



Steel Doorset Specifications



Steel Doorset Overview

Door Leaf

As standard the door leaf is manufactured from two 1.5mm Galvanised steel skins, folded and mechanically fixed to form a strong and rigid 45mm thick door leaf, filled with internal steel strengtheners and mineral wool for ultimate insulation. While anti-jemmy flanges to the leading edge of the leaf provide excellent jemmy resistance.

Frames

Supplied as standard with all steel doorsets, the 90mm frames are pressed from 2mm Galvanised steel. The special fast fit frame is able to compensate for most irregularities in the opening. They permit a tolerance of up to 18mm on each side of the door. Shims and packers are not necessary making an extremely secure fix. Frames can also be insulated if required.

Thresholds

All thresholds are DDA compliant 2mm stainless steel bolted into the vertical frame posts. Available in outward opening, inward opening and ramped.

Seal

For optimum weather, thermal and acoustic performance, a tubular silicone/rubber is bonded into the frame rebate to ensure effective sealing of the door/frame gap.

Finish

Available in any RAL or BS standard or marinegrade powder-coat finishes.

Guarantee

The frame and doorset is given a 15 year guarantee subject to correct door maintenance.

All ironmongery has a 5 year guarantee subject to correct usage and maintenance.

Marine Grade PPC finish is guaranteed for a period of 10 years subject to the cleaning and maintenance programme.



Manufacturing, installing and supplying to the trade industry for over 25 years throughout the United Kingdom.





Steel Doorset

Defender Safeguard

Personnel Door	✓
Emergency Exit Door	✓
Internal Use	✓
External Use	✓
Single Doorset	✓
Double Doorset	✓

Electric Locking	✓
Manual Locking	✓

The Defender Safeguard doorset is manufactured from 1.5mm galvanised steel and internal steel strengthening as standard.

Frames are 2mm galvanised steel and have 2mm stainless steel thresholds making the Defender Safeguard a longer lasting, stronger door.

Bolted corners giving it rigidity and threaded fixing adjusters make it quick and easy to fit resulting in the Defender Safeguard being exceptional in the marketplace.

Over Panels/Side Panels

Over panels and side panels can be incorporated, both fixed and removeable for maximum access. Panels can be single or double glazed, solid to match the door leaf, or louvred.

Door Leaf

Manufactured from two 1.5mm Galvanised steel skins, folded and mechanically fixed to form a strong and rigid 45mm thick door leaf, filled with internal steel strengtheners and mineral wool for ultimate insulation. Anti-jemmy flanges to the leading edge of the leaf provide excellent jemmy resistance.

Frame

90mm frames are pressed from 2mm Galvanised steel to form a single rebated profile. Profiled headers form a smooth butt joint with the vertical posts and are joined together utilising strong M8 bolts to provide positive rigidity. The special fast fit frame is able to compensate for most irregularities in the opening with 16no threaded fixing adjusters per doorset. They permit a tolerance of up to 18mm on each side of the door. Shims and packers are not necessary making an extremely secure fix. Frames can be insulated if required.

Thermal performance

We achieve a rating of 2.2W/m²K based on a door size of 1090mm x 2090mm WxH - values may vary slightly depending on size and finished colour of doorset.

Reduced U-value also available with Thermaguard Technology (Patent Pending).

Structural opening sizes (mm) **

	Max width	Max height
Single leaf	1470	2970
Double leaf	2860	2970

Thresholds

DDA compliant 2mm stainless steel threshold bolted into the vertical frame posts. Available in outward opening, inward opening and ramped.

Seal

For optimum weather, thermal and acoustic performance, a tubular silicone/rubber is bonded into the frame rebate to ensure effective sealing of the door/frame gap.

Hardware

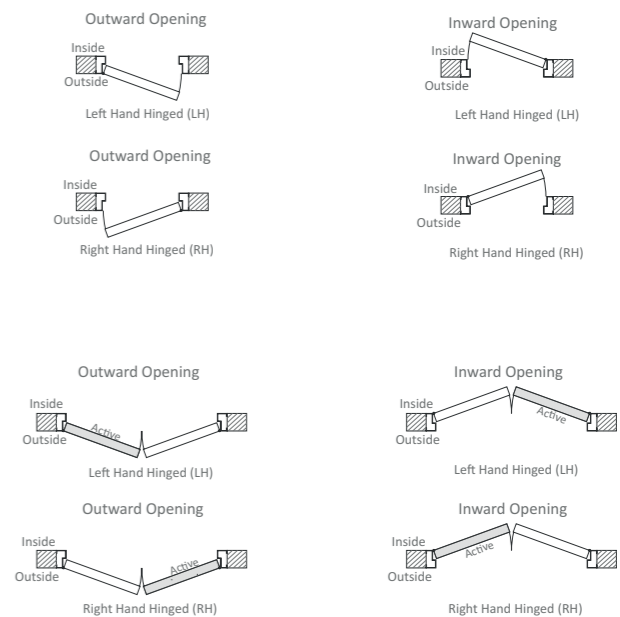
Door leaves are hung from 4no stainless steel hinges for smooth operation and optimum weather resistance. Security dog bolts secure the leaf into the frame if the hinges are attacked. Additional hardware includes a range of locks, latches, lever handles, panic hardware, closers and door restrictors. On double doors, leveraction flush bolts can be installed within the leading edge of the inactive door leaf.

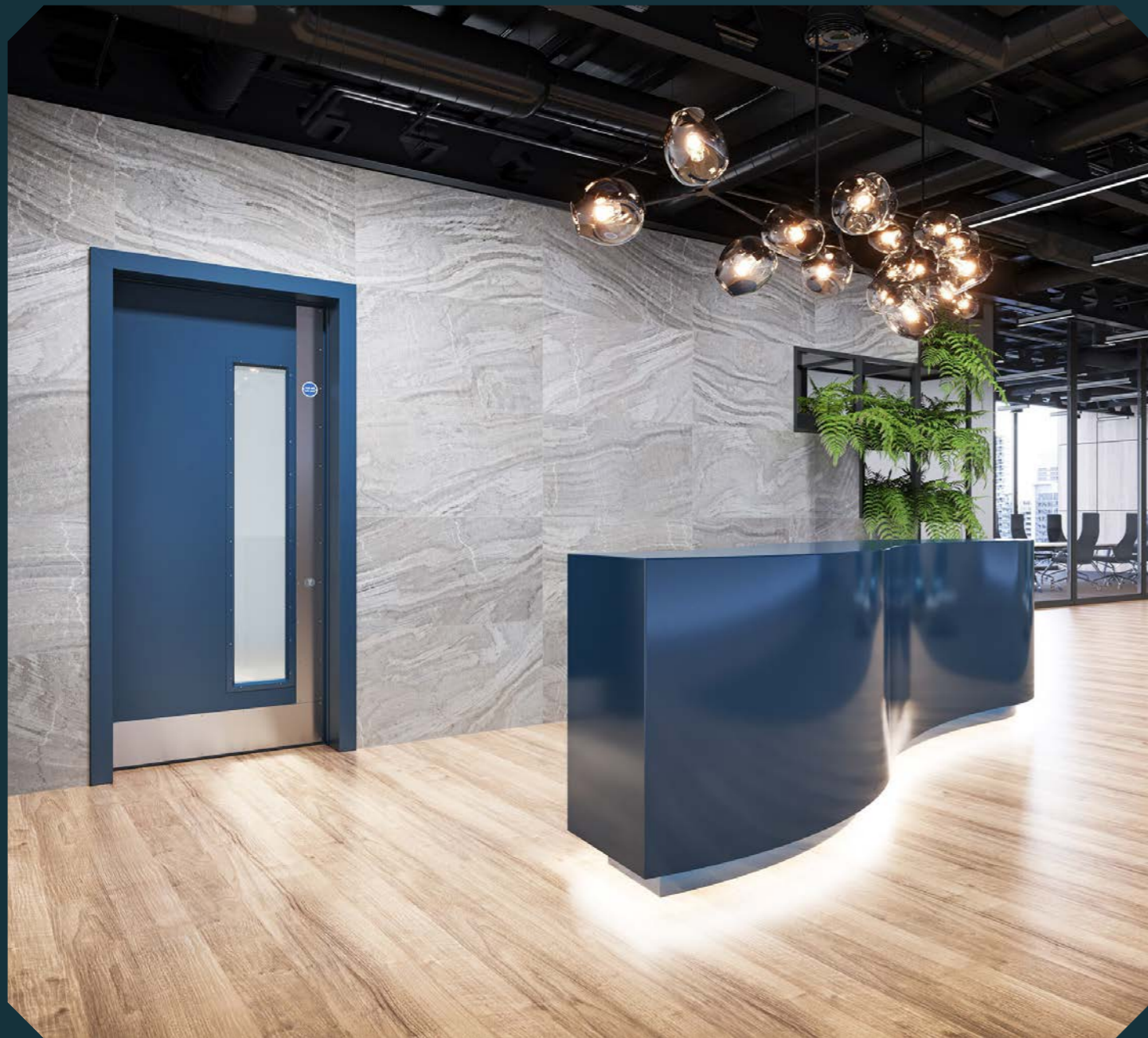
Finish

Powder coated to any RAL or BS standard and marine-grade option available if required.

Optional Extras

A full range of vision panels are available in various glass types and thicknesses. Louvre panels to any sizes are also available.





Steel Internal Doorset

Defender Duopar

Personnel Door	✓
Emergency Exit Door	✗
Internal Use	✓
External Use	✗
Single Doorset	✓
Double Doorset	✓

Electric Locking	✓
Manual Locking	✓

Do you need an internal door that is not only incredibly durable, but will also complement the interior appearance of the building? Look no further than the Defender Duopar 2-part frame steel flush door system.

Less industrial than a regular steel door and with an appearance closer to that of a timber door, the Duopar doorset combines aesthetics with strength. It has no visible fixings and is finished with a quality, powder coat.

The Duopar 2-part frame door system is designed primarily for interior environments and is guaranteed to make an architectural statement every time. Dependant on your requirements, the Duopar can be used with timber leaves as well as steel leaves.

With the Duopar, you get the same high-quality appearance as traditional timber frames and architraves, yet with the added strength of steel to withstand high usage in heavy traffic areas. This means the doorset is ideal for use in healthcare, retail, office and public buildings.

Frame

Frames are constructed from 2.0mm steel throughout and feature a fully concealed, yet incredibly strong, fixing bracket system. Corners are mitred and retained with a combination of tabs and screwed brackets.

Not only is the door unbelievably simple to fit, the clamp-style frame enables fixing at the final stage of construction, after all wet trades have completed, meaning less opportunity for doors to suffer damage from other trades.

A high-quality push-in perimeter seal completes and adds a touch of finesse - a smooth and silent closing operation and effective seal.

Threshold options are available if required.

Hardware

Door leaves are hung from durable stainless steel hinges for smooth operation. Additional hardware includes a range of locks, latches, lever handles, panic hardware, closers and door restrictors.

Various integrated electronic options are available, including overhead or jamb-mounted electromagnets, electric-strikes, solenoid bolts and electrosharelocks.

On double doors, lever-action flush bolts can be installed within the leading edge of the inactive door leaf.

Finish

Powder coated to any RAL or BS standard or marine-grade option available if required. We also offer an anti-microbial powder coating which is ideal for the healthcare sector.

Acoustic Option

An acoustic-rated option is available. Any acoustic rating will require an automatic drop seal to the bottom of the door.

Optional Extras

A full range of vision panels are available in various glass types and thicknesses.





The Defender Decorguard incorporates decorative grooves directly rolled into the door skin using the latest CNC technology and advanced tooling.

With our bespoke solution you can choose from various preconfigured designs or get creative and send your ideas to our Design Team who will work with you to create a unique design of your own.

Available in a wide range of security hardware options including electronic locking. Also available as a PAS24 tested doorset.

Vision panels can be incorporated, with clear, obscure or patterned glass.

Ask about our range of special powder coatings which include pearlescent and multi colours, textured finishes, metallic and stone effects for the ultimate designer doorset.

Door Leaf

Created with a customisable shaker cottage style look and manufactured from two 1.5mm Galvanised steel skins, folded and mechanically fixed to form a strong and rigid 45mm thick door leaf, filled with internal steel strengtheners and mineral wool for ultimate insulation.

Frame

The special fast fit frame is able to compensate for most irregularities in the opening with 16no threaded fixing adjusters per doorset. They permit a tolerance of up to 18mm on each side of the door. As shims and packers are not necessary this creates an extremely secure fix. Frames can be insulated if required.

Thermal performance

Tested and achieving an excellent rating of 2.2W/m²K (based on a door size of 1090mm x 2090mm WxH - values may vary slightly depending on size and finished colour of doorset).

Reduced U-value also available with Thermaguard Technology (Patent Pending).

Thresholds

DDA compliant 2mm stainless steel threshold bolted into the vertical frame posts. Available in outward opening, inward opening and ramped.

Seal

For optimum weather, thermal and acoustic performance, a tubular silicone/rubber is bonded into the frame rebate to ensure effective sealing of the

door/frame gap.

Over Panels/Side Panels

Over panels and side panels can be incorporated, both fixed and removeable for maximum access. Panels can be single or double glazed, solid to match the door leaf, or louvred.

Finish

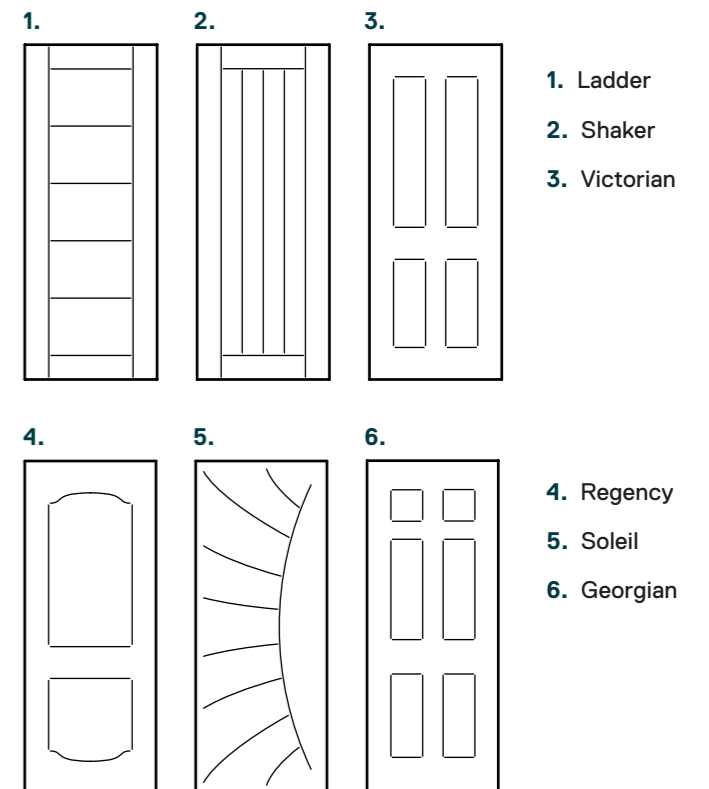
Available in any RAL or BS standard or marine-grade powder-coat finishes.

Hardware

Door leaves are hung from 4no stainless steel hinges for smooth operation and optimum weather resistance. Security dog bolts secure the leaf into the frame if the hinges are attacked. Additional hardware includes a range of locks, latches, lever handles, panic hardware, closers and stays. On double doors, lever-action flush bolts can be installed within the leading edge of the inactive door leaf.

Designs

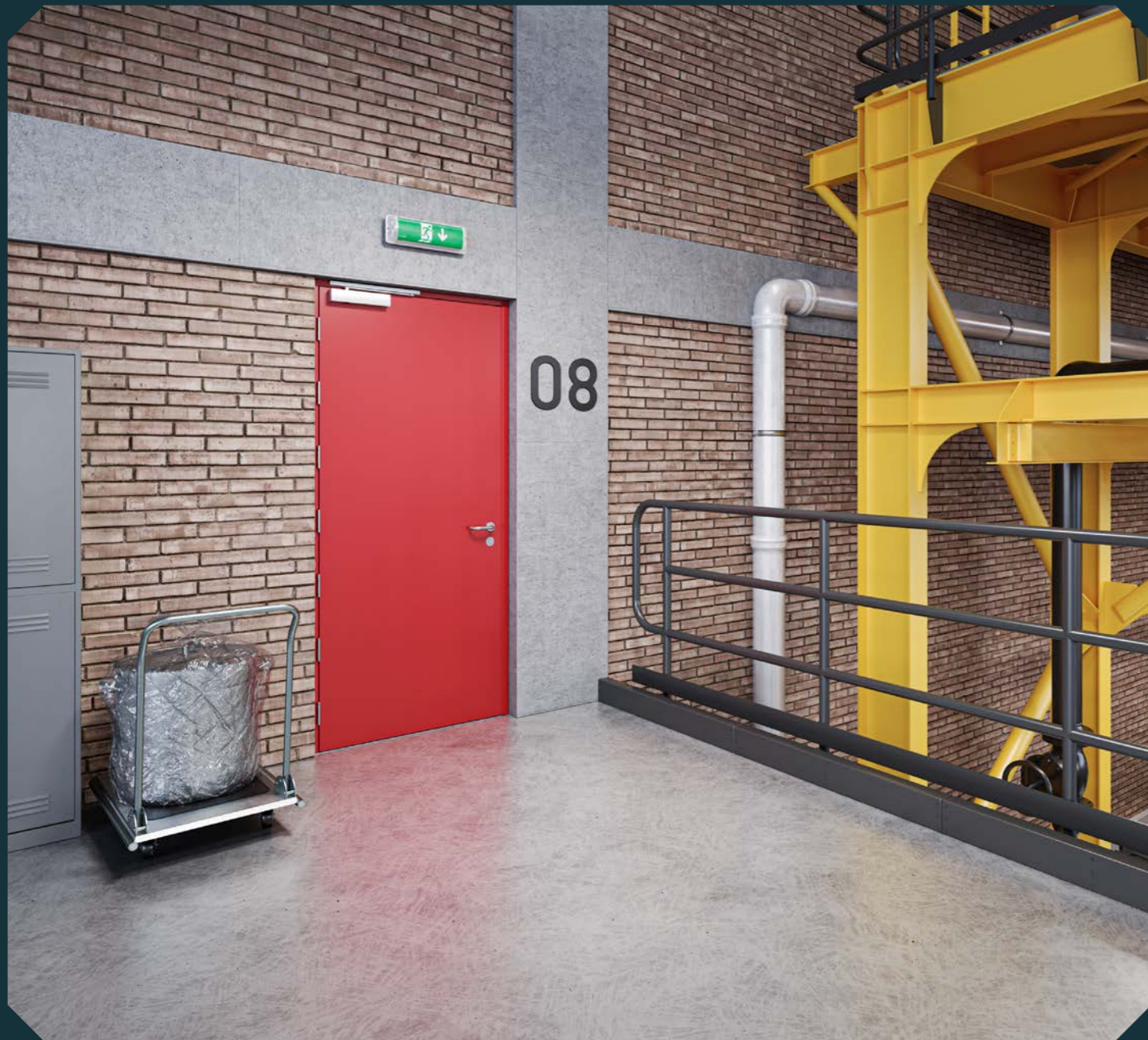
Available in either the designs below or get in touch to see if we can create what you require.



Steel Detailed Doorset

Defender Decorguard

Personnel Door	✓	Electric Locking	✓
Emergency Exit Door	✗	Manual Locking	✓
Internal Use	✓		
External Use	✓		
Single Doorset	✓		
Double Doorset	✓		



Acoustic Rated Steel Doorset

Defender Soundguard

Personnel Door	✓	Electric Locking	✓
Emergency Exit Door	✓	Manual Locking	✓
Internal Use	✓		
External Use	✓		
Single Doorset	✓		
Double Doorset	✓		

The Defender Soundguard is designed to reduce sound transmittance for many external and internal applications. It is available in almost any size and is manufactured to suit the customer requirements. It has been designed to block sound up to Rw42dB.

Over panels / Side panels

Over panels and side panels can be incorporated, both fixed and removable for maximum access. Panels can be single or double glazed, or solid to match the door leaf.

Door Leaf

Manufactured from two 1.5mm galvanised steel skins, folded and mechanically fixed to form a strong and rigid door leaf, filled with a variety of acoustic cores. Anti-jemmy flanges to the leading edge of the leaf provide excellent jemmy resistance.

Frame

Frames are pressed from 2mm galvanised steel to form a single rebated profile. Profiled headers form a smooth butt joint with the vertical posts and are joined together utilising strong M8 bolts to provide positive rigidity. The special fast fit frame is able to compensate for most irregularities in the opening with 16no threaded fixing adjusters per doorset. They permit a tolerance of up to 18mm on each side of the door. Shims and packers are not necessary making an extremely secure fix.

Thresholds

DDA compliant 2mm stainless steel threshold bolted into the vertical frame posts. Available in outward opening, inward opening and ramped. An auto dropseal is added for sound reduction for certain sound levels.

Seal

A variety of different acoustic perimeter seal systems available to meet your sound reduction requirements.

Hardware

Door leaves are hung from a minimum of 4no stainless steel hinges for smooth operation and optimum weather resistance. Security dog bolts secure the leaf into the frame if the hinges are attacked. Additional hardware includes a range of locks, latches, lever handles, panic hardware, closers and door restrictors. On double doors, lever-action flush bolts can be installed within the leading edge of the inactive door

leaf.

Finish

Powder coated to any RAL or BS standard and marine-grade option available if required.

Vision Panels

A full range of vision panels with acoustic glass with varying sound reduction levels.

Acoustic Door Louvres

Varying sizes of acoustic louvres are available. In acoustic tests, our acoustic louvre has achieved a range of values up to Rw32dB.

Soundguard Level	Rating (dB)
1	30-32
2	32-38
3	38-40

Structural opening sizes (mm)**		
	Max width	Max height
Single leaf	1470	2970
Double leaf	2860	2970

* Based on a 33mm wide frame. For oversized doors, please enquire.



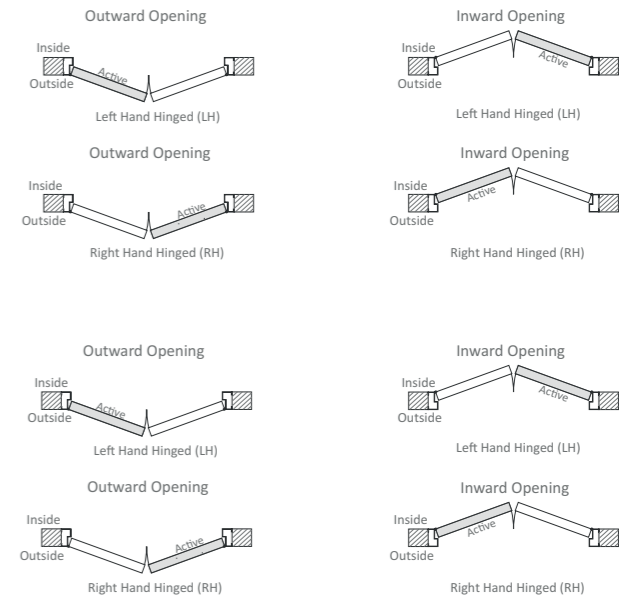
For use in situations when aluminium is just not strong enough or where fire rating is required for a fully glazed system. The steel Defender Clearguard is more secure, stronger and lasts longer than aluminium systems.

For maximum vision from 60mm wide steel profile and ideal for prestigious and high-use locations.

Fire rated to up to 1 hour and/or thermally broken frames give endless possibilities to this impressive door system. We use a clip-in beading system, along with many different types of ironmongery including electric locks. Specified with anti-bandit glazing this product is ideal for high security situations.

Finish

Powder coated to any RAL or BS standard and marine-grade option available if required.



Fully Glazed Steel Doorset

Defender Clearguard

Personnel Door	✓	Electric Locking	✓
Emergency Exit Door	✓	Manual Locking	✓
Internal Use	✓		
External Use	✓		
Single Doorset	✓		
Double Doorset	✓		





Fire Rated Steel Doorset

Defender Fireshield

Personnel Door	✓
Emergency Exit Door	✓
Internal Use	✓
External Use	✗
Single Doorset	✓
Double Doorset	✓

Electric Locking	✓
Manual Locking	✓

The Defender Fireshield doorset has been successfully tested at Exova Warrington Fire to BS EN 1634-1:2008 in January 2014, Test No: WF336507. Available with many ironmongery combinations and glazed options.

The test reference WF Test No. 336507 was performed on a specimen of a double leaf doorset incorporating unlatched door leaves. The doorset had overall dimensions of 1760mm wide by 2090mm high and incorporated two door leaves. An astragal was included to the meeting stiles.

Defender Fireshield doorsets are manufactured using the same construction methods as our Defender Safeguard giving ultimate security with; 1.5mm galvanised door skins, 2mm frame, 2mm stainless steel threshold and mineral wool core for excellent thermal qualities of 2.2W/m²K.

Door Leaf

Manufactured from two 1.5mm galvanised steel skins, folded and mechanically fixed to form a strong and rigid 45mm thick door leaf, filled with internal steel strengtheners and mineral wool for ultimate insulation. Anti-jemmy flanges to the leading edge of the leaf provide excellent jemmy resistance.

Frame

90mm frames are pressed from 2mm galvanised steel to form a single rebated profile. Profiled headers form a smooth butt joint with the vertical posts and are joined together utilising strong M8 bolts to provide positive rigidity. The special fast fit frame is able to compensate for most irregularities in the opening with 16no threaded fixing adjusters per doorset. They permit a tolerance of up to 18mm on each side of the door. Shims and packers are not necessary, making an extremely secure fix. Frames can be insulated if required.

Threshold

DDA compliant 2mm stainless steel threshold bolted into the vertical frame posts. Available in outward opening, inward opening and ramped.

Seal

For optimum weather, thermal and acoustic performance, a tubular silicone/rubber smoke seal is bonded into the frame rebate to ensure effective sealing of the door/frame gap.

Hardware

Door leaves are hung from 4no stainless steel hinges for smooth operation and optimum weather resistance. Security dog bolts secure the leaf into the frame if the hinges are attacked. Additional hardware includes a range of locks, latches, lever handles, panic hardware, closers and door restrictors. On double doors, leveraction flush bolts can be installed within the leading edge of the inactive door leaf.

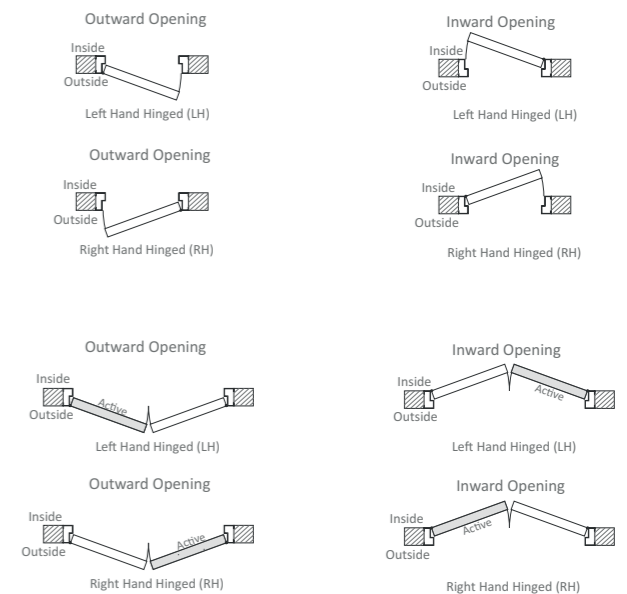
Finish

Powder coated to any RAL or BS standard and marine-grade option available if required.

Vision Panels and Glazing Systems

The active leaf in fire test WF 336507 included two vision panels with the upper panel having overall dimensions of 203mm wide x 711mm high. And the lower panel 203mm wide x 508mm high. This test demonstrated that the inclusion of vision panels will not be detrimental to a fire performance of unlatched door leaves for a period of up to 240 minutes.

For doorsets that are required to have 120 minute fire resistance, the height of the vision panel can be increased by 15% and the maximum area to be increased by 20%. The maximum permitted vision panel dimensions are 818mm high or 416mm wide.





Fire Rated External Steel Doorset

Defender Fireshield Plus

Personnel Door	✓
Emergency Exit Door	✓
Internal Use	✓
External Use	✓
Single Doorset	✓
Double Doorset	✓

Electric Locking	✓
Manual Locking	✓

The Defender Fireshield Plus is our bespoke range, that meets the latest requirements for external fire rated doorsets to be CE Marked to EN 16034 in conjunction with BS EN 14351-1.

Our Fireshield Plus range delivers fully compliant fire protection up to 60 minutes, combined with all the benefits of our Defender steel doorsets. With 1.5mm galvanised door skins, a wide range of hardware, easy installation and optional acoustic ratings of up to 52dB.

Door Leaf

Door skins in 1.5mm Galvanised Steel, folded and fabricated to form a rigid and durable leaf.

Frame

Frames are provided with multiple fixing points for secure installation.

Fire Rating

E30 and E60 ratings available (fire integrity only) to 30 and 60 minutes.

EI30 and EI60 ratings also available - fire and insulation rated to 30 and 60 minutes.

Threshold

DDA compliant low profile threshold supplied as standard.

Hardware

DIN standard locks and lever handle sets, including nightlatch and bathroom variants. Panic hardware in single and multipoint variants, with or without external access devices.

Door closers can be fitted to either side. Door selectors for double doors ensure correct closing sequence.

Approved access control options include electric strikes and solenoid locks.

Finish

Available in any RAL or BS standard or marine-grade powder-coat finishes.

Acoustic

Various acoustic ratings achievable up to 48 dB (30 minute rated doorsets) and 52 dB (60 minute rated doorsets).

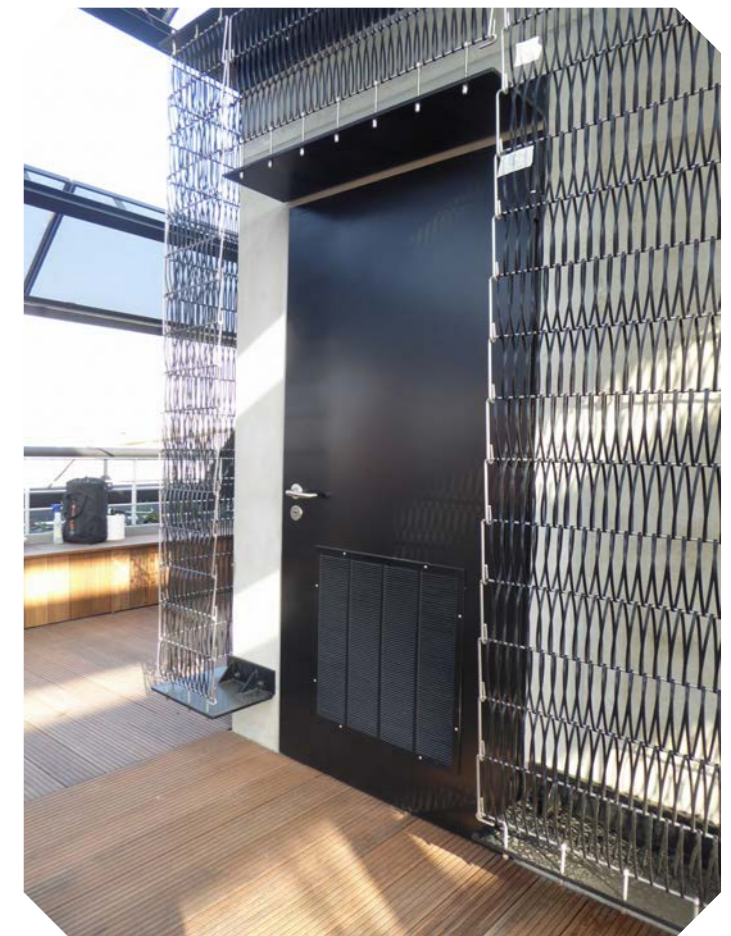
Optional Extras

A range of approved vision panel configurations and air transfer grilles are available.

Structural opening sizes (mm)**

	Max width	Max height
Single leaf	1365	2790
Double leaf	2590	2790

* For oversized doors, please enquire.





PAS24 Steel Doorset

Defender PASguard

Personnel Door	✓	Electric Locking	✓
Emergency Exit Door	✓	Manual Locking	✓
Internal Use	✓		
External Use	✓		
Single Doorset	✓		
Double Doorset	✓		

PASguard is our range of doorsets which are third party tested to PAS24. Also known as Publicly Available Specification 24, PAS 24 is the preferred specification for enhanced security performance requirements for doorsets and windows in the UK.

It sets out the minimum requirements and acceptable test criteria for products to resist attack from opportunistic crime.

Since 2015, Part Q of the Building Regulations has required doors and windows fitted to new dwellings to meet the requirements of PAS24. Whilst this does not currently cover replacement doors and windows, the Defender PASguard is a clear choice to bring security and peace of mind to residents and property owners alike.

Tested configurations include single and double doorsets, inward and outward opening. Tested with our heavy duty vision panel cassette in various sizes.

Door Leaf

Manufactured from two 1.5mm Galvanised steel skins, folded and mechanically fixed to form a strong and rigid 45mm thick door leaf, filled with internal steel strengtheners and mineral wool for ultimate insulation. Anti-jemmy flanges to the leading edge of the leaf provide excellent jemmy resistance.

Frame

90mm frames are pressed from 2mm Galvanised steel to form a single rebated profile. Profiled headers form a smooth butt joint with the vertical posts and are joined together utilising strong M8 bolts to provide positive rigidity. The special fast fit frame is able to compensate for most irregularities in the opening with 16no threaded fixing adjusters per doorset. They permit a tolerance of up to 18mm on each side of the door. Shims and packers are not necessary making an extremely secure fix. Frames can be insulated if required.

Thresholds

DDA compliant 2mm stainless steel threshold bolted into the vertical frame posts. Available in outward opening, inward opening.

Seal

For optimum weather, thermal and acoustic performance, a tubular silicone/rubber is bonded into the frame rebate to ensure effective sealing of the door/frame gap.

Louvre

Our Extra Heavy Duty Louvre System has been successfully tested too. Made to measure, these louvres feature double folded louvre blades, fully welded 2mm steel cassette frames and 19mm vertical reinforcement rods.

Hardware

Door leaves are hung from 4no stainless steel hinges for smooth operation and optimum weather resistance. Security dog bolts secure the leaf into the frame if the hinges are attacked.

Tested and approved locking systems include:

1. Multipoint sashlock with manual operation.
2. Auto-deadlocking multipoint nightlatch with panic escape option and/or electro-mechanical upgrade for integration with access control systems.
3. Heavy duty panic hardware with optional external access device.

Door closers, door viewers and TS008 approved letter plates can all be incorporated.

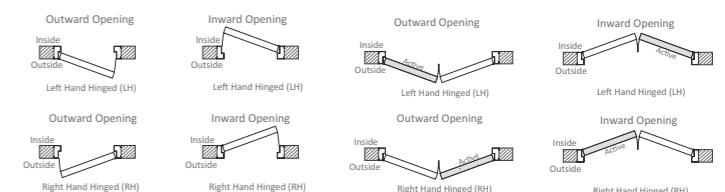
Thermal Performance

We achieve a rating of 2.2W/m²K based on a door size of 1090mm x 2090mm WxH - values may vary slightly depending on size and finished colour of doorset.

Lower U-Value also available with Thermaguard Technology * (* Patent Pending).

Finish

Available in any RAL or BS standard or marine-grade powder coat finishes.





LPS 1175 Steel Doorset

Defender Xtreme

Personnel Door	✓	Electric Locking	✓
Emergency Exit Door	✓	Manual Locking	✓
Internal Use	✓		
External Use	✓		
Single Doorset	✓		
Double Doorset	✓		

The ultimate steel security door range, third party tested and accredited by BRE to the LPCB LPS 1175 standard levels 1, 2, 3 & 4.

Metador Defender Xtreme doorsets are independently tested by BRE to meet the stringent requirements of LPS 1175, an internationally recognised standard established by The Loss Prevention Certification Board (LPCB).

We have tested a wide range of configurations, hardware and glazing options to suit most emergency exit and personnel door requirements. To see the latest full list of approved products, please visit the BRE website redbooklive.com and search 1284.

Door Leaf

Manufactured from two steel skins, folded and mechanically fixed to form a strong and rigid leaf. Filled with mineral wool and a variety of technical additional strengtheners required to support hardware and resist attack. As standard all door leaves incorporate an anti-jemmy flange to the leading edge providing excellent jemmy resistance.

Frame

Frames are folded from steel to form a single rebated profile. Profiled headers form a smooth butt joint with the vertical posts and welded for strength. The special fast fit frame with multiple threaded adjustor screws makes it easy to achieve an extremely secure fix without shims or packers, even with irregular openings.

Thresholds

A DDA compliant threshold fixed to the frame jambs provides strength and weather protection.

Over Panels

Solid overpanels can be incorporated at some security levels - see table for details.

Seal

For optimum weather, thermal and acoustic performance a durable tubular silicone rubber perimeter seal is bonded into the frame.

Hardware

Choose from a wide range of heavy duty hardware to complement your application, including mechanical or electronic access control options, panic escape, multiple locking points, auto deadlocking etc.

Structural opening sizes (mm)**

	LPS Level			
	1	2	3	4
	Xtreme 1	Xtreme 2	Xtreme 3	Xtreme 4
Single Leaf Outward Opening				
Single Leaf (min width)	600	600	750	500
Single Leaf (max width)	1440	1440	1400	1284
Single Leaf (min height)	1800	1500	1500	1000
Single Leaf (max height)	2440	2440	3060	2752
Single Leaf Outward Opening (Incorporating overpanels)				
Single Leaf (min width)	600	600	750	X
Single Leaf (max width)	1440	1440	1400	X
Single Leaf (min height)	2290	1990	2400	X
Single Leaf (max height)	3440	3440	4060	X
Double Leaf Outward Opening				
Double Leaf (min width)	1100	1100	1500	900
Double Leaf (max width)	2800	2800	2510	2492
Double Leaf (min height)	1800	1500	1500	1000
Double Leaf (max height)	2440	2440	3060	2752
Double Leaf Outward Opening (Incorporating overpanels)				
Double Leaf (min width)	1100	1100	1500	X
Double Leaf (max width)	2800	2800	2510	X
Double Leaf (min height)	2290	1990	2400	X
Double Leaf (max height)	3440	3440	4060	X
Other Options				
Vision Panel/s	X	✓	X	X
Louvre Panels	X	✓	✓	✓

Certification



Secured by Design



Police Preferred Specification



Extra High Security Steel Doorset

Defender Xtranguard

- Personnel Door ✓
- Emergency Exit Door ✓
- Internal Use ✓
- External Use ✓
- Single Doorset ✓
- Double Doorset ✓

- Electric Locking ✓
- Manual Locking ✓

Frame

Frames are pressed from galvanised steel to form a single rebated profile. Profiled headers form a smooth butt joint with the full height vertical posts and are joined together utilising strong M8 bolts to provide positive rigidity. The special fast fit frame is able to compensate for most irregularities in the opening with 16no threaded fixing adjusters per doorset. They permit a tolerance of up to 18mm on each side of the door. Shims and packers are not necessary making an extremely secure fix. Frames can be insulated if required.

Thresholds

DDA compliant 2mm stainless steel threshold bolted into the vertical frame posts. Available in outward opening, inward opening and ramped.

Seal

For optimum weather and thermal performance, a tubular silicone/rubber seal is bonded into the frame rebate to ensure effective sealing of the door/frame gap.

Finish

Powder coated to any RAL or BS standard and marine-grade powder-coat finishes.

Optional Extras

A full range of vision panels are available in various glass types and thicknesses. Louvre panels in unlimited sizes are also available. Both solid and glazed overpanels and side panels can be manufactured to suit individual customer requirements.

Specification

Defender Xtranguard is available with a wide range of high security ironmongery including panic exit bars. The table below gives some examples of what is available - please ask for further details if necessary.

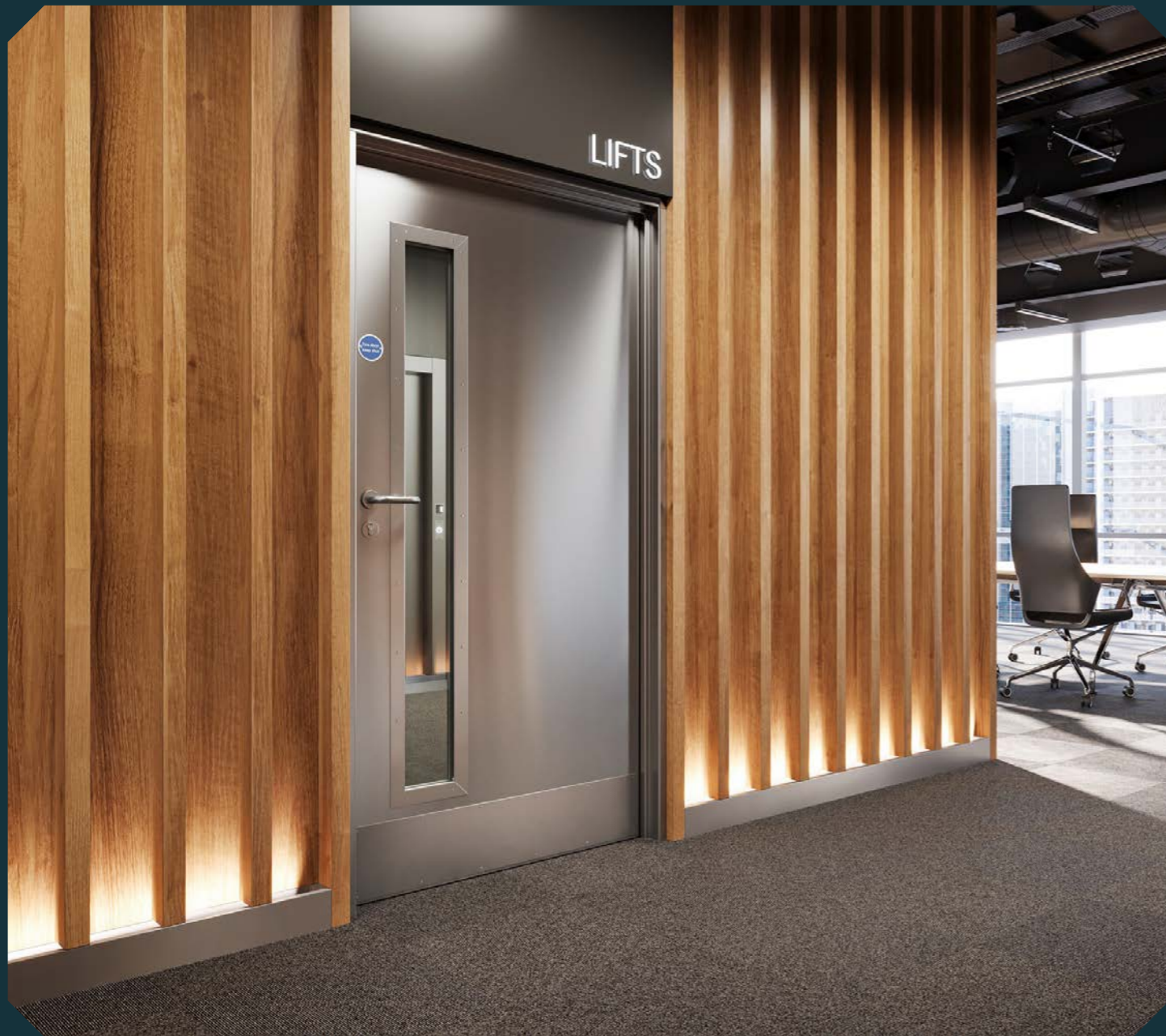


Structural opening sizes (mm)**

	Max width	Max height
Single leaf	1470	2970
Double leaf	2860	2970

* Based on a 33mm wide frame. For oversized doors, please enquire

Level	Door Leaf Skins (mm)	Frame (mm)	Core	Hinges	Lockable Access Ironmongery	Exit Ironmongery
2	1.5	2.0	Steel rib & mineral wool	S/S 102x76 Grade 13 Ball Bearing Security	1. High security cylinder 2. High security escutcheons	Exidor 700 Series/ Mico
3	2.0	2.0	Solid timber	S/S 102x76 Grade 13 Ball Bearing Security	Exidor 700 Series/ Mico	Exidor 700 Series/ Mico
4	2.0	2.0	Solid timber	S/S Continuous	Exidor 700 Series/ Mico	Exidor 700 Series/ Mico
5	2.0	2.0	Solid timber & anti-drill plates	S/S Continuous	Exidor 700 Series/ Mico	Exidor 700 Series/ Mico



Stainless Steel Security Doorset

Defender Inox

Personnel Door	✓
Emergency Exit Door	✓
Internal Use	✓
External Use	✓
Single Doorset	✓
Double Doorset	✓

Electric Locking	✓
Manual Locking	✓

Whether fitted internally or externally, you will be sure to get superlative durability from the Defender Inox stainless steel security doors.

The Defender Inox combines architectural and aesthetic appeal with durability, giving you an attractive doorset that is exceptionally hard-wearing.

For its aesthetic appeal, corrosion resistance and increased strength, stainless steel is a fantastic material for security doorsets.

Metador successfully completed a 120 minute fire test to BS EN 1634 on a large double Defender Inox in 'unlatched' configuration. The tested doors also incorporated substantial vision panels with custom-made stainless steel glazing cassettes.

We can also offer Grade 316 stainless steel for even greater durability and corrosion resistance.

Application

The Grade 304 stainless steel makes the Defender Inox ideal for a range of different uses. In particular, it is popular in locations that require a high level of hygiene, such as:

- Food production
- Medical premises
- Industrial environments (e.g. chemical work shops, paint shops, etc)
- Wet environments (e.g. swimming pools, wet rooms)
- High traffic environments (e.g. public buildings, schools, hospitals etc).

The Defender Inox is not limited to use in just these applications, when installed in an office or communal area, a stunning, contemporary design aesthetic can also be created.

Thresholds

DDA compliant 2mm stainless steel threshold bolted into the vertical frame posts. Available in outward opening, inward opening and ramped.

Seal

For optimum weather, thermal and acoustic performance, a tubular silicone/rubber is bonded into the frame rebate to ensure effective sealing of the door/frame gap.

Hardware

Door leaves are hung from 4no stainless steel hinges for smooth operation and optimum weather resistance. Security dog bolts secure the leaf into the frame if the hinges are attacked. Additional hardware includes a range of locks, latches, lever handles, panic hardware, closers and door restrictors. On double doors, lever-action flush bolts can be installed within the leading edge of the inactive door leaf.

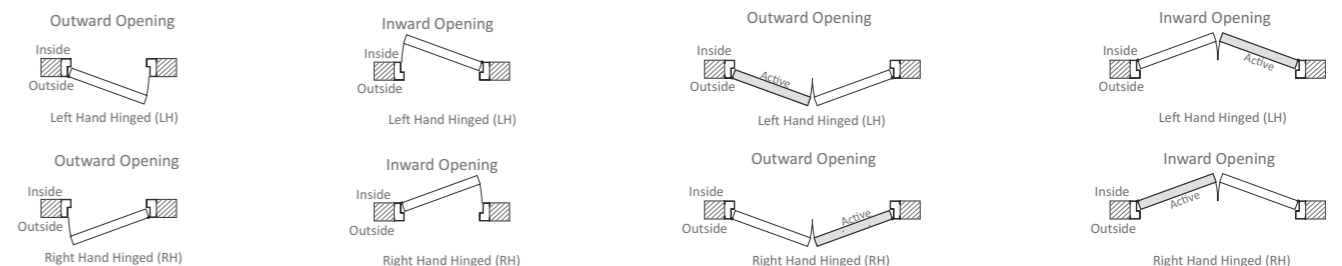
Optional Extras

A full range of vision panels are available in various glass types and thicknesses. Louvre panels to any sizes are also available.



Structural opening sizes (mm) **		
	Max width	Max height
Single leaf	1470	2970
Double leaf	2860	2970

* Based on a 33mm wide frame. For oversized doors, please enquire





Modular Building Steel Doorset

Defender ModuleX

Personnel Door	✓
Emergency Exit Door	✓
Internal Use	✓
External Use	✓
Single Doorset	✓
Double Doorset	✓

Electric Locking	✓
Manual Locking	✓

The Defender ModuleX doorset has been designed for the modular building industry to provide an ultimate fast-fitting and cost-effective solution complete with a foursided cloaking frame.

The Defender ModuleX doorset is manufactured from 1.5mm galvanised steel and internal steel strengthening as standard. Frames are 1.5mm galvanised steel and have 1.5mm stainless steel thresholds making the Defender ModuleX a longer lasting, stronger door. The mineral wool core is also more thermally efficient than cardboard honeycomb infill versions.

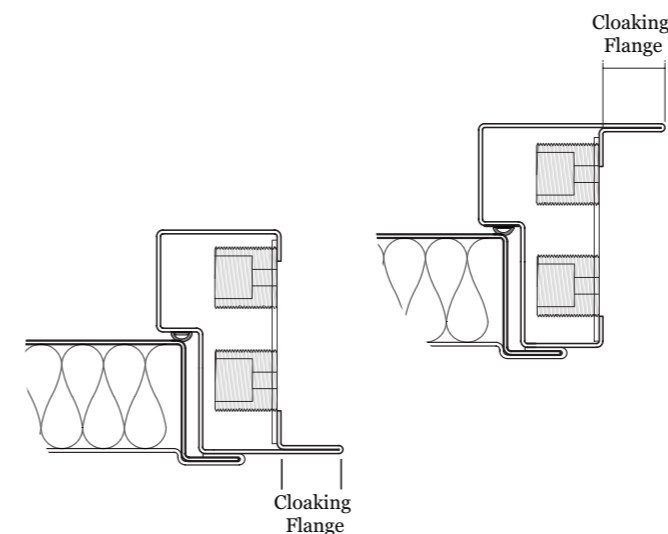
The unique flange frame design efficiently seals the frame to the building whilst concealing panel cut outs.

Door Leaf

Manufactured from two 1.5mm Galvanised steel skins, folded and mechanically fixed to form a strong and rigid 45mm thick door leaf, filled with internal steel strengtheners and mineral wool for ultimate insulation. Anti-jemmy flanges to the leading edge of the leaf provide excellent jemmy resistance.

Frame

90mm frames are pressed from 1.5mm galvanised steel to form a single rebated and an in-built cloaking profile. Profile headers form a smooth butt joint with the vertical posts and are joined together utilising strong M8 bolts to provide positive rigidity. The special fast fit frame is able to compensate for most irregularities in the opening with 16no threaded fixing adjusters per doorset. They permit a tolerance of up to 18mm on each side of the door. Shims and packers are not necessary making an extremely secure fix. Alternative frame depths are available on request to suit your specific wall panel construction.



Hardware

Door leaves are hung from 4no stainless steel hinges for smooth operation and optimum weather resistance. Security dog bolts secure the leaf into the frame if the hinges are attacked. Additional hardware includes a range of locks, latches, lever handles, panic hardware, closers and door restrictors. On double doors, lever-action flush bolts can be installed within the leading edge of the inactive door leaf.

Thresholds

DDA compliant 1.5mm stainless steel threshold bolted into the vertical frame posts. Available in inward or outward opening with full in-built cloaking to prevent water ingress into the floor of the building.

Thermal performance

Tested and achieving an excellent rating of 2.2W/m²K based on a door size of 1090mm x 2090mm WxH - values may vary slightly depending on size and finished colour of doorset.

Seal

For optimum weather, thermal and acoustic performance, a tubular silicone/rubber is bonded into the frame rebate to ensure effective sealing of the door/frame gap.

Finish

Available in any standard RAL powder-coat finishes.

Optional Extras

A full range of vision panels are available in various glass types and thicknesses. Louvre panels, closers and door restrictors and emergency exit panic ironmongery are available.

Structural opening sizes (mm)**

	Max width	Max height
Single leaf	1470	2970
Double leaf	2860	2970

* Based on a 33mm wide frame. For oversized doors, please enquire



Defender Thermaguard* technology has been developed to meet the increased demands for energy-efficient buildings as part of a greener future.

External doorsets face perhaps the most wide-ranging demands of any building envelope components: they need to be capable of withstanding the rigours of constant daily use through many years by legitimate personnel; provide security and protection from unwanted intruders, protection from fire and resistance to weather, whilst complementing the building aesthetics.

Frame

The frames include a unique perforated frame design (UK Patent pending), insulated frame and increased leaf thickness.

The design calculation has been provided by an accredited UKAS approved company using the simulation method as defined by the requirements of BS EN 10077-2:2017.

Defender Thermaguard* requires a minimum frame depth of 110mm and 60mm leaf for doors with 1.5 U-value and a minimum frame depth of 120mm and 70mm leaf for doors with 1.4 U-value.

Thermal performance

Thermaguard* technology includes a range of design innovations that reduce the U-value of a typical single doorset to as low as 1.4 W/m²K, meeting the latest requirements of the Building Regulations Part L in England, Scotland and Wales.

Application

Our Thermaguard* technology can be applied to a number of our Defender doorset products and allows even more flexibility.

Current doorsets with this technology available are:

- Defender Safeguard
- Defender PASguard
- Defender Decorguard

* Patent Pending

Thermal Rated Steel Doorset

Defender Thermaguard*

Personnel Door	✓	Electric Locking	✓
Emergency Exit Door	✓	Manual Locking	✓
Internal Use	✓		
External Use	✓		
Single Doorset	✓		
Double Doorset	✓		





Metador



T: 01204 324236

E: Sales@sssindustrialdoors.co.uk

W: www.sssindustrialdoors.co.uk