



Premium steel doorsets
for all sectors and situations



HEM
PROJECTS

Defender Safeguard

High quality bespoke steel doorsets

Safeguard is our bestselling, 'stronger than standard' doorset, providing superlative performance and protection for every environment





Thermally Rated



Acoustic



DDA Compliant

The Defender Safeguard is our flagship bespoke steel door system—stronger as standard and fully customisable for any application.

Precision-engineered from 1.5mm galvanised steel with a mineral wool core and internal steel reinforcements, it delivers unmatched durability.

Door Leaf

- Anti-jemmy flange on the leading edge (square edged option available)
- 1.5mm galvanised steel (upgrades: 2.0mm galvanised or 1.5mm stainless steel, 304/316)
- Weld-free construction prevents premature failure
- Mineral wool core with internal strengtheners (chipboard upgrade for added strength).

Frames

- 90mm single rebate frame in 2.0mm galvanised steel (stainless option available)
- Custom dimensions and alternative profiles (double rebated, face-fixed, ModuleX integral cloaking and more)
- Bolted corners for strength
- Threaded adjusters for easy installation (16+ fixings). Optional plain fixing plates
- 3mm steel hinge brackets
- Insulated frames available.

Thresholds

- Standard DDA-compliant chamfered profile in 2mm stainless steel
- Options: raised/extended cills, inward-opening profiles with drainage, 4mm ramped design
- Integrated removable thresholds available.

Seals

Tubular silicone rubber seal bonded into frame for optimal weather, thermal, and acoustic performance.

Hardware

- Stainless steel ball bearing hinges (4+ per door, with security dogbolts)
- Hinge upgrade options: concealed bearings, special finishes, fully concealed, heavy-duty continuous hinges
- Extensive hardware range: locks, latches, handles, panic hardware, closers, and stays. Custom hardware integration available.

Thermal Performance

Standard U-value: 2.2 W/m²K (upgradeable to 1.4 W/m²K with Thermaguard Technology).

Acoustic Option

Acoustic rated option available.

Vision Panels & Louvres

- Custom-sized vision panels in rectangular, square, or round styles
- Single, double, or triple glazed options with privacy films, blinds, and obscure glass

- Louvres: medium-duty aluminium or heavy-duty steel (150mm to full-door).

Over Panels & Side Panels

Designed to expand openings, these panels integrate seamlessly with Defender Safeguard doorsets

- Removable overpanels/transoms: Ideal for periodic access (e.g. large machinery)
- Glazed panels: Single or double glazed with weathertight wedge-gasket seals
- Louvred panels: Medium-duty aluminium or heavy-duty steel cassettes (optional insect/rodent mesh).

Finishes

- Powder coated in any RAL colour (marine-grade option available)
- Special finishes: textured, metallic, and woodgrain effects for a premium look.

Structural opening sizes (mm)*

	Max width	Max height
Single leaf	1470	3800
Double leaf	2860	3800

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





HEM
PROJECTS



Defender Fireshield

Internal fire rated steel doorsets

Our custom internal fire rated doorset, the Defender Fireshield offers up to 120 minutes of fire protection for internal use due to its superior strength.





Internal Use Fire Rated



Acoustic



DDA Compliant

Defender Fireshield internal doorsets have been successfully tested to BS EN 1634-1:2014+A1:2018. Available with a huge range of ironmongery and glazing options to provide protection for 30, 60, or 120 minutes.

Door Leaf

- Anti-jemmy flange on the leading edge (square edged option available up to 60 mins)
- 1.5mm galvanised steel (upgrades: 2.0mm galvanised or 1.5mm stainless steel, 304/316)
- Weld-free construction prevents premature failure
- Mineral wool core with internal strengtheners.

Frames

- Single rebate frame in 2.0mm galvanised steel (stainless option available)
- Custom dimensions and alternative profiles (double rebated, face-fixed, ModuleX integral cloaking and more)
- Bolted corners for strength
- Threaded adjusters for easy installation (16+ fixings). Optional plain fixing plates
- 3mm steel hinge brackets.
- Insulated frames available.

Thresholds

- Optional 2.0mm stainless steel thresholds available in either chamfered/rebated or ramped profiles.
- Thresholds are fixed to the bottom of the frame jambs as standard for rigidity and strength. Can also be supplied loose and trimmed to fit the jambs to enable removal after installation.

Seals

Tubular silicone rubber seal bonded into frame for optimal thermal and acoustic performance.

Hardware

- Stainless steel ball bearing hinges (4+ per door, with security dogbolts)
- Hinge upgrade options: concealed bearings, special finishes and fully concealed
- Extensive hardware range: locks, latches, handles, panic hardware, closers, and stays.

Fire Rating

Fire ratings for internal use up to 120mins are available with this doorset range.

Acoustic Option

Acoustic-rated option available.

Vision Panels/Louvres

- Custom-sized vision panels in accordance with testing

- Single or double glazing available with a range of acoustic and/or attack ratings.
- Louvres: light or heavy-duty steel (from 300x300mm to full-door).

Over Panels/Side Panels

Designed to expand openings, these panels integrate seamlessly with Defender Fireshield doorsets:

- Fixed or removable overpanels: Ideal for periodic access (e.g. large machinery)
- Louvred panels: light or heavy-duty steel cassettes (optional insect/rodent mesh).

Finishes

- Powder coated in any RAL colour (marine-grade option available)
- Special finishes: textured, metallic, and woodgrain effects for a premium look.





Defender FireshieldX

External fire rated steel doorsets

Our fire rated doorsets for external use are UKCA marked and compliant with BS EN 14351-1:2006+A2:2016 and EN 16034:2014. Engineered to offer fire protection to 30, 60, or 120 minutes, the FireshieldX is available in a wide range of configurations and functions.





External Use Fire Rated



Thermally Rated



DDA Compliant

Defender FireshieldX external doorsets are fully accredited to BS EN 14351-1:2006+A2:2016 and EN 16034:2014, with 30, 60 or 120 minute fire ratings. They are UKCA marked, in accordance with the CPR (Construction Products Regulations) and available with a large range of ironmongery and glazing options.

Door Leaf

- Anti-jemmy flange on the leading edge
- 1.5mm galvanised steel
- Weld-free construction prevents premature failure
- Mineral wool core with internal strengtheners.

Frames

- 110mm single rebate frame in 2.0mm galvanised steel
- Custom dimensions and alternative profiles
- Bolted corners for strength
- Threaded adjusters for easy installation (16+ fixings)
- 3mm steel hinge brackets
- Insulated frames available.

Thresholds

- Standard DDA-compliant chamfered profile in 2mm stainless steel
- Options: inward-opening profile with drainage.

Seals

Tubular silicone rubber seal self-adhered into frame for optimal weather, thermal, and acoustic performance.

Hardware

- Stainless steel ball bearing hinges (min. 4 per door, with security dogbolts)
- Large hardware range: locks, latches, handles, panic hardware and closers.

Fire Rating

External fire ratings include 30, 60 or 120 minutes and are tested bi-directionally i.e. opening both into and out from the test furnace.

Thermal Performance

Standard U-value: 2.2 W/m²K (upgradeable to 1.5 W/m²K with Thermaguard Technology).

Vision Panels/Louvres

- Custom-sized vision panels
- Single or double glazed options

- Metador extra high security louvre (300x300mm to full door).

Over Panels/Side Panels

Designed to expand openings, these panels integrate seamlessly with Defender FireshieldX doorsets:

- Framed overpanels with fixed or removable solid centre panels
- Framed side and overpanels with Metador heavy duty high security louvre cassettes (LPS 1175 B3 rated and Secured by Design approved).

Finishes

- Powder coated in any RAL colour (marine-grade option available)
- Special finishes: textured, metallic, and woodgrain effects for a premium look.





HEM PROJECTS

Defender Xtreme

Maximum security steel doorsets

Our flagship range of security steel doorsets, stringently tested to the LPCB LPS 1175 standard (issue 8), levels B3, C5 and D10.



Assessed to ISO 9001
Cert/LPCB ref. 1284



LPS 1175
Cert/LPCB ref. 1284c



LPS 1175
Cert/LPCB ref. 1284d



LPS 1175
Cert/LPCB ref. 1284b



Official Police Security Initiative



NBS Source
PARTNER





Maximum Security



Internal or External Use
Fire Rated*

The Defender Xtreme range consists of three levels of ultimate steel security doorsets, third party tested and accredited by BRE to the stringent requirements of the LPS 1175 Issue 8 scheme created by the internationally recognised standard established by The Loss Prevention Certification Board (LPCB).

We have tested a huge range of configurations, hardware and glazing options to suit most emergency exit and personnel door requirements.

Door Leaf

- Galvanised steel skins (varying thickness depending on security level)
- Anti-jemmy flange on the leading edge.

Frames

Galvanised steel frame profiles with bolted corners.

Thresholds

- Standard DDA-compliant chamfered profile in 2mm stainless steel
- Options: raised/extended cills, inward-opening profiles with drainage, 4mm ramped design
- Integrated removable thresholds available.

Seals

Tubular silicone rubber seal bonded into frame for optimal weather, thermal, and acoustic performance.

Hardware

Extensive hardware range: locks, latches, handles, panic hardware, closers, and stays approved to the LPS 1175 rating required.

Fire Rated Option*

Fire ratings for internal or external use up to 120mins are available as an upgrade with LPS 1175 B3 doorsets only.

Over Panels/Side Panels

A range of over panels and side panels; solid, glazed or louvred with sizes dependent on LPS 1175 rating required.

Vision Panels/Louvres

Vision panels available on some LPS 1175 levels with sizes dependent on LPS 1175 rating required.

Finishes

- Powder coated in any RAL colour (marine-grade option available)
- Special finishes: textured, metallic, and woodgrain effects for a premium look.



Scan to view the certificates of our LPS 1175 range on redbooklive.com

Product Name	Type	Minimum Structural Opening Width (m)	Maximum Structural Opening Width (m)	Minimum Structural Opening Height (m)	Maximum Structural Opening Height (m)	Security Rating	LPCB Ref. No.
Defender Xtreme 2	Single leaf outward opening hinged security doorset	0.5	1.5	1.5	2.5	B3 (SR2)	1284c/01
	Single leaf inward opening hinged security doorset	0.5	1.5	1.5	2.5		
	Single leaf outward or inward opening doorset with overpanels and/or sidepanels	0.8	3.5	1.8	3.5		
	Double leaf outward opening doorset	1.1	2.9	1.5	2.5		
	Double leaf outward opening doorset with overpanels and/or sidepanels	1.4	4.9	1.8	3.5		

Product Name	Type	Minimum Structural Opening Width (m)	Maximum Structural Opening Width (m)	Minimum Structural Opening Height (m)	Maximum Structural Opening Height (m)	Security Rating	LPCB Ref. No.
Defender Xtreme 3	Single leaf outward opening hinged security doorset	0.5	1.5	1.5	2.5	C5 (SR3)	1284d/01
	Single leaf outward opening doorset with overpanels and/or sidepanels	0.8	3.5	1.8	3.5		
	Double leaf outward opening doorset	1.1	2.9	1.5	2.5		
	Double leaf outward opening doorset with overpanels and/or sidepanels	1.4	4.9	1.8	3.5		

Product Name	Type	Minimum Structural Opening Width (m)	Maximum Structural Opening Width (m)	Minimum Structural Opening Height (m)	Maximum Structural Opening Height (m)	Security Rating	LPCB Ref. No.
Defender Xtreme 4	Single leaf outward opening doorsets	0.5	1.284	1.0	2.752	D10 (SR4)	1284b/01
	Double leaf outward opening doorsets	0.9	2.492	1.0	2.752		



Defender PASguard PAS24 rated steel doorsets

PASguard is our Secured By Design approved, PAS24 rated steel doorset, providing excellent certified protection and especially suited for residential use.



NBS Source
PARTNER



E info@hem-projects.co.uk

W www.hem-projects.co.uk



Internal or External Use
Fire Rated



Acoustic



Thermally Rated



DDA Compliant

The Defender PASguard range of doorsets are third party tested to meet the Product Assessment Specification (PAS24). PAS24 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.

Door Leaf

- Anti-jemmy flange on the leading edge (square edged option available)
- 1.5mm galvanised steel (upgrade: 1.5mm stainless steel, 304/316)
- Weld-free construction prevents premature failure
- Mineral wool core with internal strengtheners.

Frames

- 90mm single rebate frame in 2.0mm galvanised steel (stainless option available)
- Custom dimensions and alternative profiles (double rebated, face-fixed, ModuleX integral cloaking and more)
- Bolted corners for strength
- PASguard doorsets have been tested as both inward and outward opening
- Threaded adjusters for easy installation (16+ fixings). Optional plain fixing plates

- 3mm steel hinge brackets.

Thresholds

- Standard DDA-compliant chamfered profile in 2mm stainless steel
- Options: Square, chamfered or inward opening with integral rainwater drainage.

Seals

Tubular silicone rubber seal bonded into frame for optimal weather, thermal, and acoustic performance.

Hardware

- Stainless steel ball bearing hinges (4+ per door, with security dogbolts)
- Extensive hardware range: locks, latches, handles, panic hardware, closers, and stays. Custom hardware integration available.

Fire Rated Option

Fire ratings for internal or external use up to 120mins are available as an upgrade with this doorset.

Thermal Performance

Standard U-value: 2.2 W/m²K (upgrade-able to 1.4 W/m²K with Thermaguard Technology).

Acoustic Option

Acoustic rated option available.

Vision Panels/Louvres

- Custom-sized vision panels as compliant with PAS24 regulations
- Louvres compliant with PAS24 available.

Over Panels/Side Panels

Designed to expand openings, these panels integrate seamlessly with Defender PASguard doorsets:

- Solid framed panels available with either fixed or removable centre panels
- PAS24 rated glazed side and overpanels with weathertight wedge-gasket seals. Available as separate units or integrated with your doorset, utilising shared frame mullions and transoms for maximum strength and a premium look.

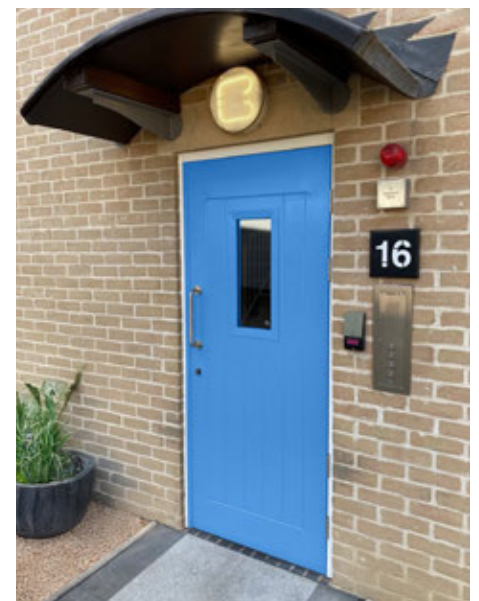
Finishes

- Powder coated in any RAL colour (marine-grade option available)
- Special finishes: textured, metallic, and woodgrain effects for a premium look.

Structural opening sizes (mm)*

	Max width	Max height	Test Sizes (WxH)
Single leaf	1284	2401	1050 x 2150
Double leaf	2502	2401	2240 x 2150

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





Defender Xtraguard High security steel doorsets

Providing extra high security and reassurance when you need it the most.





Extra High Security



DDA Compliant

The Defender Xtraguard offers the next level of protection and confidence when 'stronger than standard' still isn't enough. Use of thicker steel, solid timber core construction and completed with high security locking configurations, this doorset offers resilience in the toughest of environments.

This doorset is often used in conjunction with custom ironmongery and high security electronic locking options as an ideal doorset for alternative provision academies and other environments where doorsets are exposed to repeated abuse.

Door Leaf

- Anti-jemmy flange on the leading edge (square edged option available)
- Galvanised steel skins (thickness varying on level required)
- Weld-free construction prevents premature failure
- Mineral wool core with internal strengtheners, chipboard core, anti-drill plates (varying on level required).

Frames

- 90mm single rebate frame in 2.0mm galvanised steel
- Custom dimensions and alternative profiles (double rebated, face-fixed, ModuleX integral cloaking and more)
- Bolted corners for strength.

Thresholds

- Standard DDA-compliant chamfered profile in 2mm stainless steel
- Options: raised/extended cills, inward-opening profiles with drainage, 4mm ramped design
- Integrated removable thresholds available.

Seals

Tubular silicone rubber seal bonded into frame for optimal weather, thermal, and acoustic performance.

Hardware

- Stainless steel ball bearing hinges or continuous hinges depending on level required
- Extensive hardware range: locks, latches, handles, panic hardware, closers, and stays. Custom hardware integration available.

Vision Panels/Louvres

- Custom-sized vision panels
- Double or triple glazed options with privacy films, blinds, and obscure glass
- Louvres: Heavy-duty steel (150mm to full-door).

Over Panels/Side Panels

Designed to expand openings, these panels integrate seamlessly with Defender Xtraguard doorsets:

- Removable overpanels/transoms: Ideal for periodic access (e.g. large machinery)
- Glazed panels with weathertight wedge-gasket seals
- Louvred panels: Heavy-duty steel cassettes (optional insect/rodent mesh).

Finishes

- Powder coated in any RAL colour (marine-grade option available)
- Special finishes: textured, metallic, and woodgrain effects for a premium look.

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	Chipboard	S/S 102x76 Grade 13 Ball Bearing Security	Exidor 700 Series/ Mico	Exidor 700 Series/ Mico
4	2.0	2.0	Chipboard	S/S Continuous	Exidor 700 Series/ Mico	Exidor 700 Series/ Mico
5	2.0	2.0	Chipboard & anti-drill plates	S/S Continuous	Exidor 700 Series/ Mico	Exidor 700 Series/ Mico

Structural opening sizes (mm)*

	Max width	Max height
Single leaf	1470	3800
Double leaf	2860	3800



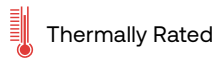
HEM PROJECTS



Defender Thermaguard Thermally efficient steel doorsets

Defender Thermaguard is independently accredited to provide a value as low as 1.4 W/m²K for a single doorset.





Thermally Rated



High Security



Internal or External Use
Fire Rated



Acoustic



DDA Compliant

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

The Defender Thermaguard doorset uses 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. Defender Thermaguard is accredited by a UKAS approved company as defined by the requirements of BS EN 10077-2:2017.

Door Leaf

- Anti-jemmy flange on the leading edge (square edged option available)
- 1.5mm galvanised steel
- Weld-free construction prevents premature failure
- Mineral wool core with internal strengtheners
- 60mm depth minimum door leaf to achieve a U-value of 1.5 W/m²K
- 70mm depth minimum door leaf to achieve a U-value of 1.4 W/m²K.

Frames

- 110mm depth minimum door frame to achieve a U-value of 1.5 W/m²K
- 120mm depth minimum door frame to achieve a U-value of 1.4 W/m²K
- Bolted corners for strength
- Threaded adjusters for easy installation (16+ fixings). Optional plain fixing plates
- 3mm steel hinge brackets.

Thresholds

- Standard DDA-compliant chamfered profile in 2mm stainless steel
- Options: raised/extended cills, inward-opening profiles with drainage, 4mm ramped design
- Thresholds available fixed or removable.

Seals

Tubular silicone rubber seal bonded into frame for optimal weather, thermal, and acoustic performance.

Hardware

- Stainless steel ball bearing hinges (4+ per door, with security dogbolts)
- Upgrade options: concealed bearings, special finishes, fully concealed, heavy-duty continuous hinges
- Extensive hardware range: locks, latches, handles, panic hardware, closers, and stays. Custom hardware integration available.

Fire Rated Option

Fire ratings for internal or external use up to 120mins are available as an upgrade with this doorset.

Thermal Performance

1.5 W/m²K or 1.4 W/m²K values achievable with this doorset, dependent on requirements.

Acoustic Option

Acoustic rated option available.

Vision Panels

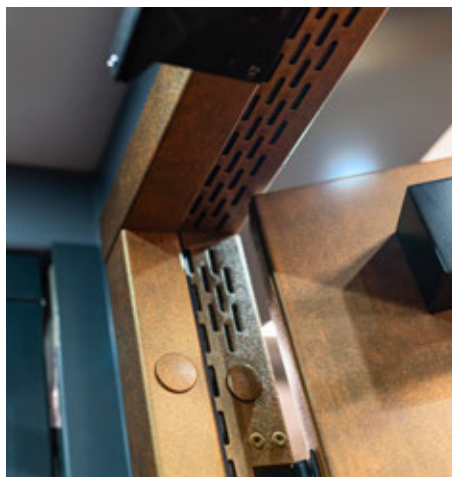
- Custom-sized vision panels to meet requirements
- Triple glazed options with privacy films, obscure or patterned glass.

Over Panels & Side Panels

- Removable overpanels/transoms: Ideal for periodic access (e.g. large machinery)
- Glazed panels: Triple glazed with weathertight wedge-gasket seals.

Finishes

- Powder coated in any RAL colour (marine-grade option available)
- Special finishes: textured, metallic, and woodgrain effects for a premium look.





HEM PROJECTS

Defender Duopar

Durable internal steel doorsets

Combining aesthetics and strength with Metador's Defender Duopar 2-part frame system.





Internal Use Fire Rated



Acoustic

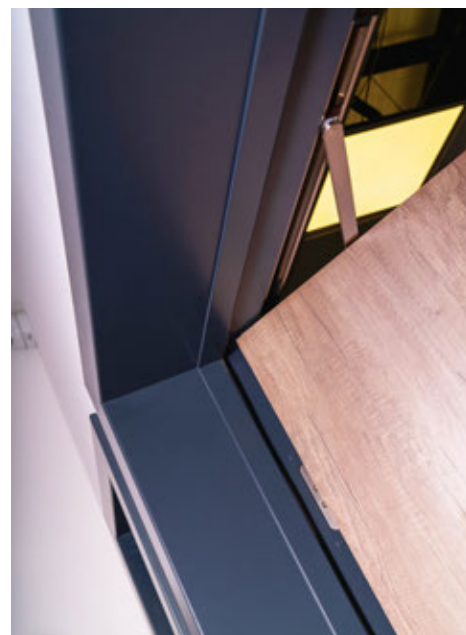


DDA Compliant

The Defender Duopar is a 2-part frame flush steel door system, designed primarily for interior environments which is guaranteed to make an architectural statement every time.

The Duopar delivers the same overall appearance as traditional timber frames and architraves, yet with the added strength and durability of powder coated steel to withstand high usage in heavy traffic areas.

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.



Door Leaf

- Supplied with standard 1.5mm steel skin door leaves or with timber leaves
- Square edged as standard for internal use (anti-jemmy flange on the leading edge for external).

Frames

Manufactured individually to suit any wall depth up to 400mm. Adjustable design will accommodate wall depth variations of +30mm/-10mm.

Seals

Push-in perimeter for optimal weather, thermal, and acoustic performance.

Hardware

- Supplied with Grade 13 ball bearing butt hinges as standard
- Upgrade options: concealed bearings, special finishes, fully concealed, heavy-duty continuous hinges
- Extensive hardware range. Custom hardware integration available.

Fire Rated Option

Fire ratings for internal use of up to 60mins are available as an upgrade with this doorset.

Thermal Performance

Standard U-value: 2.2 W/m²K.

Acoustic Option

Additional perimeter seals and an upgraded composite door core can deliver acoustic performances.

Vision Panels

- Custom-sized vision panels in rectangular, square, or round styles
- Single, double, or triple glazed options with privacy films, blinds, and obscure glass.

Over Panels/Side Panels

Designed to expand openings, these panels integrate seamlessly with Defender Duopar doorsets:

- Solid panels: Fixed or removable for easy handling, installation, and future access
- Removable over panels/transoms: Ideal for periodic access (e.g. large machinery)
- Glazed panels: Single or double glazed with weathertight wedge-gasket seals.

Finishes

- Powder coated as standard in any RAL colour
- Anti-microbial powder coating available for healthcare environments
- Woodgrain effect powder coating available in a huge range of designs
- Duopar frames can also be used with timber leaves – enquire for details.

Optional Extras

- Air transfer grilles
- Decorguard design upgrade.



HEM PROJECTS

101

Defender Decorguard

High security aesthetic design

Defender Decorguard is a doorset that combines stunning contemporary looks with all of the security and durability benefits of steel.





High security



Thermally Rated



Acoustic



DDA Compliant

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.

Where high security is a requirement, this doorset is available with a PAS24 rated upgrade.

Door Leaf

- Anti-jemmy flange on the leading edge (square edged option available)
- 1.5mm galvanised steel (upgrades: 2.0mm galvanised or 1.5mm stainless steel, 304/316)
- Weld-free construction prevents premature failure
- Mineral wool core with internal strengtheners (chipboard upgrade for added strength).

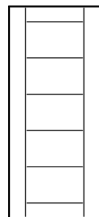
Frames

- 90mm single rebate frame in 2.0mm galvanised steel (stainless option available)
- Custom dimensions and alternative profiles (double rebated, face-fixed, ModuleX integral cloaking and more)
- Bolted corners for strength
- Threaded adjusters for easy installation (16+ fixings). Optional plain fixing plates
- 3mm steel hinge brackets
- Insulated frames available.

Thresholds

- Standard DDA compliant chamfered profile in 2mm stainless steel

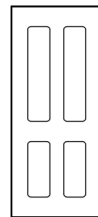
Decorguard Designs



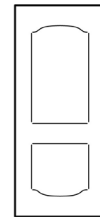
Ladder



Shaker



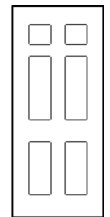
Victorian



Regency



Soleil



Georgian

- Options: raised/extended cills, inward-opening profiles with drainage, 4mm ramped design
- Integrated removable thresholds available.

Seals

Tubular silicone rubber seal bonded into frame for optimal weather, thermal, and acoustic performance.

Hardware

- Stainless steel ball bearing hinges (4+ per door, with security dogbolts)
- Upgrade options: concealed bearings, special finishes, fully concealed, heavy-duty continuous hinges
- Extensive hardware range: locks, latches, handles, panic hardware, closers, and stays. Custom hardware integration available.

Thermal Performance

Standard U-value: 2.2 W/m²K (upgradeable to 1.4 W/m²K with Thermaguard Technology).

Acoustic Option

Acoustic rated option available (requires automatic drop seal).

Vision Panels/Louvres

- Custom-sized vision panels in rectangular, square, or round styles
- Single, double, or triple glazed options with privacy films, blinds, and obscure glass
- Louvres: Aluminium/steel high security louver (150mm to full-door).

Over Panels/Side Panels

Designed to expand openings, these panels integrate seamlessly with Defender Decorguard doorsets

- Removable overpanels/transoms: Ideal for periodic access (e.g. large machinery)
- Glazed panels: Single or double glazed with weathertight wedge-gasket seals
- Louvred panels: Aluminium/steel high security louver (optional insect/rodent mesh).

Finishes

- Powder coated in any RAL colour (marine-grade option available)
- Special finishes: textured, metallic, and woodgrain effects for a premium look.

Designs

Available in either the designs above or get in touch for bespoke designs and requirements.



HEM PROJECTS

LIFTS

Defender Inox

Bespoke stainless steel doorsets

The Defender Inox is Metador's stainless steel doorset, constructed of Grade 304 or 316 stainless steel, making it perfect for a number of applications.





High Security



Internal Use Fire Rated



DDA Compliant

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

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

Constructed from Grade 304 or 316 stainless steel, Inox offers excellent corrosion resistance and increased strength, an ideal material for security doorsets. It is also popular in locations that require a high level of hygiene such as:

- Food production
- Medical and healthcare premises
- Wet environments
- High traffic environments.

Door Leaf

- Anti-jemmy flange on the leading edge (square edged option available)
- 1.5mm 304/316 stainless steel
- Weld-free construction prevents premature failure
- Mineral wool core with internal strengtheners (chipboard upgrade for added strength).

Frames

- 90mm single rebate frame in 2.0mm 304/316 stainless steel
- Custom dimensions and alternative profiles (double rebated, face-fixed, ModuleX integral cloaking and more)
- Bolted corners for strength
- Threaded adjusters for easy installation (16+ fixings). Optional plain fixing plates



- 3mm steel hinge brackets.
- Insulated frames available.

Thresholds

- Standard DDA-compliant chamfered profile in 2mm stainless steel
- Options: raised/extended cills, inward-opening profiles with drainage, 4mm ramped design
- Integrated removable thresholds available.

Seals

Tubular silicone rubber seal bonded into frame for optimal weather, thermal, and acoustic performance.

Hardware

- Stainless steel ball bearing hinges (4+ per door, with security dogbolts)
- Upgrade options: concealed bearings, special finishes, fully concealed, heavy-duty continuous hinges
- Extensive hardware range: locks, latches, handles, panic hardware, closers, and stays. Custom hardware integration available.

Fire Rated Option

Fire ratings for internal use up to 120mins are available as an upgrade with this doorset.

Vision Panels/Louvres

- Custom-sized vision panels in rectangular, square, or round styles
- Single, double, or triple glazed options with privacy films, blinds, and obscure glass
- Louvres: medium-duty aluminium or heavy-duty steel (150mm to full-door).

Over Panels/Side Panels

Designed to expand openings, these panels integrate seamlessly with Defender Inox doorsets

- Removable overpanels/transoms: Ideal for periodic access (e.g. large machinery)
- Glazed panels: Single or double glazed with weathertight wedge-gasket seals
- Louvred panels: Medium-duty aluminium or heavy-duty steel cassettes (optional insect/rodent mesh).

Finishes

Stainless steel finished as standard but can also be powder coated if required.

Structural opening sizes (mm)*

	Max width	Max height
Single leaf	1470	3800
Double leaf	2860	3800

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



HEM PROJECTS

Defender Riserguard

Fire protective riser shaft steel doorsets

Discreet yet smart, the perfect solution to protect and secure access to building services and storage areas such as dry riser cupboards.



The Defender Riserguard has been designed and fire tested for use in riser shafts in larger buildings and provides protection to riser openings, preventing fire escaping throughout multi-storey buildings.

Possibly the most important access door in the building for compartmentalising the spread of fire through floors, manufactured from steel with concealed riveted and welded frame corners.

Door Leaf

- 1.0mm and 1.2mm Zintec electro-galvanised mild steel
- Stainless steel option available
- Insulated core
- Single, double, triple and quadruple configurations available.

Frames

- Minimum of 60mm wide perforated or solid picture frame
- Concealed frame as standard.

Sizes

Up to 6 door leaves, max height of 2876mm and widths of up to 4171mm available.

Hardware

- Quick release heavy duty pivot hinge
- Concealed escutcheon
- Five point euro-lock fitted as standard.

Fire Rating

- Available with up to 120 minutes fire rating for internal use.

- Rigorously tested to both EN and BS standards in UKAS approved test laboratories.

Thermal Performance

The Riserguard incorporates 90mm of insulation in the door envelope which has a low lambda value, which results in a low overall u-value of 1.35W/m²K.

Acoustic Option

Acoustic rated option available.

Air Tightness

- Thermally insulated and air-sealed options are available
- The Riserguard doorset has been tested to BS EN 1634-3:2004, achieving an S-rating.

Finishes

- Powder coated in any RAL colour (marine-grade option available)
- Special finishes: textured, metallic, and woodgrain effects for a premium look.





HEM PROJECTS

Defender Sportsguard Steel doorsets for Sports Halls

The Defender Sportsguard, specifically designed for leisure halls, features rebound panels to provide protection against protruding hardware.



E info@hem-projects.co.uk

W www.hem-projects.co.uk



High Security



Thermally Rated



DDA Compliant

The Defender Sportsguard doorset is manufactured for emergency exits in sports halls and leisure facilities. Using rebound panels manufactured from a durable steel construction, these doorsets not only offer protection from protruding hardware but offer superior wear in high use environments.

Built in line with the Sport England Guidance on sports halls, these doorsets feature protective rebound boxes fixed to the door face to prevent injuries from accidental collisions with protruding ironmongery.



Door Leaf

- Anti-jemmy flange on the leading edge (square edged option available)
- 1.5mm galvanised steel (upgrades: 2.0mm galvanised or 1.5mm stainless steel, 304/316)
- Weld-free construction prevents premature failure
- Mineral wool core with internal strengtheners (chipboard upgrade for added strength)
- Rebound panels constructed from 1.5mm steel configured to suit requirements.

Frames

- The standard 2mm galvanised steel frame for Sportsguard is 170mm to match the depth of the rebound boxes. Other depths are available to suit site requirements
- Bolted corners for strength
- Threaded adjusters for easy installation (16+ fixings). Optional plain fixing plates
- 3mm steel hinge brackets
- Insulated frames available.

Thresholds

- Standard DDA-compliant chamfered profile in 2mm stainless steel
- Options: raised/extended cills, or 4mm ramped design
- Integrated removable thresholds available.

Seals

Tubular silicone rubber seal bonded into frame for optimal weather, thermal, and acoustic performance.

Hardware

- Stainless steel ball bearing hinges (4+ per door, with security dogbolts)
- Available with a wide range of panic hardware to suit budget, security requirements and frequency of use.

Thermal Performance

Standard U-value: 2.2 W/m²K (upgrade-able to 1.4 W/m²K with Thermaguard Technology).

Acoustic Option

Acoustic-rated option available.

Over Panels/Side Panels

- Designed to expand openings, these panels integrate seamlessly with Defender Sportsguard doorsets
- Removable overpanels/transoms: Ideal for periodic access (e.g. large machinery).

Finishes

- Powder coated in any RAL colour (marine-grade option available)
- Special finishes: textured, metallic, and woodgrain effects for a premium look.

Structural opening sizes (mm)*

	Max width	Max height
Single leaf	1470	3800
Double leaf	2860	3800

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



HEM PROJECTS

Defender ModuleX

Steel doorsets for modular buildings

Defender ModuleX is designed to facilitate fitting flush into thin wall panels as used in the modular building industry.



E info@hem-projects.co.uk

W www.hem-projects.co.uk



Internal or External Use
Fire Rated



Thermally Rated



Acoustic



DDA Compliant

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 four-sided cloaking frame to conceal panel cut outs.

Door Leaf

- Anti-jemmy flange on the leading edge (square edged option available)
- 1.5mm galvanised steel (upgrades: 2.0mm galvanised or 1.5mm stainless steel, 304/316)
- Weld-free construction prevents premature failure
- Mineral wool core with internal strengtheners (chipboard upgrade for added strength).

Frames

- 1.5mm galvanised steel with built in cloaking profile
- Bolted corners for strength
- Threaded adjusters for easy installation (16+ fixings). Optional plain fixing plates
- 3mm steel hinge brackets
- Insulated frames available.

Thresholds

- Standard DDA-compliant chamfered profile in 2mm stainless steel
- Options: raised/extended cills, inward-opening profiles with drainage, 4mm ramped design
- Integrated removable thresholds available.

Seals

Tubular silicone rubber seal bonded into frame for optimal weather, thermal, and acoustic performance.



Hardware

- Stainless steel ball bearing hinges (4+ per door, with security dogbolts)
- Upgrade options: concealed bearings, special finishes, fully concealed, heavy-duty continuous hinges
- Extensive hardware range: locks, latches, handles, panic hardware, closers, and stays. Custom hardware integration available.

- Louvres: medium-duty aluminium or heavy-duty steel (150mm to full-door).

Finishes

- Powder coated in any RAL colour (marine-grade option available)
- Special finishes: textured, metallic, and woodgrain effects for a premium look.

Fire Rated Option

Fire ratings up to 120mins for internal or external use are available as an upgrade with this doorset.

Thermal Performance

Standard U-value: 2.2 W/m²K (upgradeable to 1.4 W/m²K with Thermaguard Technology).

Acoustic Option

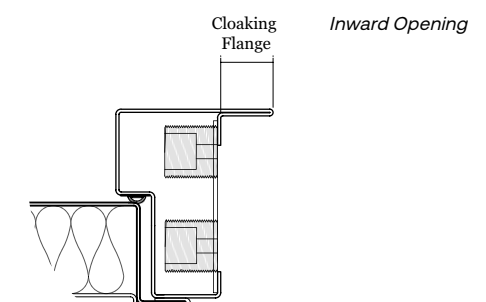
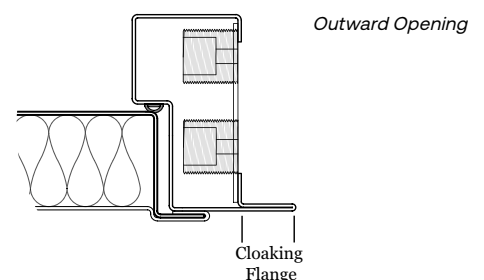
Acoustic rated option available (requires automatic drop seal).

Vision Panels/Louvres

- Custom-sized vision panels in rectangular, square, or round styles
- Single, double, or triple glazed options with privacy films, blinds, and obscure glass

Structural opening sizes (mm)*		
	Max width	Max height
Single leaf	1470	3800
Double leaf	2860	3800

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



Supplied & Installed by

