



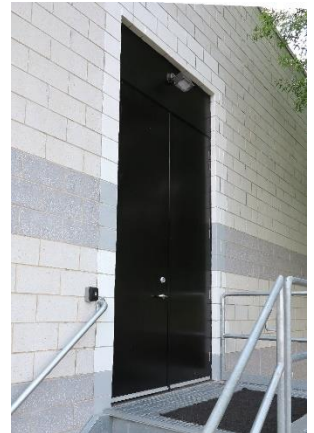
Ballistic Doorsets –

Product Range ‘Blast & Ballistic Doorsets’

Specify either – **‘Blast & Ballistic Steel Doorset’**
‘Blast & Ballistic Timber Doorset’
‘Blast & Ballistic Glazed Doorset’

When ordering, specify product from above and add suffix for the required ballistic protection e.g. **‘Blast & Ballistic Timber Doorset FB6’** = NATO 7.62 protection

- Ballistic Ratings –** BSEN 1522/23 FB2 through to FB7 European Standards and NIJ IIIA through to NIJ IV American Standards
- Material Finish –** Timber Composite, Steel and Fully Glazed
- Fire Resistance –** Timber/Glazed products FR60 and specific steel doorsets up to 4 hours
- Internal / External –** Both options for all types and includes weathering detail on external applications
- Frames –** Steel or Timber composite of minimum section 100mm deep, and varying to suit local applications with additional depth or separate linings. Rebate depths minimum 25mm
- Frame Finishes –** RAL Powder Coat, Stains, Paints, Lacquers
- Doorleaves –** Steel facings incorporating ballistic armoured steel linings and structural profiles. Timber facings onto hardwood/ballistic steel composite cores, lipped all edges. All door edges fully encapsulated
- Doorleaf Finishes –** RAL Powder Coat, Stains, Paints, Lacquers
- Hinges –** 3 or 4 No. Stainless steel or purpose made
- Door Closers –** All types provided, LCN 4040 is the closer of choice
- Ancillary Items –** **‘T’ Bars:** to meeting edges of double doorsets
Thresholds: Internal/external profiles
Hinge Bolts: Security upgrade item as detailed
Seals: Draught Seals: Fire Seals as detailed
Weather Detail: Drip moulds, weather boards
Fixings: Supplied on request for masonry or steel



- Vision Panels –** Tested to BSEN 1063 BR2 through to BR7 European Standards and NIJ IIIA through to NIJ IV American Standards
- Vision Panel Frame -** Manufactured from ballistic armour with bolt through fixing from the protected side, and tested to the same ballistic standard as the doorleaf FB2 through to FB7 and NIJ IIIA through to NIJ IV
- Finish -** RAL PPC finish or cloaked with solid hardwood to match decorative door finishes
- Glazing -** Tested within the Vision Panel Frame to BSEN 1063 BR2 through to BR7 European Standards and NIJ IIIA through to NIJ IV American Standards. Available in Spall Allowed and NO Spall options
- Side Panels -** Manufactured to integrate with the doorset and again meeting the same ballistic levels of protection
- Overpanels, fanlights** Manufactured to integrate with the doorset and again meeting the same ballistic levels of protection
- Locking Hardware -** ASSA Modular Locking with Ruko and ASSA cylinders
Surelock McGill single and multipoint locking systems
Pickersgill Kaye single and multipoint locking systems
Mico Tindall single and multipoint locking systems
Morticed and also surface mounted locking using the above hardware
- Locking Options -** Emergency Escape only
Emergency Escape with external entry
Manual in/out with manual locking
Manual escape and external entry
Access control in, emergency escape out
Access control in and out with mechanical override
Option with all locks of auto locking/auto bolting/manual locking
Access control locking in 12 volts and also 24 volts
Overlocking facilities
All locking can be interlocked for use in Airlocks and Tiger Traps
Special locking applications can be incorporated into these locks including lock status and bolt status monitoring
- Additional Products -** Ballistic door viewers to BSEN 1063 BR2 through to BR7 European Standards and NIJ IIIA through to NIJ IV American Standards.
Ballistics Louvres (can be fitted within the doorleaf or within side panels) to BSEN 1063 BR2 through to BR7 European Standards and NIJ IIIA through to NIJ IV American Standards.

Blast rating upgrade available from C25 through to C10 with full ballistic protection

These doors and locking products have been supplied to UK Government Projects for over 25 years both within the United Kingdom and also on Overseas Projects and all elements of their construction are independently tested within the United Kingdom

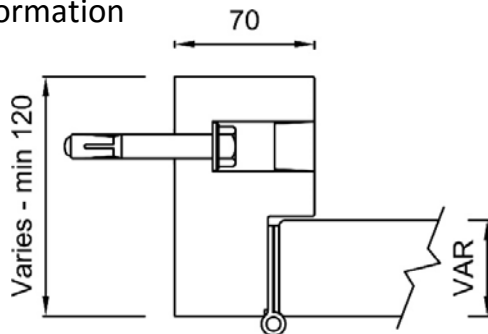


A leaf and a half timber
ballistic doorset

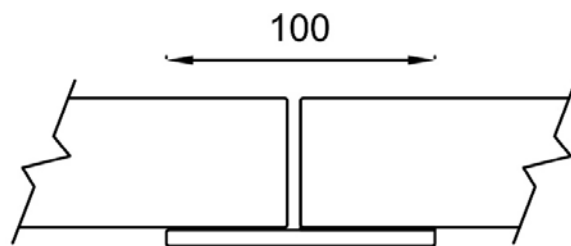
Ballistic Doorsets - Wooden

- Designed primarily for commercial, domestic and military environments.
- Paint, stains and lacquer factory applied finishes.
- For internal and external applications
- Can accommodate a wide range of commercial and specialist locking systems
- Configurations – Single, 1½ leaf and Double doorsets, with side and overpanels if required
- Available with vision panels, ballistic louvers and door viewers which are also ballistic rated
- Extensive range of ballistic certification

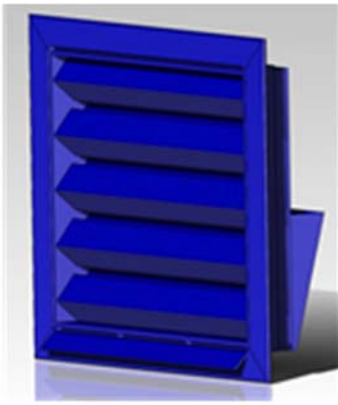
Typical wooden door and frame profiles – see accompanying details for further information



Typical outline - variable job specific



Typical outline - meeting style detail



Doorframe	
✓	Machined from solid hardwood timbers
✓	Can be machined to replicate existing timber finishes
✓	Minimum frame depth/wall thickness generally 120mm +
Doorleaf	
✓	Ranging in thickness from 44mm up to 70mm
✓	Multi layered timber & steel composite core/pressure bonded
Finishes	
✓	Flush, veneers or panel effects
✓	Factory applied paint finish
✓	Factory applied stains and lacquers
✓	Both internal and external quality finishes
Available sizes	
✓	Single doorsets up to 1300mm wide x 3050mm high
✓	Double doorsets 2550mm wide x 3050mm high
✓	With side screens and overpanels - indefinite
Hinges	
✓	Continuous Stainless Steel hinges
✓	Individual Stainless Steel Hinges
Suitable Locking Systems/applications	
✓	Multipoint surface mounted locking systems
✓	Multipoint concealed locking systems
✓	Single point surface mounted locking systems
✓	Single point morticed locking systems
✓	Suitable for access control
✓	Suitable for mechanical operation only
✓	Suitable for escape systems/panic exit only
✓	Suitable for combined a/c, mechanical override and escape
Power transfer to lock options	
✓	Concealed cable loop
✓	Surface mounted cable loop
Certified Ballistic Standards	
✓	BS EN1522/23 FB6 - 7.62 NATO
✓	BS EN1522/23 FB5 - 5.56 NATO
✓	Special - AK47 Stannag based
✓	BS EN1522/23 FB4 - .44
✓	BS EN1522/23 FB3 - .357
✓	BS 5051 - G2/S86 - .357, .44, Shotgun

Shown above:

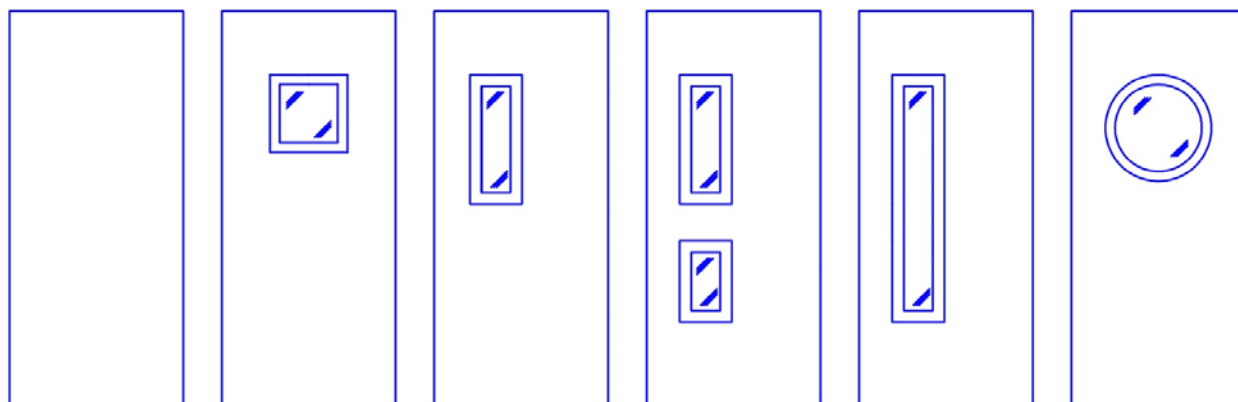
- 1 – Ballistic Louver
- 2 – Ballistic Door Viewer
- 3 – Ballistic Vision Panel with decorative covers

Compatible additional items	
✓	Ballistic door viewer to BS EN1063 BR3 - BR6 and NIJ IIIA - III
✓	Vision panels to BS EN1063 BR3 - BR6 and NIJ IIIA - III + AK47
✓	Ballistic Louver to BS EN 1522.23 FB3 - FB6 + AK47
Door closers	
✓	Suitable door closer type LCN 4041 and derivatives
✓	Alternative makes - Geze, Dorma and ASSA
✓	Automatic opening and closing systems - Besam, Dorma
Weights	
✓	Wooded frame profiles approx. 5.4kg/m
✓	Doorleaves approx. 45kg/m2 to 82kg/m2
Packing	
✓	Supplied in international crates for dispatch

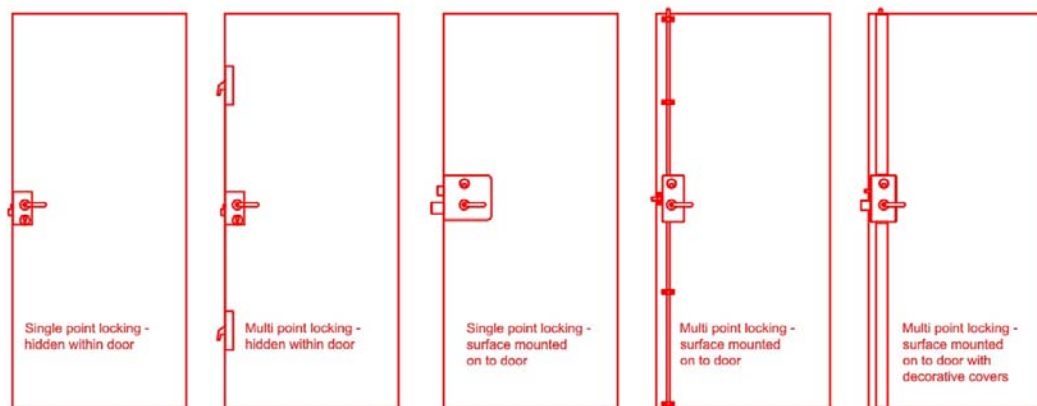


Suitable for –

- Commercial applications
- Domestic applications
- Embassies
- Internal use
- External use
- Flush finishes
- Panelled finishes
- Paints finish
- Stains and lacquers

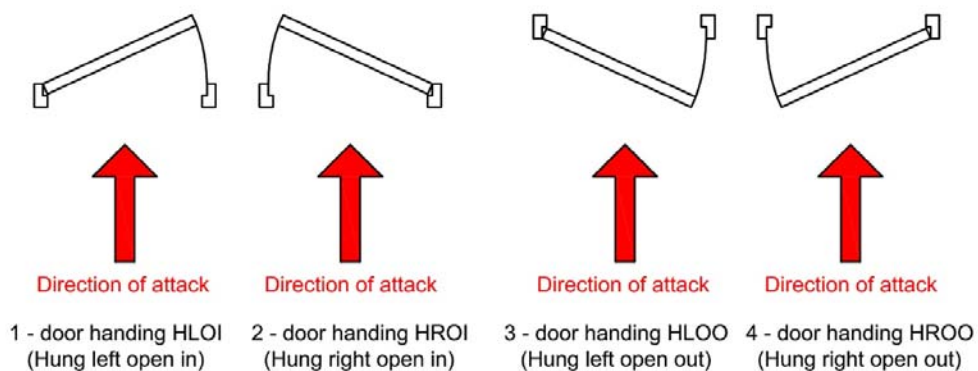


Typical Vision Panel Layouts

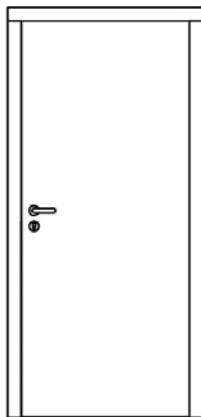


Locking systems - hidden and exposed

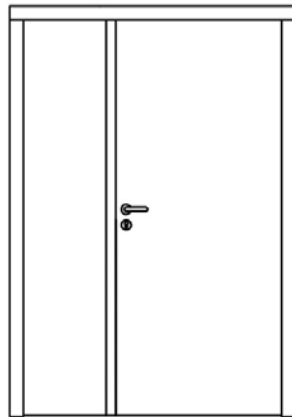
Door handings - when ordering



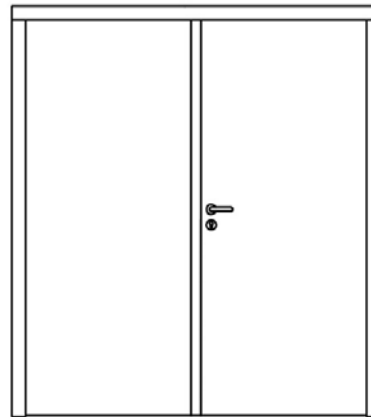
Typical Doorset Configurations



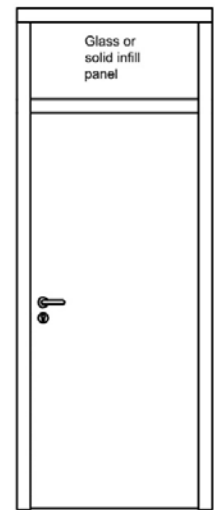
Single doorset



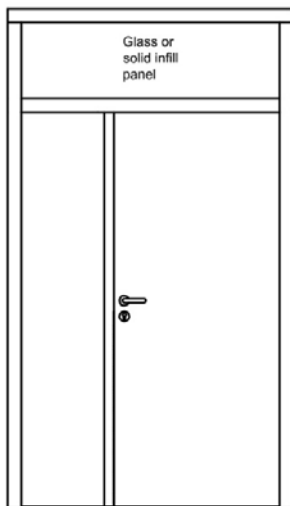
1 1/2 leaf doorset



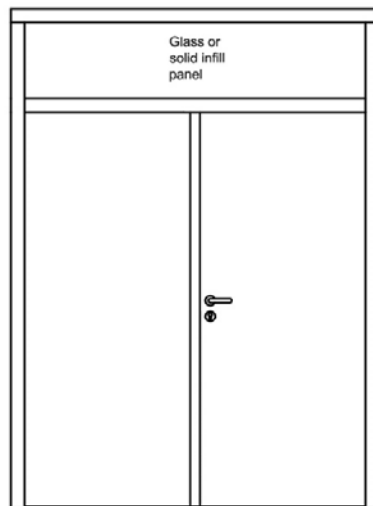
Double doorset



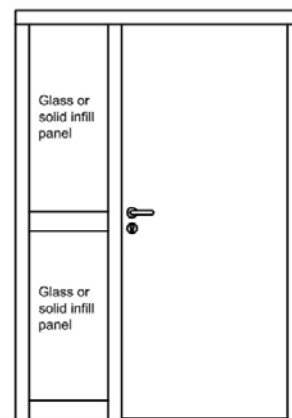
Single doorset with overpanel



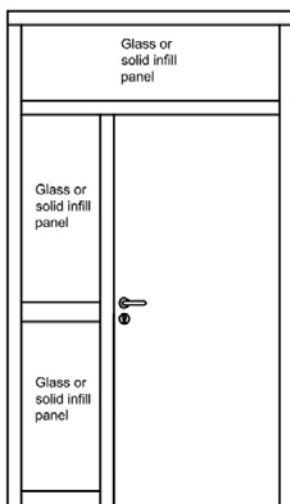
1 1/2 leaf doorset with over panel



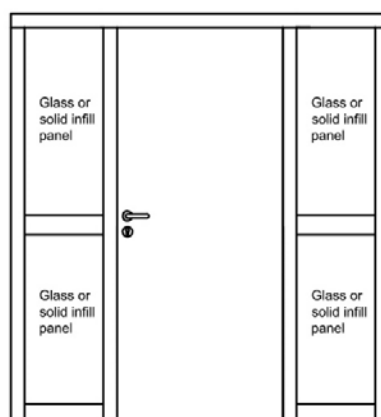
Double doorset with over panel



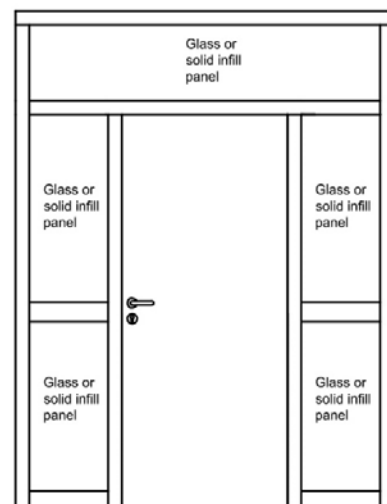
Single doorset with side screen



1 1/2 leaf doorset with over panel and side screen



Double doorset with side screens



Double doorset with side screens and over panel

Indicative veneer options and finishes

	NATURAL CLEAR STAIN	GOLDEN HONEY	WARM CHESTNUT	CINNAMON	NUTMEG	MERLOT	TUSCAN COFFEE
OAK WOOD							
MAPLE WOOD							
CHERRY WOOD							
MAHOGANY WOOD							
WALNUT WOOD							
	WHITE	BLACK	CUSTOM	HAZELNUT	MOCHA	SILVER	AMBER
PAINT GRADE WOOD			 CUSTOM COLORS AVAILABLE UPON REQUEST				

Door Configuration Outline – for Steel and Wooden Doorsets



Inward opening and outward opening blast, ballistic and security doorsets



Concealed locking double blast, ballistic and security doorset



Ballistic doorset with bullet louvers



High security multi point locking system with bullet ventilation grilles and internal tray to resist deliberate ingress of flammable liquids



One and a half leaf door configurations



Double doorset with high security locking and removable overpanel and transom. Particularly useful when large equipment needs to be moved through door openings



Double doorset with high security locking, clear glazed fanlight and vision panels to each doorleaf. Allows lots of light to enter the room but still offers blast, ballistic and security protection

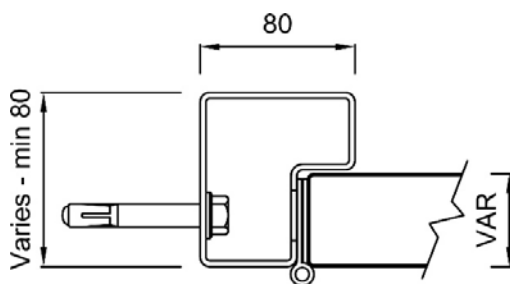


Fully glazed ballistic entrance

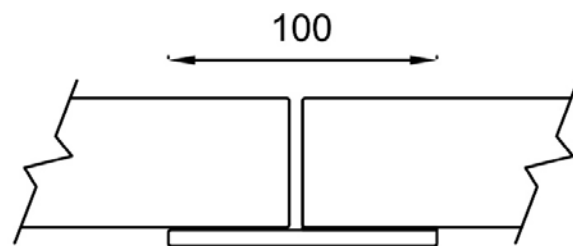
Ballistic Doorsets - Glazed

- Designed primarily for commercial, domestic and military environments.
- PPC or other special finishes available
- For internal and external applications
- Can accommodate a wide range of commercial and specialist locking systems
- Configurations – Single, 1½ leaf and Double doorsets, with side and overpanels if required
- Extensive range of ballistic certification

Typical glazed door and frame profiles – see accompanying details for further information



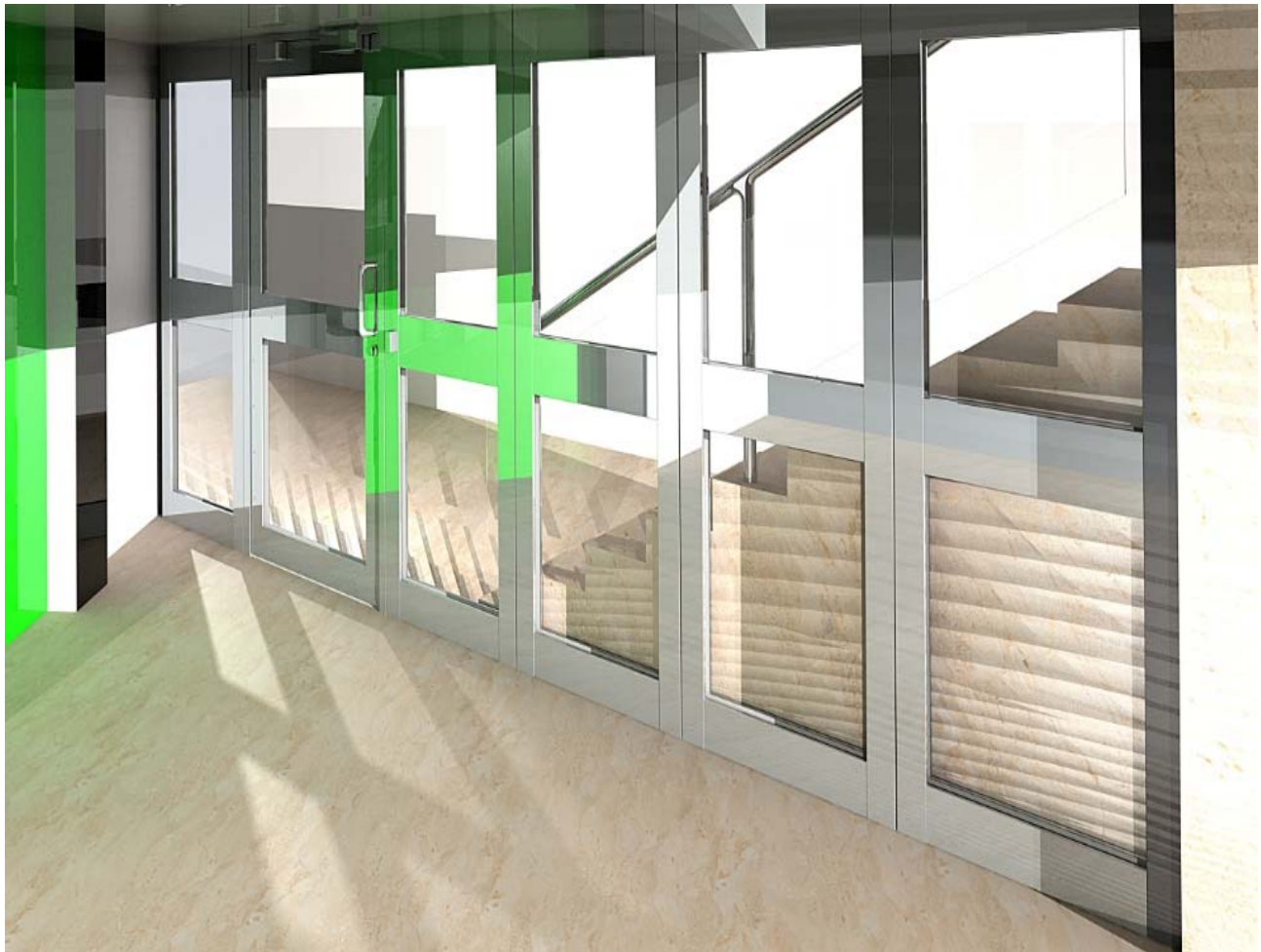
Typical outline - variable job specific



Typical outline - meeting style detail

Doorframe	
✓	Fabricated from profiled ballistic steels
✓	Can be designed to complement existing doors and windows
✓	Minimum frame depth/wall thickness generally 80mm
Doorleaf	
✓	Ranging in thickness from 50mm up to 80mm
✓	Fully welded construction
Finishes	
✓	Factory applied PPC finish
✓	Factory applied paint finish
✓	Both internal and external quality finishes
Available sizes	
✓	Single doorsets up to 1200mm wide x 2500mm high
✓	Double doorsets 2550mm wide x 2500mm high
✓	With side screens and overpanels - indefinite
Hinges	
✓	Continuous Stainless Steel hinges or individual hi load hinges
Suitable Locking Systems/applications	
✓	Multipoint surface mounted locking systems
✓	Multipoint concealed locking systems
✓	Single point surface mounted locking systems
✓	Single point morticed locking systems
✓	Suitable for access control
✓	Suitable for mechanical operation only
✓	Suitable for escape systems/panic exit only
✓	Suitable for combined a/c, mechanical override and escape
Power transfer to lock options	
✓	Concealed cable loop
✓	Surface mounted cable loop
Certified Ballistic Standards	
✓	BS EN1522/23/1063 - FB7/BR7
✓	BS EN1522/23/1063 - FB6/BR6
✓	BS EN1522/23/1063 - FB5/BR5
✓	BS EN1522/23/1063 - FB4/BR4
✓	BS EN1522/23/1063 - FB3/BR3
✓	NIJ 0108.01 IV
✓	NIJ 0108.01 IIIA
✓	UL752 Level 9
✓	UL752 Level 5
✓	UL752 Level 3
✓	AK47

Blast ratings	
✓	Arena testing 100 kg @15m with ballistic protection
✓	Protecting against fragmentation - grenades and pipe bombs
Door closers	
✓	Suitable door closer type LCN 4041 and derivatives
✓	Alternative makes - Geze, Dorma and ASSA
✓	Automatic opening and closing systems - Besam, Dorma
Weights	
✓	Profiled frames approx. 24kg/m
✓	Glass - see elsewhere - Data sheet TDSBB 1005
Packing	
✓	Supplied in international crates for dispatch



Special finishes also available



Airlock doorsets (top left) are ideally designed using as much glass as possible. Firstly ensuring that the doors and cubicle will offer the intended ballistic protection, the controller will then have good visibility of the person making their way through the airlock and provide time to assess the visitor, whilst they are waiting for the inner door to release, after which the airlock can be exited.

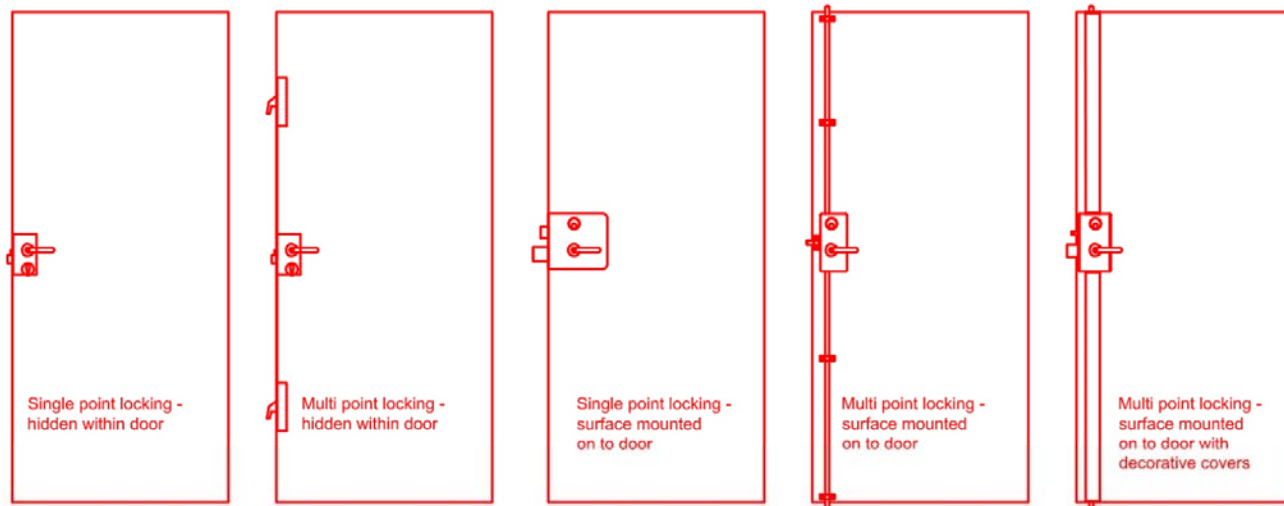
Both doors of the airlock should be controlled in such a way that only one door at any time can be opened. This is controlled by the access control system. See our locking products and also bullet window section for further information.

The minimum level of ballistic protection should be .44 Magnum – EN1063 BR4 or NIJ 0108.01 IIIA but it is often anticipated that larger calibre weapons, such as AK47 or other concealed automatic weapons may be used, in which case a protection level of EN1063 BR6 or NIJ IV should be considered.



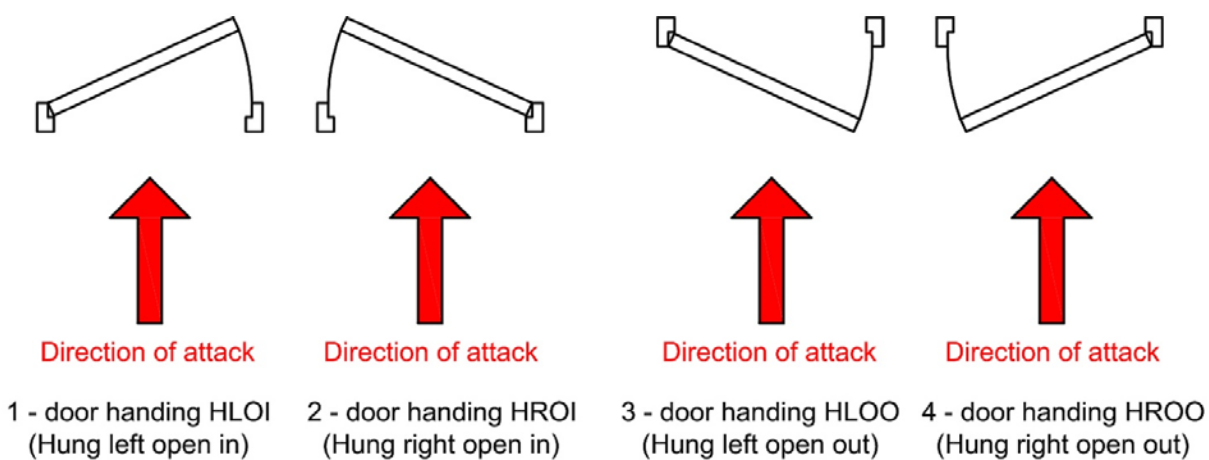
Ballistic or 'Bullet Glass Doors' and sometimes more specifically 'AK47 bullet glass doors' as they are sometimes referred to are suitable for both internal and external applications.

Also see our Ballistic Windows page and also Data Sheets for more information about our glass products.

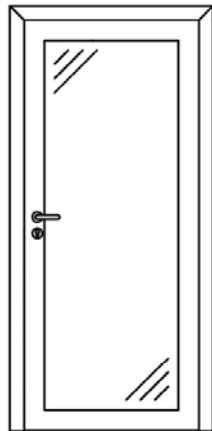


Locking systems - hidden and exposed

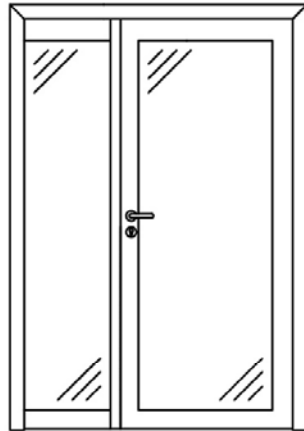
Door handings - when ordering



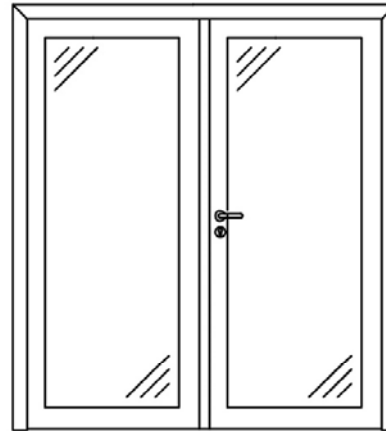
Typical Doorset Configurations



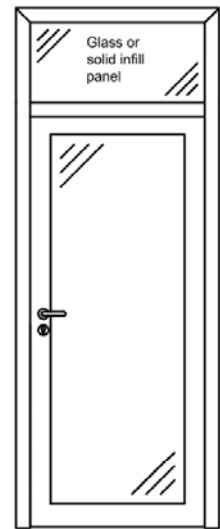
Single doorset



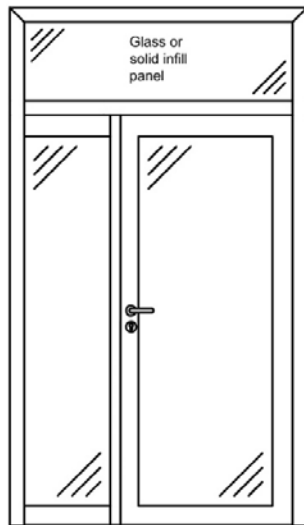
1½ leaf doorset



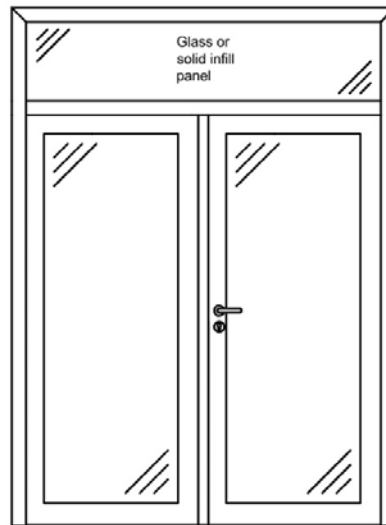
Double doorset



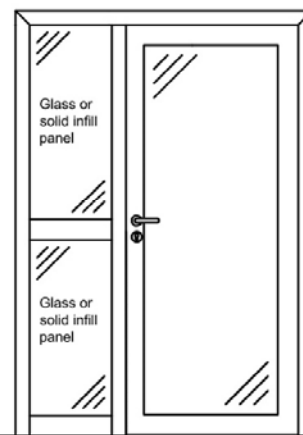
Single doorset with overpanel



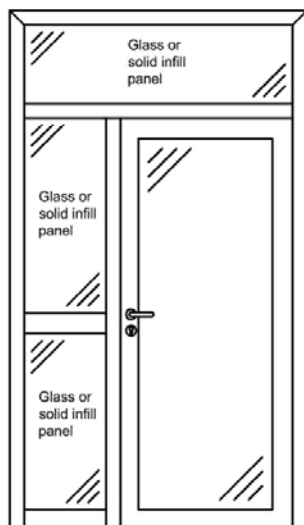
1½ leaf doorset with overpanel



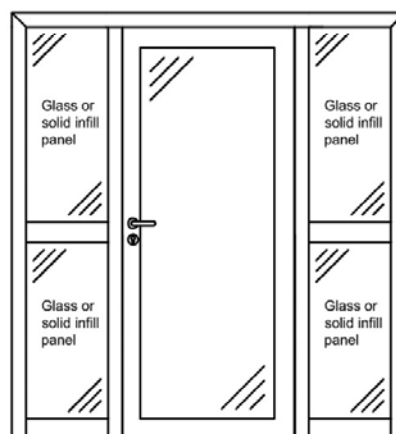
Double doorset with overpanel



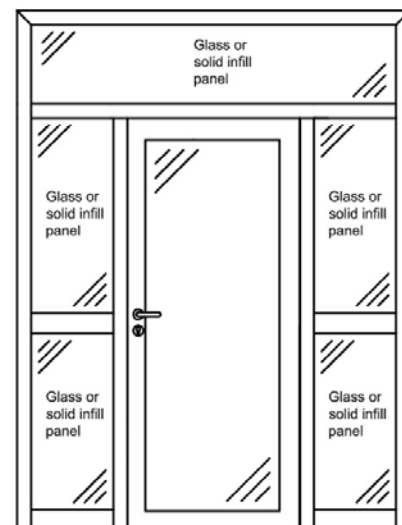
Single doorset with side screen



1½ leaf doorset with overpanel and side screen



Double doorset with side screens



Double doorset with side screens and overpanel



Fire Rated Doorsets –

Product Range ‘Blast & Ballistic Fire Doorsets’

Specify either – **‘Blast & Ballistics Ltd. Metal Fire Doorset’** - See Images on Page 3
 ‘Blast & Ballistics Ltd. Timber Fire Doorset’ - See Images on Page 4
 ‘Blast & Ballistics Ltd. Glazed Fire Doorset’ - See Images on Page 3

When ordering, specify product from above and add suffix for the required level of fire protection. E.g. for a 1 hour timber fire door specify: **‘Blast and Ballistics Ltd. Timber Fire Doorset FD60’** and where applicable **‘E’** and **‘EI’** (see below for explanation)

Fire Test Standards – BSEN 1363-1, BSEN 13501.2:2016, BSEN 1634-1, BSEN 1634-3, BSEN 16034, BSEN 476 Part 22

Integrity/Insulation - Products are denoted ‘E’ and ‘EI’. The ‘E’ means that they are tested to Integrity only (this prevents the spread of fire past the doorset) or ‘EI’ which means that in addition to preventing the fire passing the doorset it is also safe to touch in a fire situation

Material Finish – Aluminium, Steel, Timber. Glazed Doorsets in Metal frames.
 Timber/Steel/Aluminium doorsets with vision panels

Fire Resistance – Standard Timber products 30 and 60 minutes. Special timber products 90 and 120 minutes. Metal doorsets 60 minutes through to 4 hours including blast and ballistic rated products

Internal / External – Both options for all types and includes weathering detail on external applications

Frames – Steel/Aluminium of minimum section 100mm deep, and varying to suit local applications. Steel frames are folded steel generally 100 x 60 in section with rebate. Aluminium frames are extruded and of minimum 80 x 50 and upwards dependent upon system profile. Timber frames 100 x 45 with rebate or 100 x 32 with planted stop and upwards. 30 minute timber frames in softwood, 60 minute and greater in high density close grained hardwood

Frame Finishes – RAL Powder Coat for Steel and Aluminium and Veneers, Stains, Paints, Lacquers for timber frames

Doorleaves – Steel/Aluminium – choice of flush panels or fully glazed panels within outer framing system. Timber doorsets are solid core with flush faces in paint, decorative veneers or laminates

Doorleaf Finishes – RAL Powder Coat for Steel and Aluminium and Veneers, Stains, Paints, Lacquers for Timber Doors

Thresholds:	Not generally required unless specified to accommodate floor coverings or external weather applications
Seals:	All products are fitted with fire seals, internal insulation, intumescent strips, intumescent papers to hinges and locks as per test data
Weather Detail:	Drip moulds, weather boards for external application fire doorsets as required
Fixings:	Supplied on request and also fire mastics, Rockwool and specialist sealants
Vision Panels –	Tested to BSEN 1363, BSEN 1364, BSEN 1365, BSEN 1634, BS 476
Vision Panel Beads -	Manufactured from Steel, Aluminium or Timber dependant upon fire door type
Finish -	Steel/Aluminium RAL PPC finish and stains, paints, lacquers for hardwood timber beads
Glazing -	Tested within the Vision Panel Frame using proprietary products such as Pyroguard, Schott, Polflam, Pilkington, ESG, Contraflam, Pyrobel up 120 minutes fire resistance in both integrity only and integrity and insulation preventing heat transfer from fire side to non fire side
Side Panels -	Manufactured to integrate with the doorset and again meeting the same levels of fire protection. They can be solid panels or glazed panels
Overpanels, fanlights	Manufactured to integrate with the doorset and again meeting the same levels of fire protection. They can be solid panels or glazed panels
Locking Hardware -	Certifire approved locking is available on all doorsets and is installed in accordance with test requirements
Locking Options -	<p>Emergency Escape only</p> <p>Emergency Escape with external entry</p> <p>Manual in/out with manual locking</p> <p>Manual escape and external entry</p> <p>Access control in, emergency escape out</p> <p>Access control in and out with mechanical override</p> <p>Option with all locks of auto locking/auto bolting/manual locking</p> <p>Access control locking in 12 volts and also 24 volts</p> <p>Overlocking facilities</p> <p>All locking can be interlocked for use in Airlocks and Tiger Traps</p> <p>Special locking applications including monitoring</p>

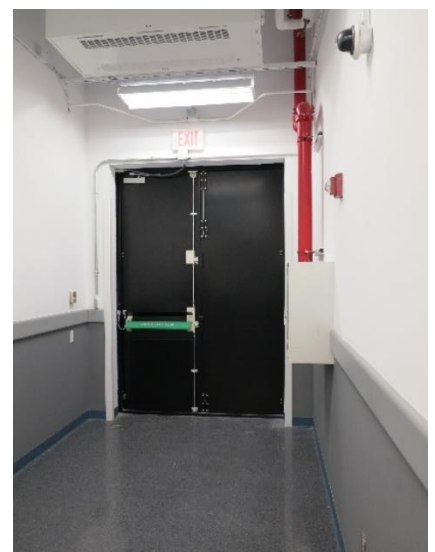
Also available – Fire Rated Louvre Doors and associated products

These doors and locking products have been supplied to UK Government Projects for over 25 years both within the United Kingdom and also on Overseas Projects and all elements of their construction are independently tested within Europe and the United Kingdom

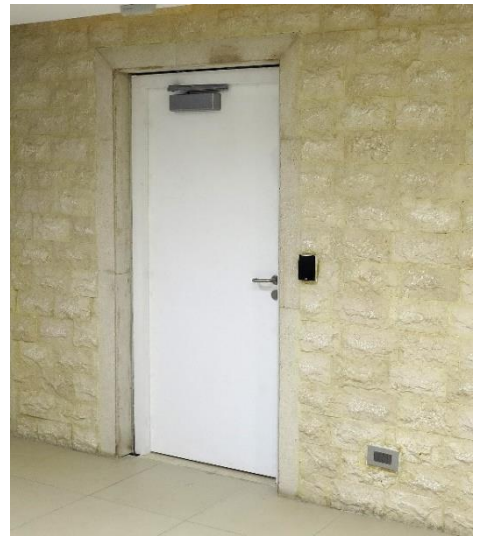
‘Blast & Ballistics Ltd. Glazed Fire Doorset’



‘Blast & Ballistics Ltd. Metal Fire Doorset’



‘Blast & Ballistics Ltd. Timber Fire Doorset’



‘Blast & Ballistics Ltd. Louvred Fire Doorset’



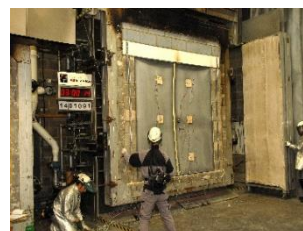
Indicative veneer options and finishes

	NATURAL CLEAR STAIN	GOLDEN HONEY	WARM CHESTNUT	CINNAMON	NUTMEG	MERLOT	TUSCAN COFFEE
OAK WOOD							
MAPLE WOOD							
CHERRY WOOD							
MAHOGANY WOOD							
WALNUT WOOD							
	WHITE	BLACK	CUSTOM	HAZELNUT	MOCHA	SILVER	AMBER
PAINT GRADE WOOD			 CUSTOM COLORS AVAILABLE UPON REQUEST				



Fire Rated Security and Ballistic Doorsets – Product Range 'Blast & Ballistic FRBRS'

LPCB SR3 and SR4 Security – Fire – Ballistic protection in one product



1. Fire Protection Specification

Fire Test Standards – Doorset - BS EN 1634-1: 2008 and LPS1056: Issue 6.1 for 4 hours

Vision Panel – BS EN 1634-1: 2008 for 1 hour or 2 hours

Integrity Products are denoted 'E' means that they are tested for Integrity (this prevents the spread of fire past the doorset)

Material Finish – Marine Grade Factory PPC Steel, and vision panels also in Marine PPC finish

Fire Resistance – Doorsets are 30 and 60 minutes fire protection and also extending to 4 hours including blast and ballistic ratings

Internal / External – Both options for all types and includes weathering detail on external applications

Frames – Steel 100mm deep. Steel frames are folded steel generally 100 x 74 in section with rebate.

Frame Finishes – RAL Marine Grade Powder Coat for Steel

Doorleaves – Steel with ballistic and attack internal reinforcement

Doorleaf Finishes –	RAL Powder Coat for Steel
Thresholds:	Choice of detail – see profiles elsewhere
Seals:	All products are fitted with fire seals, internal insulation, weather seals as required
Weather Detail:	Drip moulds, weather boards for external application fire doorsets as required
Fixings:	Supplied on request and also fire mastics, Rockwool and specialist sealants
Vision Panels –	Tested to 30, 60, 90 and 120 minutes fire protection
Vision Panel Beads -	Manufactured from Steel,
Finish -	Steel Marine Grade paint finish
Glazing -	Tested within the Vision Panel Frame using proprietary products such as Pyroguard, Schott, Polflam, Pilkington, ESG, Contraflam, Pyrobel up 120 minutes fire resistance. This is also combines with LPS attack glass and ballistic glass

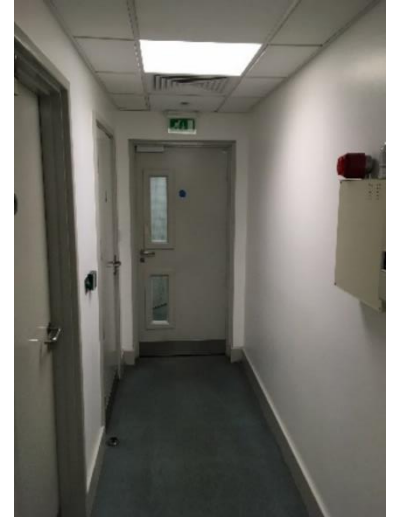


2. LPCB Physical Attack Specification

LPCB Attack Standards – Tested and certified to either LPS SR3 and SR4 Issue 7 currently being updated to Issue 8

LPCB Test Certificate No.'s - LPS SR4 No. 234d/07 Part 4
LPS SR3 No. 234d/13 Part 3





3. Ballistic Protection Specification

Independent Ballistic Tested by Wiltshire Ballistic Services – Registered UKAS Test Centre, ISO 9001

Ballistic Test Standard - BS EN1522/23 (Doors and Frames) and BS EN1063 (Glazing Elements)

**Test Certificate No.'s - Doorset Elements - FB4 (including FB3) – No. 10298a and NIJ IIIA No. 10298b
Glazing Element – BR6 used on all ballistic glazing – No. 10080d**



These doorsets and locking products have been supplied to UK Government Projects for over 25 years both within the United Kingdom and also on Overseas Projects and all elements of their construction are independently tested within the United Kingdom

Certificate of Accreditation



Wiltshire Ballistic Services Limited

Testing Laboratory No. 10532

Is accredited in accordance with International Standard ISO/IEC 17025:2017 - General Requirements for the competence of testing and calibration laboratories.

This accreditation demonstrates technical competence for a defined scope specified in the schedule to this certificate, and the operation of a management system (refer joint ISO-ILAC-IAF Communiqué dated April 2017). The schedule to this certificate is an essential accreditation document and from time to time may be revised and reissued.

The most recent issue of the schedule of accreditation, which bears the same accreditation number as this certificate, is available from www.ukas.com.

This accreditation is subject to continuing conformity with United Kingdom Accreditation Service requirements.

M. Gantley

Matt Gantley, Chief Executive Officer
United Kingdom Accreditation Service

Initial Accreditation 13 December 2021
Certificate Issued 13 December 2021



UKAS is appointed as the sole national accreditation body for the UK by the Accreditation Regulations 2009 (SI No 3155/2009) and operates under a Memorandum of Understanding (MoU) with the Department for Business, Energy and Industrial Strategy (BEIS).



Locking Hardware - Approved locking is fitted on all doorsets and is installed in accordance with test requirements

Locking Options -

- Emergency Escape only
- Emergency Escape with external entry
- Manual in/out with manual locking
- Manual escape and external entry
- Access control in, emergency escape out
- Access control in and out with mechanical override
- Option with all locks of auto locking/auto bolting/manual locking
- Access control locking in 12 volts and also 24 volts
- Overlocking facilities
- All locking can be interlocked for use in Airlocks and Tiger Traps
- Special locking applications including monitoring



Additional Information:

- Doorsets are also used for Airlock applications, Data Centres, Alarm Receiving Centres, Cash Offices, Secure Storage of Valuables
- CE Marking to BS EN14351-1
- Thermal Properties nominal U values 3.7 with Vision Panels
- All doorsets fitted with hinges to BS EN1935 Class 13 and also hinge bolts to all hinge sides

All products MADE IN ENGLAND