheon, Cylinder, Deadlock, Flush Bolt, Kickplates
Cylinder Pull 	Deadlock 	Scissor arm closer 		Riser/Service Duct	018-L	Escutcheon, Cylinder Pull, Cylinder, Deadlock, Flush Bolt, Kickplates
Digi Lock 		Scissor arm closer 		Multiple	021	Flush Bolt, Scissor Arm Closer (included if door is Fire Rated), Kickplates, Codelock

Note: All sets will include in the relevant intumescent and fire signage based on the fire rating of the door. See notes on page 10

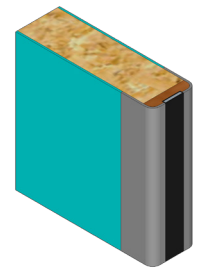
Additional PVC Protection – Kickplates

Whilst PVC encapsulated doors are arguably the most durable option for internal healthcare doorsets – some clients like to add additional PVC kickplates to the face of the doors in order to provide enhanced protection, and/or to provide a contrasting colour feature. PVC Kickplates are available flushed into the face of the door (providing flushed in PVC Edge Protectors are also fitted), or as surface mounted kickplates. The beauty of surface mounted PVC kickplates is that they are fully replaceable, and unlike Stainless Steel kickplates – there are no size restrictions on fire rated doors.



Additional PVC Protection – Edge Protectors

PVC Edge Protectors are often used where the door and frame are similar in colour, to provide a contrasting colour to one or both door edges. The Building Regulations Approved Document Part M (BS 8300-2:2018), states that the presence of doors, whether open or closed, should be apparent to visually impaired people through the careful choice of colour and material for the door and its surroundings. This document also states that all Internal doors should be identifiable and contrast visually with the surrounding wall and floor finishes, achieving at least 30 points LRV. PVC Edge Protectors are available in any of the colours listed above and are supplied flushed into the face of the door for infection control purposes, and in order to simplify the fitting of the ironmongery



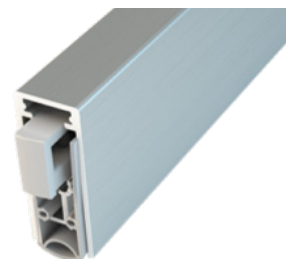
Fire & Smoke Seals

As standard, Intumescent Brush strips are fitted to all doors, and plain intumescent strips are used where two Brush strips would conflict – i.e. on the meeting stiles of a pair of doors. All strips are supplied in either Black or White, as standard.



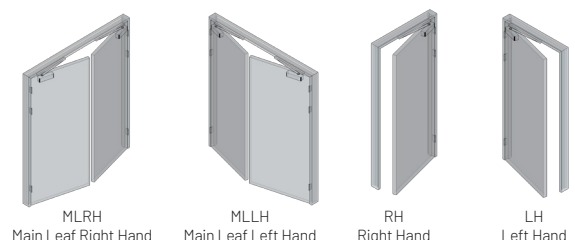
Threshold Seals

Where FD30s or FD60s doors are required for smoke control, the doors must have a maximum gap of 3mm under the door leaves in order to comply. Practically – a 3mm gap is very hard to achieve without the doors binding or scraping on the floor, and therefore by default we use a dropseal in the base of the door where smoke control is required. A dropseal is automatically activated when the door is in the closed position, and seals against the floor. By using a dropseal – the gap under the doors can be increased up to 10mm giving a more realistic door-to-floor clearance, but still achieving the requirements of BS 476-31.1: 1983. Dropseals are also fitted to acoustic rated doors where required.



Door Handings

Door handings refer to the side of the door where the hinges are, when viewing the hinge knuckle side ('pull-side') of the door. Unequal pairs of doors refer to the large leaf. Double door handings refer to the main leaf.



	Swing Type	Door Configuration	SYSTEM CODE	Durability	Warranty	Fire Ratings	Flush Glaze Available?	Priviglaze Available	Priviglaze+ Available	No. of Finishes Choices	Additional PVC Protection available	OHP Available	Sidescreen Available
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Dfendoor	Single Swing	Single Door	DSS	Severe Duty	10 years	NFR, FD30, FD60	✓	✓	✓	24	✓	✓	✓
		Unequal Pair	DUS	Severe Duty	10 years	NFR, FD30, FD60	✓	✓	✓	24	✓	✓	✓
		Double Door	DDS	Severe Duty	10 years	NFR, FD30, FD60	✓	✓	✓	24	✓	✓	✓
	Double Swing	Single Door	DSD	Severe Duty	10 years	NFR, FD30, FD60	✓	✓	✓	24	✓	✓	✓
		Unequal Pair	DUD	Severe Duty	10 years	NFR, FD30, FD60	✓	✓	✓	24	✓	✓	✓
		Double Door	DDD	Severe Duty	10 years	NFR, FD30, FD60	✓	✓	✓	24	✓	✓	✓
	Ambulant WC	Single Door	DSDA	Severe Duty	10 years	NFR, FD30, FD60				24	✓		
		Unequal Pair	DUDA	Severe Duty	10 years	NFR, FD30, FD60				24	✓		

Shielddoor	Single Swing	Single Door	SSS	Severe Duty	10 years	NFR, FD30, FD60	✓	✓	✓	24	✓		
		Unequal Pair	SUS	Severe Duty	10 years	NFR, FD30, FD60	✓	✓	✓	24	✓		
		Double Door	SDS	Severe Duty	10 years	NFR, FD30, FD60	✓	✓	✓	24	✓		

Lamdoor (limited door sizes available - Max leaf size =2100 x 950mm)	Single Swing	Single Door	LSS	Medium Duty	5 years	NFR, FD30, FD60				7		✓	✓
		Unequal Pair	LUS	Medium Duty	5 years	NFR, FD30, FD60				7		✓	✓
		Double Door	LDS	Medium Duty	5 years	NFR, FD30, FD60				7		✓	✓
	Double Swing	Single Door	LSD	Medium Duty	5 years	NFR, FD30, FD60				7		✓	✓
		Unequal Pair	LUD	Medium Duty	5 years	NFR, FD30, FD60				7		✓	✓
		Double Door	LDD	Medium Duty	5 years	NFR, FD30, FD60				7		✓	✓
	Double Swing Ambulant WC	Single Door	LSDA	Medium Duty	5 years	NFR, FD30, FD60				7			
		Unequal Pair	LUDA	Medium Duty	5 years	NFR, FD30, FD60				7			



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