



# SDS

## Dfendoor

### Double Swing Door Systems

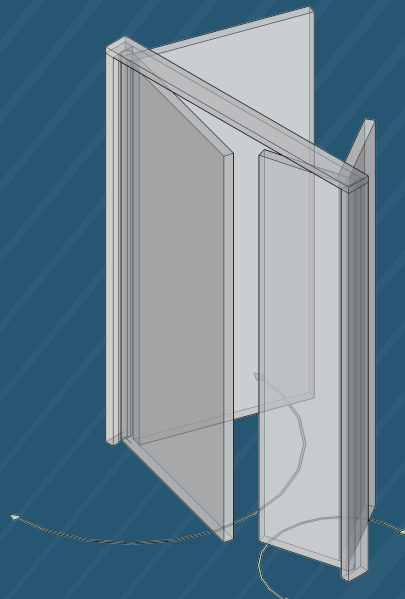
#### DSD

- Dfendoor
- Single Door
- Double Swing



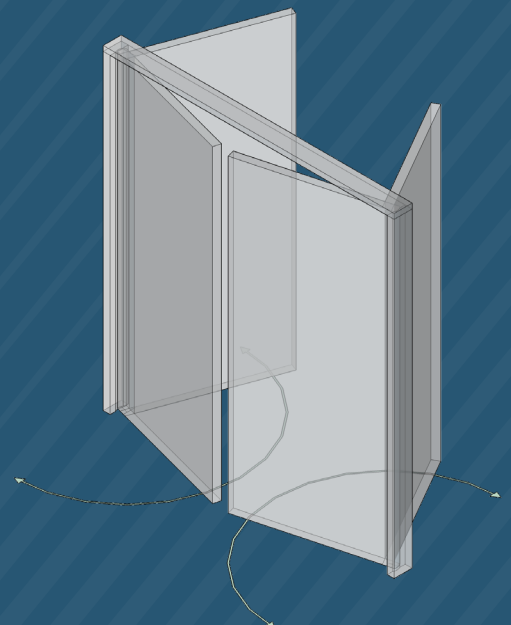
#### DUD

- Dfendoor
- Unequal Pair
- Double Swing



#### DDD

- Dfendoor
- Double Door
- Double Swing



# SDS Door Systems 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 DSD, DUD & DDD Door Systems

The **DSD, DUD & DDD** Door Systems are all double swing doorsets. They are hung on pivots and are designed to open in both directions – typically to facilitate fire escape routes.

The **DSD, DUD & DDD** Door Systems are all part of the Dfendoor range of doors. The SDS Dfendoor is an incredibly resilient, hard wearing and hygienic doorset, ideal for high-traffic, high-wear hospital environments. As well as being extremely tough, with minimal maintenance requirements compared to timber and laminate products.

The SDS Dfendoor 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. Dfendoor doors are supplied encapsulated with 2mm thick PVC, and are designed for high use in healthcare, pharmaceutical, hospitality, retail and education sectors. Supplied with 5 Year Warranty.

## Fire Rating Options

**NFR** – No Fire Rating

**FD30** – 30 Mins Fire Resistance

FD30s – Not available on double swing doors

**FD60** – 60 Mins Fire Resistance

FD60s – Not available on double swing doors

## Acoustic Performance

**0 – 20dB** – without any acoustic seals

21dB+ – Not available on double swing doors

## 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'.



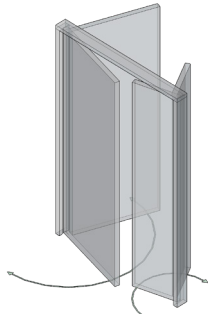
## Maximum Leaf Sizes

Here are the maximum leaf sizes available for the **DSD, DUD & DDD** 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:

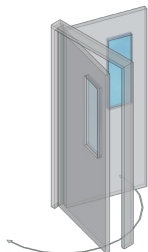
		Widest Option		Tallest Option:	
		Height	Width	Height	Width
<b>DSD Doors</b> 	NFR - No Latch	3000	1180	3000	1180
	NFR - With Latch	3000	1180	3000	1180
	FD30 - No Latch	2360	1180	2932	1075
	FD30 - With Latch	2360	1180	2982	1075
	FD60 - No Latch	2360	1104	2519	1028
	FD60 - With Latch	2360	1129	2569	1028

<b>DUD Doors</b> 	NFR - No Latch	3000	1180	3000	1180
	NFR - With Latch	3000	1180	3000	1180
	FD30 - No Latch	2360	1180	2932	1075
	FD30 - With Latch	2360	1180	2982	1075
	FD60 - No Latch	2360	1104	2519	1028
	FD60 - With Latch	2360	1129	2569	1028

<b>DDD Doors</b> 	NFR - No Latch	3000	1180	3000	1180
	NFR - With Latch	3000	1180	3000	1180
	FD30 - No Latch	2360	1180	2932	1075
	FD30 - With Latch	2360	1180	2982	1075
	FD60 - No Latch	2360	1104	2519	1028
	FD60 - With Latch	2360	1129	2569	1028

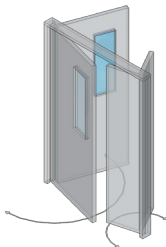
# Vision Panels

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



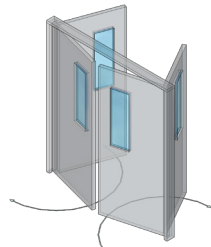
**DSD Doors**

Vision Panel of choice



**DUD Doors**

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



**DDD 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.

**VPA1**



VPA1 = 750 x 200mm  
(150mm From Door Edge)  
VPA1A = 750 x 200mm  
(200mm From Door Edge)

**VPA2**



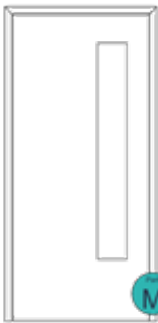
VPA2 = 750 & 688 x 200mm  
(150mm From Door Edge)  
VPA3A = 750 & 688 x 200mm  
(200mm From Door Edge)

**VPA3**



VPA3 = 750 & 688 x 200mm  
(150mm From Door Edge)  
VPA3A = 750 & 688 x 200mm  
(200mm From Door Edge)

**VPA4**



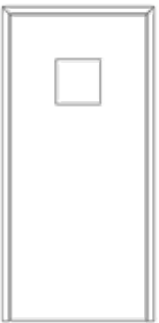
VPA4 = 1450 x 200mm  
(150mm From Door Edge)  
VPA4A = 1450 x 200mm  
(200mm From Door Edge)

**VPA5**



VPA5 = 1650 x 200mm  
(150mm From Door Edge)  
VPA5A = 1650 x 200mm  
(200mm From Door Edge)

**VPA9**



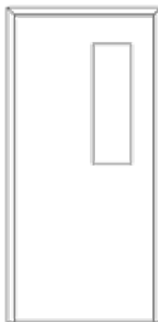
VPA9 = 300 x 300mm  
(Central on Door Width)  
VPA9A = 350 x 350mm  
(Central on Door Width)

**VPA10**



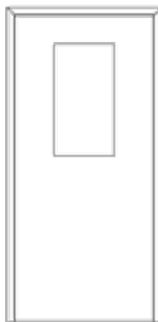
VPA10 = 408 x 408mm  
(Central on Door Width)

**VPA11**



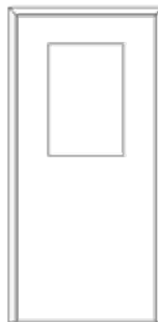
VPA11 = 805 x 255mm  
(150mm From Door Edge)  
VPA11A = 805 x 255mm  
(200mm From Door Edge)

**VPA12**



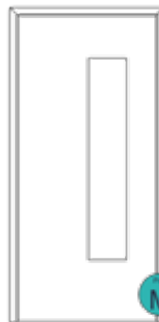
VPA12 = 750 x 400mm  
(Central on Door Width)

**VPA13**



VPA13 = 750 x 500mm  
(Central on Door Width)

**VPA17**



VPA17 = 1355 x 255mm  
(150mm From Door Edge)  
VPA17 = 1355 x 255mm  
(200mm From Door Edge)





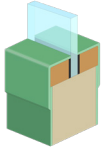

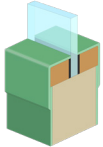

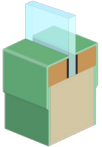


**VPA18**



VPA18 = 1550 x 200mm  
(150mm From Door Edge)  
VPA18 = 1550 x 200mm  
(200mm From Door Edge)

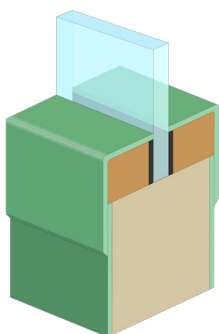
## Glass Types

All of the following glass types are available on the **DSD, DUD & DDD** 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.

Name	Clearglaze		Frostglaze		Priviglaze		Priviglaze+
							
Comments	The most common type of glazing. Available either as a single glass pane, or as a double glazed unit finishing flush with both faces of the door.		Glass can be frosted for privacy if required. Available either as a single glass pane, or as a double glazed unit finishing flush with both faces of the door.		A double glazed unit incorporating an integral blind. Available with PVC beading, or 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)	PVC Bead	Flush	PVC Bead	Flush	PVC Bead	Flush	Flush
							
Size Options	Available in all vision panel sizes		Available in all vision panel sizes		Available in VP10 & VP11		Available in VP10 & VP11

## Beading Types

The following beading options are available on the **DSD, DUD & DDD** Door Systems, both of 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.



### PVC Bead

Our most common beading system – providing excellent aesthetics and also minimal edges for infection control. Bead covers are available in matching or contrasting colours to the door leaf finish.

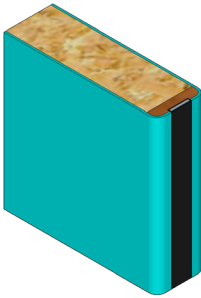


### Flush

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.

# Door Edges

All door edges on the **DSD, DUD & DDD** 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

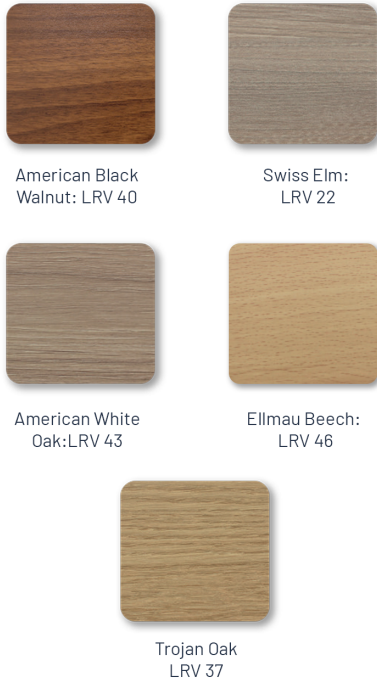
The following frame type is used on the **DSD, DUD & DDD** Door Systems;

Frame Type	Image	Comments	Notes	Wall Depths
Double Swing Centre		A scalloped profile frame with separate architraves, used for all Double Swing doors.	This frame type has a scalloped profile to the jambs, and the doors have a radiused edge to suit. Frame fixings are placed behind the intumescent strips within the frame, and the architraves are supplied with loose PVC covers. This means that there are no visible fixings on the finished doorset.	90 – 160mm  Extension lining available for deeper reveals up to 300mm.

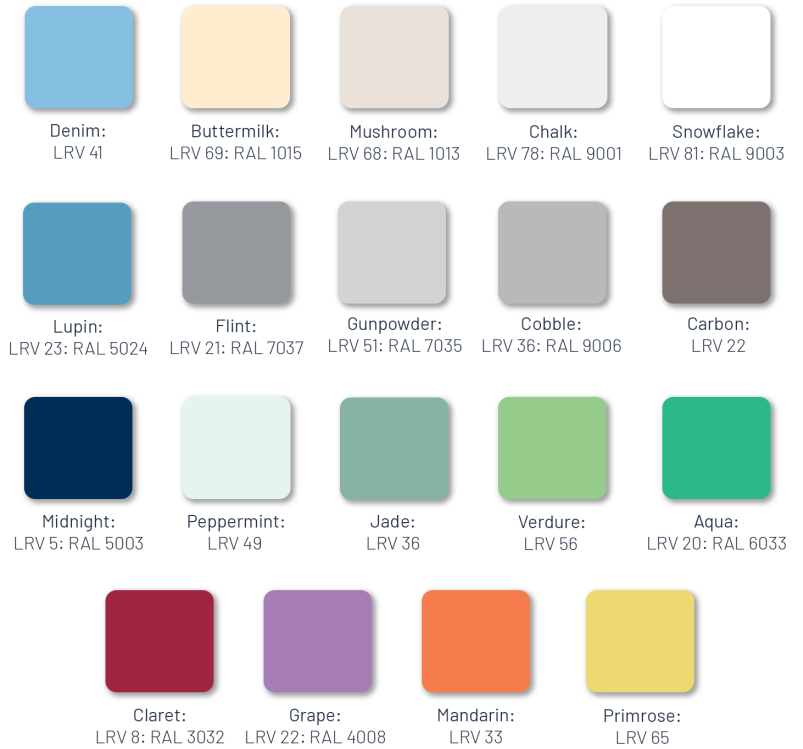
# Finishes

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

## Woodgrains



## DFend - Textured Finish



## Vibrance - High Gloss Finish



## Satin Smooth Finish



**Vibrance - High Gloss and Satin Smooth ranges are not recommended for high traffic areas**



## 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<sup>+</sup> Range - Anti-Microbial

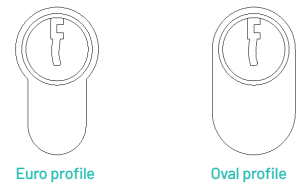
A range of ironmongery with an Anti-Microbial coating containing silver ions. The silver ions in the coating continuously fight against harmful bacteria by disrupting the bacteria's metabolism which inhibits its survival and reproduction. The coating is extremely tough and remains operative even when 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.

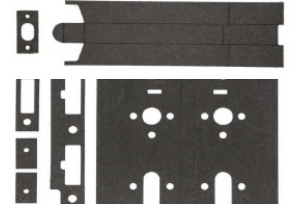
## Lock Profile Options

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.



## Floor Springs

We use universal non-handed floor springs which conform to EN 1154. These are designed for door weights of up to 120kg. These Floor Springs also feature hydraulically fully controlled closing cycle and backcheck function.








## EMHO Floor Springs



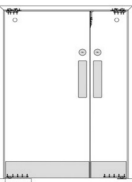

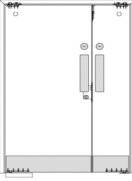
EMHO stands for Electro Magnetic Hold Open. Under BS 476: Part 22 - all fire rated doors into a room, or on a corridor must be fitted with a door closing device to ensure that the doors are held in the closed position. Under no circumstances must a fire door be kept in the open position, unless fitted with an EMHO closing device. An EMHO Floor Spring closer is designed to be linked to the fire alarm, and the Floor Spring contains a magnetic device which holds the door in the open position. In the event of the fire alarm being activated, the Floor Spring will automatically release the doors.





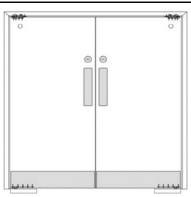

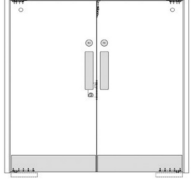
## DSD Ironmongery Sets (Dfendoor, Single Door, Double Swing)

Handle Type	Locking Option	Closer Type	Image	Application / Description	Set No.	Set Contents
	Non Locking			Multiple	040	Push Plates, Floor Spring, Floor Door Stops, Kickplates
				Multiple (EMHO)	041	Push Plates, EMHO Floor Spring, Floor Door Stops, Kickplates
	Deadlock			Multiple	040-L	Push Plates, Floor Spring, Floor Door Stops, Escutcheon, Cylinder, Deadlock, Kickplates
				Multiple (EMHO)	041-L	Push Plates, EMHO Floor Spring, Floor Door Stops, Escutcheon, Cylinder, Deadlock, Kickplates

## DUD Ironmongery Sets (Dfendoor, Unequal Pair, Double Swing)

Handle Type	Locking Option	Closer Type	Image	Application / Description	Set No.	Set Contents
	Non Locking			Multiple	038	Push Plates, Floor Spring, Free Swing Pivot, Floor Door Stops, Flush Bolt, Kickplates
				Multiple (EMHO)	039	Push Plates, EMHO Floor Spring, Free Swing Pivot, Floor Door Stops, Flush Bolt, Kickplates
	Deadlock			Multiple	038-L	Push Plates, Floor Spring, Free Swing Pivot, Floor Door Stops, Escutcheon, Cylinder, Deadlock, Flush Bolt, Kickplates
				Multiple (EMHO)	039-L	Push Plates, EMHO Floor Spring, Free Swing Pivot, Floor Door Stops, Escutcheon, Cylinder, Deadlock, Flush Bolt, Kickplates

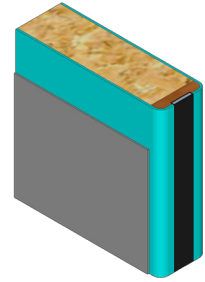
## DDD Ironmongery Sets (Dfendoor, Double Door, Double Swing)

Handle Type	Locking Option	Closer Type	Image	Application / Description	Set No.	Set Contents
	Non Locking			Multiple	036	Push Plates, Floor Springs, Floor Door Stops, Kickplates
				Multiple (EMHO)	037	Push Plates, EMHO Floor Springs, Floor Door Stops, Kickplates
	Deadlock			Multiple	036-L	Push Plates, Floor Springs, Floor Door Stops, Escutcheon, Cylinder, Deadlock, Flush Bolt, Kickplates
				Multiple (EMHO)	037-L	Push Plates, EMHO Floor Springs, Floor Door Stops, Escutcheon, Cylinder, Deadlock, Flush Bolt, Kickplates

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

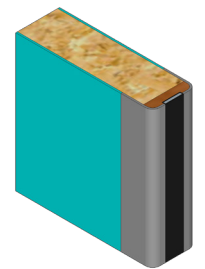
## Additional PVC Protection – Kickplates

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.



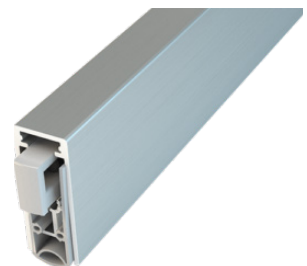
Intumescent Seal  
Fire Only



Intumescent Brush  
Fire & Smoke

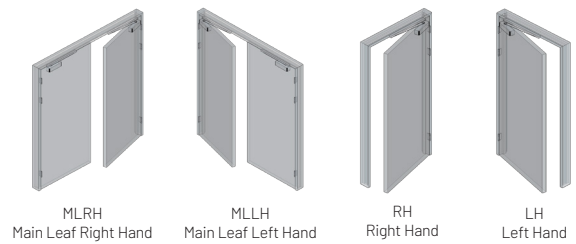
## Threshold Seals

No Threshold Seals are used on our **DSD, DUD & DDD** door systems.



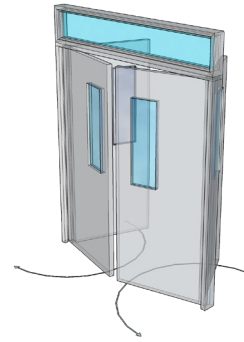
## Door Handings

Typically **DSD, DUD and DDD** door systems will not need to be handed since the door is positioned within the middle of the frame, and the doorset can be fitted either way around. However, where doorsets need to be handed – i.e. if fitted with a lock, then handings refer to the side of the door where the pivots are when viewing the 'pull-side' of the door. Unequal pairs refer to the large leaf. Double doors refer to the main leaf.



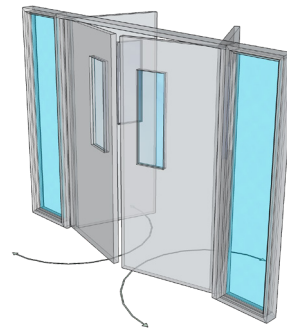
## Overhead Panels

Solid or Glazed overhead panels are available on the **DSD, DUD & DDD** Door Systems. Glass panels can be either clear or frosted, and Solid panels can be in the same colour or a contrasting colour to the door leaves.



## Sidescreen Panels

Solid or Glazed Sidescreen panels are available on the **DSD, DUD & DDD** Door Systems. Glass panels can be either clear or frosted, and Solid panels can be in the same colour or a contrasting colour to the door leaves.



## Air Transfer Grilles

Air movement in a building is important. Grilles are often fitted into walls and ceilings, but sometimes they need to be fitted in doors. However, fire and smoke travels wherever there's air movement! Our intumescent air transfer grilles create the perfect solution by expanding to form a solid block in the event of a fire, in order to stop fire spreading. Air transfer grilles are available on any of the **DSD, DUD and DDD** systems in NFR, FD30 or FD60 rating. (Note Air Transfer Grilles are not suitable for smoke rated doors – i.e. FD30s or FD60s.)



	Swing Type	Door Configuration	SYSTEM CODE	Durability	Warranty	Fire Ratings	Flush Glaze Available?	Priviglaze Available	Priviglaze+ Available	No. of Finishes	Additional PVC Protection	OHP Available	Sidescreen available
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Dfendoor	Single Swing	Single Door	DSS	Severe Duty	5 years	NFR, FD30, FD60	✓	✓	✓	45	✓	✓	✓
		Unequal Pair	DUS	Severe Duty	5 years	NFR, FD30, FD60	✓	✓	✓	45	✓	✓	✓
		Double Door	DDS	Severe Duty	5 years	NFR, FD30, FD60	✓	✓	✓	45	✓	✓	✓
	Double Swing (This Data Sheet)	Single Door	DSD	Severe Duty	5 years	NFR, FD30, FD60	✓	✓	✓	45	✓	✓	✓
		Unequal Pair	DUD	Severe Duty	5 years	NFR, FD30, FD60	✓	✓	✓	45	✓	✓	✓
		Double Door	DDD	Severe Duty	5 years	NFR, FD30, FD60	✓	✓	✓	45	✓	✓	✓
	Ambulant WC	Single Door	DSDA	Severe Duty	5 years	NFR, FD30, FD60				45	✓		
		Unequal Pair	DUDA	Severe Duty	5 years	NFR, FD30, FD60				45	✓		
	Lead Lined	Single Door	DLSS	Severe Duty	5 years	NFR, FD30, FD60	✓	✓	✓	45	✓		
		Unequal Pair	DLUS	Severe Duty	5 years	NFR, FD30, FD60	✓	✓	✓	45	✓		
		Double Door	DLDS	Severe Duty	5 years	NFR, FD30, FD60	✓	✓	✓	45	✓		

Lamdoor (limited door sizes available - Max leaf size =2100 x 950mm)	Single Swing	Single Door	LSS	Medium Duty	2 years	NFR, FD30, FD60				7		✓	✓
		Unequal Pair	LUS	Medium Duty	2 years	NFR, FD30, FD60				7		✓	✓
		Double Door	LDS	Medium Duty	2 years	NFR, FD30, FD60				7		✓	✓
	Double Swing	Single Door	LSD	Medium Duty	2 years	NFR, FD30, FD60				7		✓	✓
		Unequal Pair	LUD	Medium Duty	2 years	NFR, FD30, FD60				7		✓	✓
		Double Door	LDD	Medium Duty	2 years	NFR, FD30, FD60				7		✓	✓
	Double Swing Ambulant WC	Single Door	LSDA	Medium Duty	2 years	NFR, FD30, FD60				7			
		Unequal Pair	LUDA	Medium Duty	2 years	NFR, FD30, FD60				7			



# SDS

SPECIALIST DOOR  
SOLUTIONS

For further information, contact us:

**T** 01420 543222

**E** [sales@specialistdoorsolutions.com](mailto:sales@specialistdoorsolutions.com)

Unit 1 Bordon Trading Estate, Old Station Way, Bordon, Hampshire GU35 9HH

[specialistdoorsolutions.com](http://specialistdoorsolutions.com)