

ahmarra

Fire Door Manufacture & Installation



EDUCATION DOOR RANGE

Version 5.9 | 06-03-2026

Timber
Fire Door
Manufacture



Fire Door
Installation





Our many years experience of manufacturing doors within the education sector has led us to produce this range of doors that are specific to schools, colleges, academies and universities.

Our doorsets are made to order on a project by project basis and we focus on providing our customers with the quality of service that we should all expect from our suppliers. Our ability to provide this level of service ensures that our customers return time and time again.

Our aim is to make the entire process as simple and practical as possible, offering solutions to the challenges presented by Building Regulations including performance requirements and complex design issues.

As a specialist in developing customer specific rationalised doorsets, our clients have recognised that significant cost savings can be made by offering a uniform finish throughout and eliminating the need to re-define doorsets and ironmongery for every project.

Ahmarra is Q-Mark Timber Fire Door Manufacture, Q-Mark Fire Door Installation, Q-Mark Enhanced Security Door (PAS24), Secured By Design, ISO 9001 Quality Management System, ISO 14001 Environmental Management System, ISO 14064 Carbon Footprint and FSC® (Forest Stewardship Council®) certified. Our ability to offer full product certification has enabled us to meet the supply chain criteria for many of the UK's largest construction companies.

We are a family business that prides itself on offering a quality product and developing long-term relationships with our clients, suppliers and staff. Every team member understands that being polite, enthusiastic and reliable are essential components of what makes Ahmarra successful.

WHY SHOULD YOU CHOOSE THE EDUCATION RANGE?

- QUALITY** We use the finest materials, cutting edge technology and traditional craftsmanship to guarantee exceptional standards.
- BESPOKE** You select the style, the material, and the finish from a wide range of options, creating the perfect look with limitless possibilities.
- GREEN** Ahmarra is FSC® certified (FSC C018847), and as such, all of our doors and frames are supporting responsible forestry. Our wood waste is converted into heat for our production facility in our biomass boiler. Our local forest planting scheme has meant thousands of plants and trees have been planted as a result of our donations.
- BRITISH** Made in Britain to the highest quality standards, we are proud to fly the flag for UK manufacturing.



CASE STUDY

MIDHURST ROTHER COLLEGE

Manufacture of FD30 and FD60 fire doorsets and side screens for the classrooms, store rooms, communal spaces and sports hall of a college in West Sussex.

Key Features

As the college is mainly in use during daylight hours, the screens allow natural light to flood internal spaces, which improves productivity. Exposure to natural light also improves overall health.

The doorsets feature premium, slim-profile, high efficiency closers.

All ironmongery has a satin stainless steel finish.

Design Considerations

Some doors are faced with Formica Storm Grey high pressure laminate, and feature contrasting glazing bead and exposed oak lippings. Other doors feature crown cut American White Oak wood veneer.

Doors, frames and screens are manufactured from sustainably sourced timber.



CASE STUDY

OCTAVIA HOUSE SCHOOL

Manufacture of internal FD30 fire doorsets for the classrooms, offices, toilets and communal spaces of an independent specialist therapeutic school in Essex.

Key Features

These pre-hung doorsets were supplied with factory-fitted stainless steel ironmongery, ensuring full compliance.

Doorsets feature a severe-duty core, are lipped on all four edges for longevity, and have kick and push plates to protect the door facings.

Design Considerations

Doors are faced with Formica's Vibrant Green, Leaf Green, Lime and Lemon high pressure laminates.

The vibrant door facings were selected inline with Octavia's brand colour scheme.

The concealed lippings and cloak beading (where doors have vision panels) are made from American White Oak.



"Having been involved in the development of several schools, I can say that Ahmarra's fire rated doorsets have been the best quality doors I've seen - Ahmarra's product and service is outstanding!"

The Estimators & Project Management team were very helpful at every stage.

School staff have commented on how nice the doors look, and the vibrant choice of laminate colour is a real statement.

I definitely plan to use Ahmarra again for future projects."

Richard Leonard
Director, Octavia House Schools



CASE STUDY

SOUTHAMPTON JUNIOR SCHOOL

Manufacture and installation of FD30 and FD60 fire doors as part of a fire safety upgrade scheme for a school in Hampshire.

Key Features

Many of the doorsets feature our standard VP01 vision panels, which are Equality Act compliant to BS 8300-2:2018.

Vision panels are encased in American White Oak cloak bead (aka bolecion bead) to match the concealed lippings.

Doors were supplied with pre-primed frames manufactured from engineered softwood - a premium quality timber that offers dimensional stability. The main contractor's team painted the frames on-site.

Design Considerations

Circulation and public space doors, such as those for the corridors, sports hall and library are faced with Polyrey's Rouge Fatal FA (R062) high pressure laminate, whilst doors for the toilets, secure storage cupboards and staff rooms are faced with Polyrey's Noir FA (N005).

Doors and frames are manufactured from sustainably sourced timber.



"CLC Group have worked with Ahmarra on a variety of fire safety upgrade projects - spanning schools, council flats, retirement homes and military barracks.

The quality of their fire doorsets and screens, and their installation service is exceptional. Their level of expertise and hands-on approach to project management has also been superb.

We have an excellent working relationship with Ahmarra and will continue to partner with them on future projects. I would absolutely recommend them."

Lee Elliott
Operations Director South, CLC Group



A CLIENT FOCUSED APPROACH

Our experienced sales and specification team are available to assist you with your project. Samples of materials including veneer, laminate and ironmongery are available on request.

We remain focused on providing excellent customer service from inception to completion of a project. We do this through our tried and trusted manufacturing and project management team, who implement first rate procedures ensuring projects are delivered on time and to the clients' expectations.

We build long-term relationships with our clients because we take the time to understand their needs and we treat every job as our passport to future business.



SITE PROTECTION

Our doors are delivered in our standard biodegradable bubble wrap.

Through our experience of site installation and the damage that can occur during the building process, we recognise the need for good, on-site protection. We now offer the option of full Correx site protection which is also LPS fire-rated. It is applied in the factory and will allow the door to function normally (open and close), but will last until the end of the project when it can be removed. In addition we are happy to recycle the protective packaging.



BM TRADA Q-MARK CERTIFICATION

The Importance of Fire Doors and Third Party Certification

Fire doors save lives and protect property, so it is vital that they are manufactured and installed correctly, or their fire-resistance can be seriously compromised. Third party certification provides an additional level of assurance of both the level and consistency of performance.

Q-Mark Certification

Ahmarra are proud to be certified members of the BM TRADA Q-Mark Timber Fire Door Manufacture Scheme and Fire Door Installation Scheme.

This comprehensive third party certification for timber fire doors provides reassurance that the doorsets have been manufactured and installed in accordance with the manufacturers' instructions and test evidence and that performance, production and installation are regularly checked through audit testing and inspections.



Q-Mark Timber Fire Door Manufacturer Scheme

The Q-Mark Scheme has been designed to allow fire door manufacturers to demonstrate that their doors meet the standards required, and to provide ongoing reassurance that their product is fit for purpose.

Q-Mark Fire Door Installation Scheme

We offer full project management for every installation, from initial design through to site installation and handover. We provide a highly-skilled team of certified fire door installers; all installers are skilled joiners and carpenters and time-served tradesmen.

Q-MARK FIRE DOOR IDENTIFICATION PLUGS

Timber fire doors that have achieved BM TRADA third-party certification feature colour coded fire door plugs, giving specifiers and building owners a way of identifying that the door is certified.



The fire door identification plugs signify;

- Outer circle colour - period of fire resistance
- Inner / tree colour - status
- Member's unique certification number

Outer circle colour indicates period of fire resistance



Yellow circle
FD30
30 minutes of fire resistance



Brown circle
FD90
90 minutes of fire resistance



Blue circle
FD60
60 minutes of fire resistance



Black circle
FD120
120 minutes of fire resistance

Inner / tree colour - when fixed to door



Red tree
Approved door (FD30 and FD60 only)
Intumescent not supplied



Silver tree
Certified factory hung doorset



Green tree
Approved door
Intumescent in door and factory fitted



Gold tree
Certified installed doorset

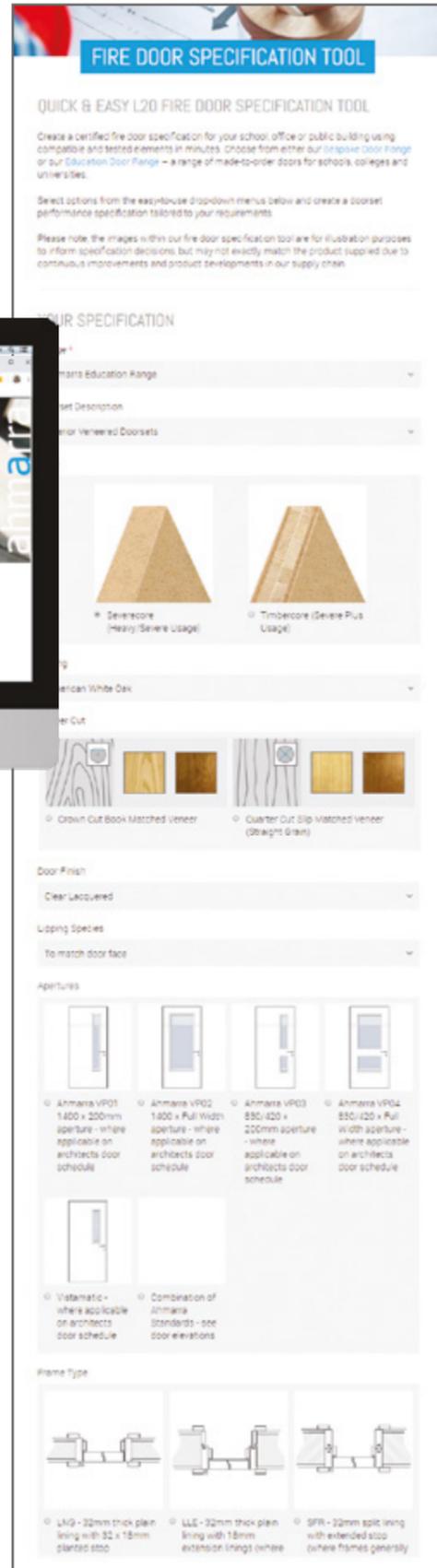
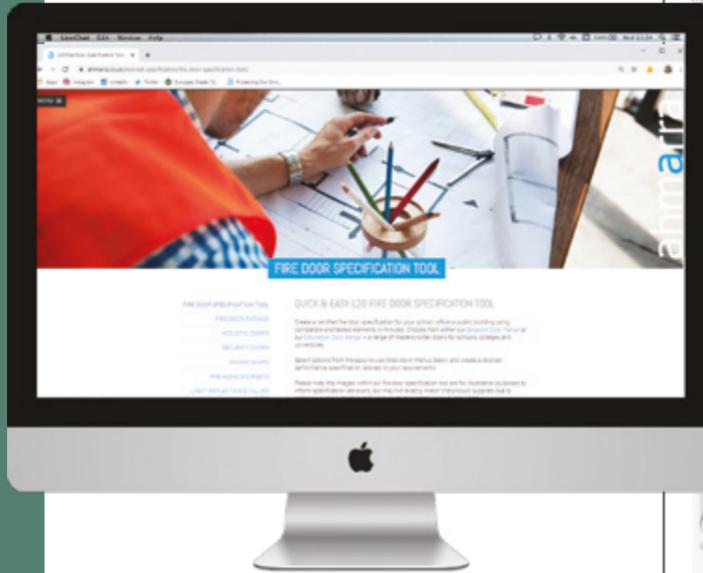


Orange tree
Approved door
Factory fitted glazing

L20 FIRE DOOR SPECIFICATION TOOL

Our easy-to-use specification tool enables you to create a fully certified fire door specification using compatible and tested elements.

Just select options from the drop-down menus and create a performance specification tailored to your requirements and ready to download in minutes.



To create your L20 fire door specification, visit; <https://bit.ly/L20-Specification-Tool>

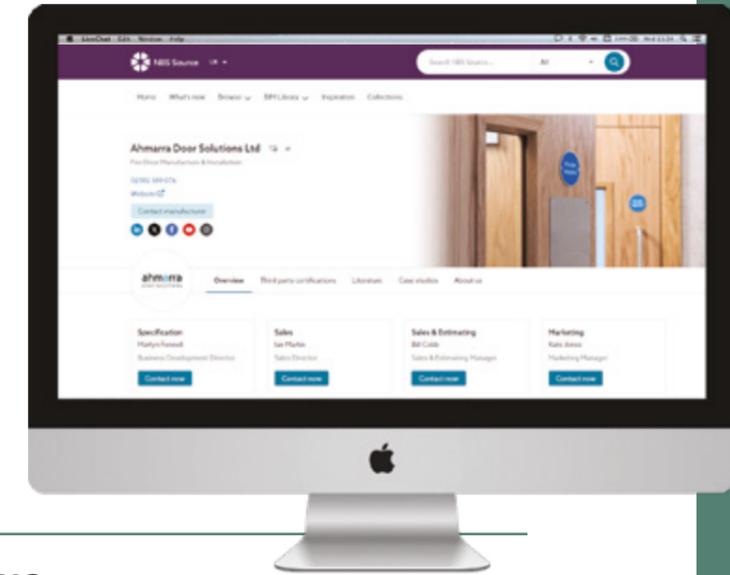
NBS SOURCE SPECIFICATION TOOL

Ahmarra are NBS Source Partners, which means that bespoke fire doorsets from our Education Door Range, as well as our glazed screens, can now be specified on NBS Source.

NBS Source is a construction product platform that allows you to quickly and easily find, select and specify products tailored to your project.

Boasting enhanced product data in a standardised specification format, as well as a range of content - from case studies to third party certificates; NBS Source gives you the detailed information you need to make informed product decisions.

To create your fire door specification using NBS Source, visit; <https://bit.ly/Ahmarra-NBS-Source>



BIM - BUILDING INFORMATION MODELLING

Our BIM process creates an intelligent 3D model of your internal fire doorset that automatically updates as you change the specifications of elements within it. The Revit 2019 software produces conceptual building designs and documentation in a common data environment. Building Information Modelling can support your decision-making throughout the preparation, design, construction and facility management of the project.

Ahmarra have developed a BIM family for each configurable Education Range Door Type. To create your L20 fire door specification, visit; <https://bit.ly/Ahmarra-BIM>

Key features of our BIM families include:

- Vision panel selector
- Clear opening widths
- Indicative LRV values
- Door & frame weight calculator
- Recommended finished undercuts
- Ironmongery set selector
- Key suiting
- Clash detection (adjustable feature on opening degree)
- Instant fire, acoustic & ironmongery incompatibility awareness
- Insulated glass requirement awareness
- Fourth hinge automatically updated on tall doors
- Parametric sizings calculated from structural openings
- Auto frame type update to include extension lining on wide wall depths



SOUND REDUCTION

Ahmarra offer a range of specialist acoustic cores to suit the education sector. We can offer expert advice on the specification of acoustic doors ensuring that other requirements such as fire and accessibility can also be met. Our standard core achieves 30Rw dB when fitted with a drop-seal. For spaces such as music rooms, drama studios etc, a specialist core is likely to be required.

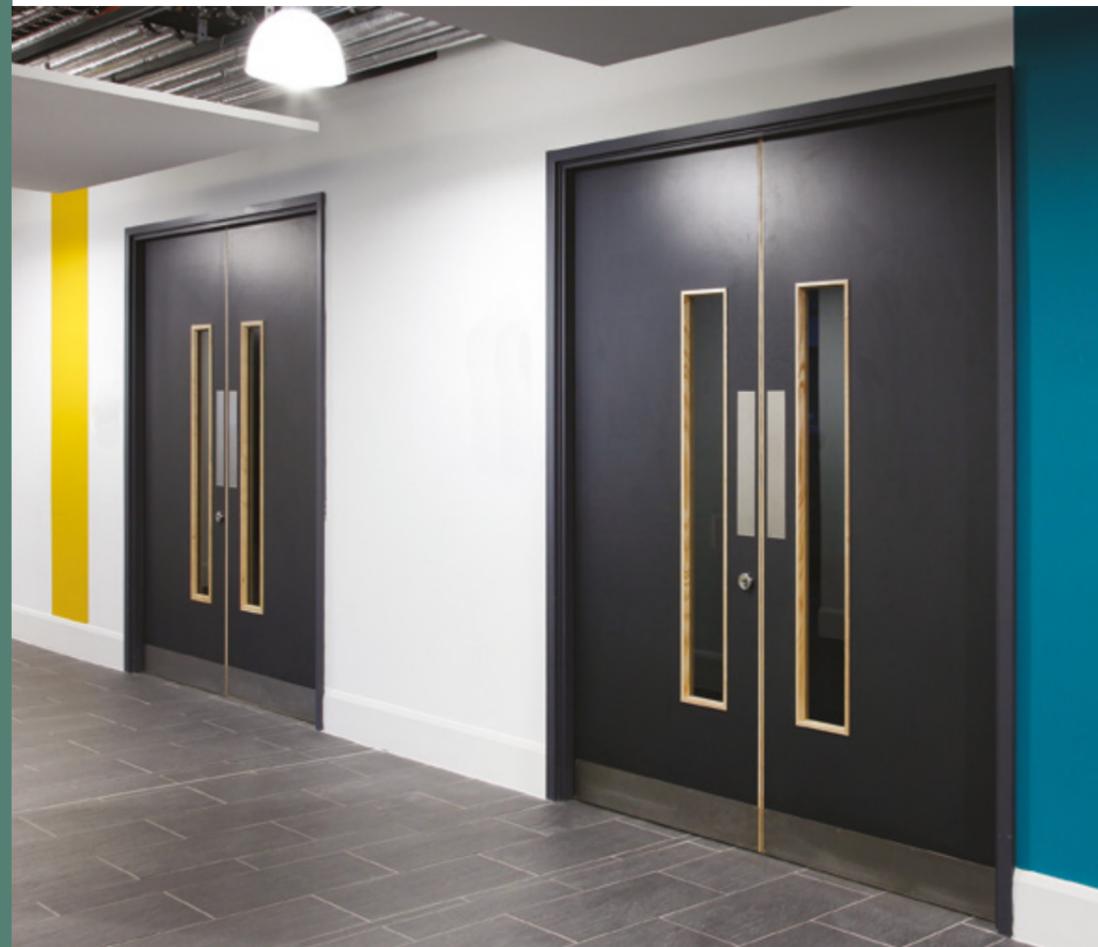


Noise Levels in Education Spaces

The table shown in the Department for Education's 'The Acoustic Design of Schools Performance Standard - Building Bulletin 93 (BB93)' sets out the minimum permissible performance standards for airborne sound insulation between circulation spaces and other spaces used by students, for separating walls that do not have a ventilator. Values for refurbishment are also the minimum acceptable standards for alternative performance standards in new buildings.

The acoustic value of the doorset measured in isolation is shown below based on its location around the school.

Workspace	Acoustic Doorset
Secondary school music room Control room - for recording Drama room Multi-purpose hall Teaching space intended specifically for use by students with hearing or communication needs	35 Rw dB
Primary music classroom All other rooms used for teaching or learning	30 Rw dB



DOOR CORES

We will select the most appropriate core for your project, taking into consideration budget and performance requirements.



SEVERECORE Our Standard Severe Duty Core

Severecore™ is a solid three layer particle board, achieving severe duty under the classification standard BS EN 12400:2002.

High Performance
The engineered performance has been tested to achieve a severe duty rating for durability.

Environmental Credentials
Manufactured from FSC®-certified and other controlled material

Independent Third Party Certification
BM TRADA

Fire Rating
Available in FD30, FD60 and FD90

Acoustic Rating
Up to 35Rw dB

FD30 Specifications
Thickness: 44mm
U-Value (W/km2): 2.0

FD60 Specifications
Thickness: 54mm
U-Value (W/km2): 1.8

FD90 Specifications
Thickness: 64mm



TIMBERCORE Solid Timber Core

Timbercore™ is a traditionally laminated softwood or hardwood core with MDF facings for internal use or plywood for external applications.

High Performance
The engineered performance has been tested to achieve a severe duty rating for durability.

Environmental Credentials
Manufactured from FSC®-certified and other controlled material

Independent Third Party Certification
BM TRADA

Fire Rating
Available in FD30 and FD60

Acoustic Rating
Up to 35Rw dB

FD30 Specifications
Thickness: 44mm
U-Value (W/km2): 1.8

FD60 Specifications
Thickness: 54mm
U-Value (W/km2): 1.6



SOUNDCORE Multi-layered Extended Acoustic Core

Soundcore™ is a specialist acoustic core for high-end applications.

High Performance
The engineered performance has been tested to achieve a severe duty rating for durability.

Environmental Credentials
Manufactured from FSC®-certified and other controlled material

Independent Third Party Certification
BM TRADA

Fire Rating
Available in FD30 and FD60

Acoustic Rating
Up to 40Rw dB

FD30 Specifications
Thickness: 44mm
U-Value (W/km2): 1.9

FD60 Specifications
Thickness: 54mm
U-Value (W/km2): 1.9

Bespoke/Custom Door Types

Ahmarra have years of experience designing and manufacturing bespoke, project specific doors and are able to accommodate special requirements.

This range was designed to cater for the majority of education sector requirements, offering a doorset solution born from years of experience working in the sector. However, the Education Range is not limited to the door types defined in this brochure.

SPECIFICATION

Consider the following when specifying doorsets...

Door Type



Select the most appropriate door type for each structural opening.

Ahmarra can also accommodate if a custom configuration is necessary.

Ironmongery Set

Note that certain door types offer multiple ironmongery options.

Dimensions



Dimensions can be given for the structural opening and/or required door size.

Ahmarra suggest selecting the door sizes recommended in this brochure.

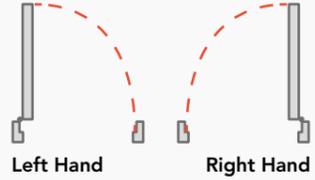
Handing



Be sure to select the correct handing for each door type.

Ahmarra Handing Convention

Standing on the non-hinge side (door opening away), if the door opens towards the right then it is a right handed door. If it opens towards the left it is a left handed door.



Fire Rating



Ensure each door has the correct fire rating associated, NFR, FD30 and FD60 (FD90 on request). This should be derived from the building's fire strategy, by a professional.

Acoustic Rating



If noise reduction is required, please select the appropriate acoustic rating. The typical acoustic rating for the area of use is highlighted on each door type.

Facing & Finish

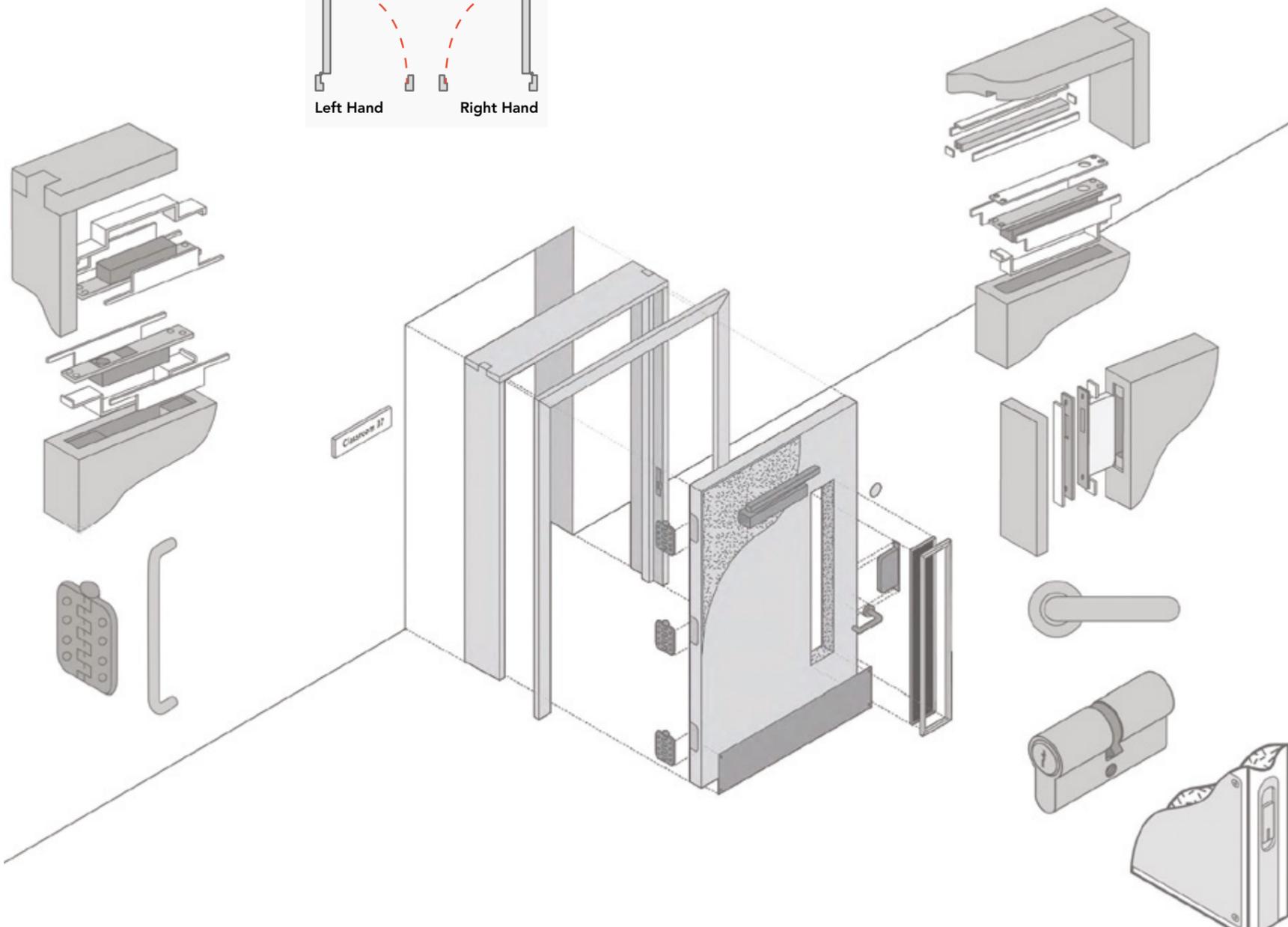


We offer a full range of decorative facings and finishes to complement your design scheme. Any special requirements can usually be accommodated.

Signage



FDKS: Fire door keep shut.
FDKL: Fire door keep locked.
AFDKC: Automatic fire door keep clear.
Signage is not fitted as standard, but is available on request. This is due to the complexity of handings and door openings.



Frame & Architrave



Select the most appropriate frame type for your project.

Frame Material

Multiple frame materials are available each with specific characteristics.

Vision Panel Style



Choose a vision panel configuration to suit the project's design scheme.

Note that multiple vision panel styles can be used on different doors across a project, where necessary.

Ironmongery Set



Select a ironmongery set (lever handles, escutcheons etc) to best suit your design scheme.

Closer Pack



Select closers most suited to the project's requirements.

Finger Protection



We offer a range of finger protection hardware to prevent injury through finger trapping.

Cylinder Suiting & Cylinder Type

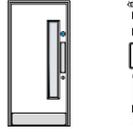
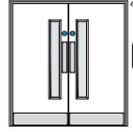
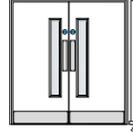
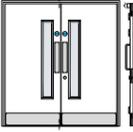
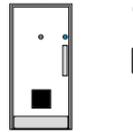
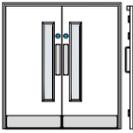
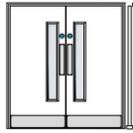
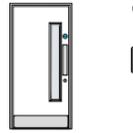
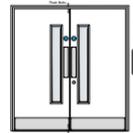
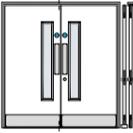
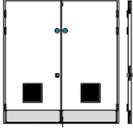
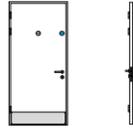
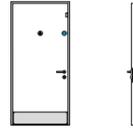
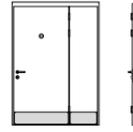
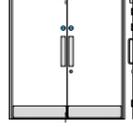


Consider the location and usage to define the suiting requirements, where it may be necessary to control the access of different key holders. Also, select a double (key-to-key) cylinder where a cylinder and turn isn't required.

DOOR TYPE OVERVIEW

Our Education Range door types can be specified by location.

Zone			
■ Circulation & public spaces	■ Toilets, washrooms & changing rooms	■ Classrooms & teaching spaces	■ Multi-use
■ Store rooms & utilities			

TYPE 01 Page 20 Corridor, stairwell, hall - hold open, free access circulation door 	TYPE 02 Page 20 Corridor, stairwell, hall - hold open, lockable, circulation door 	TYPE 03 Page 21 Corridor, stairwell, hall - hold open, free access, circulation doors 	TYPE 03DA Page 21 Corridor, stairwell, hall - hold open, free access, circulation double action doors 
TYPE 04 Page 22 Corridor, stairwell, hall - hold open, lockable, circulation double action doors 	TYPE 04DA Page 22 Corridor, stairwell, hall - hold open, lockable, circulation double action doors 	TYPE 05 Page 24 Bathroom lobby/changing room Corridor, stairwell, hall - hold open, lockable, circulation double action doors 	TYPE 06 Page 24 Corridor, stairwell, teaching/mixed use space - keep shut, free access circulation door 
TYPE 07 Page 25 Corridor, stairwell, teaching space - keep shut, free access circulation door 	TYPE 07DA Page 25 Corridor, stairwell, teaching space - keep shut, free access circulation double action door 	TYPE 08 Page 26 Corridor, stairwell, hall, teaching/mixed use space - keep shut, lockable circulation door 	TYPE 09 Page 26 Corridor, stairwell, hall, mixed use space - keep shut, lockable circulation door 
TYPE 09DA Page 27 Corridor, stairwell, hall, mixed use space - keep shut, lockable circulation double action door 	TYPE 10 Page 28 Classroom, music room, staff room, general teaching space - keep door shut 	TYPE 11 Page 29 Classroom, music room, science, D&T lab, art room - keep door shut 	TYPE 12 Page 30 Store room - keep locked door 
TYPE 13 Page 30 Store room - keep shut, lever handle operated, lockable store room door 	TYPE 14 Page 31 Store room - keep shut, lever handle operated store room door 	TYPE 15 Page 31 Exam paper store, laptop store, secure room, hub room - keep locked, night latch store room door 	TYPE 16 Page 32 Store room, duct room, riser, cleaner's cupboard - keep locked store room doors 
TYPE 17 Page 33 Store room, duct room, riser, cleaner's cupboard - keep locked store room doors 	TYPE 18 Page 34 Male, female or unisex toilet, shower, changing room - lockable toilet door 	TYPE 19 Page 35 Accessible toilet/changing room - accessible toilet door with emergency release doorstop 	TYPE 20 Page 36 Accessible toilet/changing room - bi-fold accessible toilet door where there is insufficient space for a regular door 
TYPE 21 Page 38 General - keep shut, lockable general doorset 	TYPE 22 Page 38 General - keep shut, lockable general doorset 		

Zone	Door type	Configuration	Operation	Vision panel	Closer type	Ironmongery set	Signage (Fr Only)	Locking
CIRCULATION & PUBLIC SPACES	Type 01	single	push/pull	standard	hold open	1	AFDKC	none
	Type 02	single	push/pull	standard	hold open	2	AFDKC	deadlock
	Type 03	double	push/pull	standard	hold open	3	AFDKC	none
	Type 03DA	double action	push/pull	standard	hold open floor spring or transom closer	24 or 24.1	AFDKC	none
	Type 04	double	push/pull	standard	hold open	4	AFDKC	deadlock
	Type 04DA	double action	push/pull	standard	hold open floor spring or transom closer	25 or 25.1	AFDKC	deadlock
	Type 05	single	push/pull	none	standard	23 or 23.1	WC & FDKS	none
	Type 06	single	push/pull	standard	standard	6	FDKS	none
	Type 07	double	push/pull	standard	standard	8	FDKS	none
CLASSROOMS & TEACHING SPACES	Type 07DA	double action	push/pull	standard	floor spring or transom closer	26 or 26.1	FDKS	none
	Type 08	single	push/pull	standard	standard	5	FDKS	deadlock
	Type 09	double	push/pull	standard	standard	7	FDKS	deadlock
	Type 09DA	double action	push/pull	standard	floor spring or transom closer	27 or 27.1	FDKS	deadlock
	Type 10	single	lever	standard	standard	9, 15 or 16	FDKS	sashlock, escape lock or sashlock classroom
	Type 11	unequal double	lever	standard	standard	9.1, 15.1 or 16.1	FDKS & FDKL	sashlock, escape lock or sashlock classroom
	Type 12	double	push/pull	none	none	22	FDKL	deadlock
	Type 13	single	lever	none	standard	28	FDKS	sashlock
	Type 14	double	lever	none	standard	12	FDKS	sashlock
STORE ROOMS & UTILITIES	Type 15	single	push/pull & lever	none	standard	29	FDKL	night latch sashlock
	Type 16	single	cylinder pull	none	none	13 or 13.1	FDKL	deadlock
	Type 17	double	cylinder pull	none	none	14 or 14.1	FDKL	deadlock
	Type 18	single	lever or turn/release	none	standard or rising hinge	17 or 17.1	WC (Pack 17 only) FDKS	bathroom
	Type 19	single	lever	none	standard	18 or 18.1	accessible WC FDKS	bathroom
TOILETS, WASHROOMS & CHANGING ROOMS	Type 20	unequal double	lever	none	none	21	accessible WC	bathroom
	Type 21	single	push/pull	none	standard	5	FDKS	deadlock
	Type 22	double	push/pull	none	standard	7	FDKS	deadlock

Hold Open Closers

Hold open closers close in the event of a fire alarm being activated.

Please note that power supply units are normally provided within the mechanical and electrical package.



Dimensions

The standard dimensions presented in this brochure are recommendations based on industry guidelines for schools and should offer a more cost effective option than bespoke sizing. However, Ahmarra is able to supply doors in any size to suit your project specific requirements as long as they meet building regulations.

CIRCULATION & PUBLIC SPACES

Doorsets for use in circulation spaces, halls, lecture theatres and auditoriums.

TYPE 01
Corridor, stairwell, hall - hold open, free access circulation door.

FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR 30 35 40

Specification

Configuration	Single
Vision Panel	Standard
Operation	Push/Pull
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 mm
Structural Opening Width	1010 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Set 1

Qty	Component	Factory Fitted
3	Hinges	Yes
1	Electromagnetic Hold Open Closer TS92EMF	No
1	Pull Handle	No
2	AFDKC Sign (Fr Only)	No
1	Push Plate	No
2	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
1	Wall or Floor Stop as Required	No

TYPE 02
Corridor, stairwell, hall - hold open, lockable, circulation door.

FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR 30 35 40

Specification

Configuration	Single
Vision Panel	Standard
Locking	Deadlock
Operation	Push/Pull
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 mm
Structural Opening Width	1010 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Set 2

Qty	Component	Factory Fitted
3	Hinges	Yes
1	Electromagnetic Hold Open Closer TS92EMF	No
1	Deadlock	Yes
1	Pull Handle	No
1	Cylinder	No
2	Escutcheon	Yes
2	AFDKC Sign (Fr Only)	No
1	Push Plate	No
2	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
1	Wall or Floor Stop as Required	No

TYPE 03
Corridor, stairwell, hall - hold open, free access, circulation doors.

FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR 30 35 40

Specification

Configuration	Double
Vision Panel	Standard
Operation	Push/Pull
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Set 3

Qty	Component	Factory Fitted
6	Hinges	Yes
2	Electromagnetic Hold Open Closer TS92EMF	No
2	Pull Handle	No
4	AFDKC Sign (Fr Only)	No
2	Push Plate	No
4	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
2	Wall or Floor Stop as Required	No

TYPE 03DA
Corridor, stairwell, hall - hold open, free access, circulation double action doors.

FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR

Specification

Configuration	Double
Vision Panel	Standard
Operation	Push/Pull
Lining	Double Action

Technical Details

Door Core	Timbercore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height*	Varies
Structural Opening Height	2105 mm

Ironmongery Items

Set 24 & Set 24.1

Qty	Component	Factory Fitted
2	Floor Spring* Electromagnetic Hold Open BTS80-EMB (Set 24)	Yes
2	Transom Closer Electromagnetic Hold Open RTS80-EMB (Set 24.1)	Yes
4	AFDKC Sign (Fr Only)	No
4	Push Plate	No
4	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
4	Wall or Floor Stop as Required	No

*Floor spring, if screed, can accommodate or inverse transom closer if required.

*For acoustic guidance please refer to BB93: acoustic design of schools - performance standards.

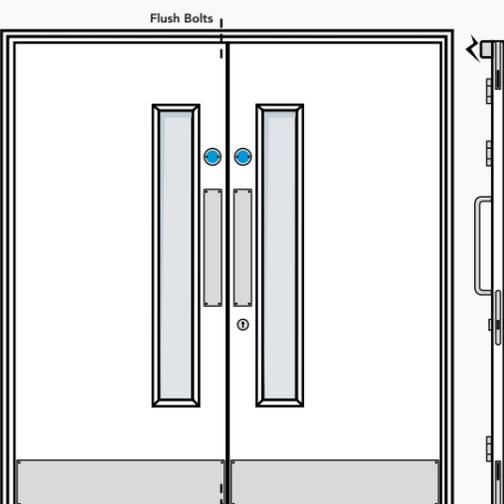
Double Action Doorsets

Single or double doors where the door can swing in both directions

CIRCULATION & PUBLIC SPACES

Doorsets for use in circulation spaces, halls, lecture theatres and auditoriums.

TYPE 04
Corridor, stairwell, hall - hold open, lockable, circulation doors.



FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR 30 35 40

Specification

Configuration	Double
Vision Panel	Standard
Locking	Deadlock
Operation	Push/Pull
Lining	Standard

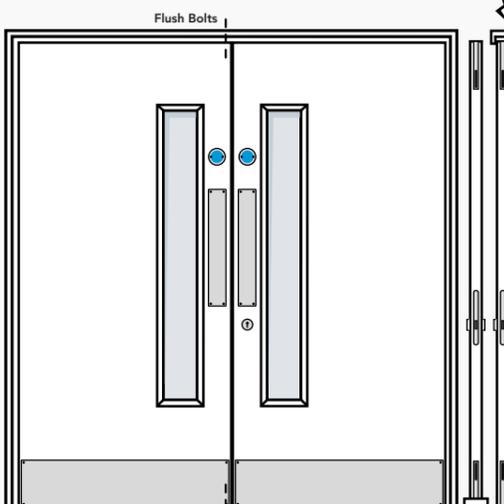
Technical Details

Door Core	Severecore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items
Set 4

Qty	Component	Factory Fitted
6	Hinges	Yes
2	Electromagnetic Hold Open Closer TS92EMF	No
1	Deadlock	Yes
2	Pull Handle	No
1	Cylinder	No
2	Escutcheon	Yes
4	AFDKC Sign (Fr Only)	No
2	Push Plate	No
4	Kick Plate	Yes
2	Flush Bolt	Yes
1	Dust Excluding Socket	No
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
2	Wall or Floor Stop as Required	No

TYPE 04DA
Corridor, stairwell, hall - hold open, lockable, circulation double action doors.



FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR

Specification

Configuration	Double
Vision Panel	Standard
Locking	Deadlock
Operation	Push/Pull
Lining	Double Action

Technical Details

Door Core	Timbercore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height*	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items
Set 25 & Set 25.1

Qty	Component	Factory Fitted
2	Floor Spring* Electromagnetic Hold Open BTS80-EMB (Set 25)	Yes
2	Transom Closer Electromagnetic Hold Open RTS80-EMB (Set 25.1)	Yes
1	Deadlock	Yes
1	Cylinder	No
2	Escutcheon	Yes
4	AFDKC Sign (Fr Only)	No
2	Push Plate	No
4	Kick Plate	Yes
2	Flush Bolt	Yes
1	Dust Excluding Socket	No
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
4	Wall or Floor Stop as Required	No

*Floor spring, if screed, can accommodate or inverse transom closer if required.



A combination of Formica Storm Grey laminate and American white oak veneered doors. Storm Grey laminate is complemented with exposed oak lippings, frames, architraves and glazing bead for circulation doors. Whilst contrasting crown cut, American white oak service and store room doors act as a way finding feature for students and teachers.

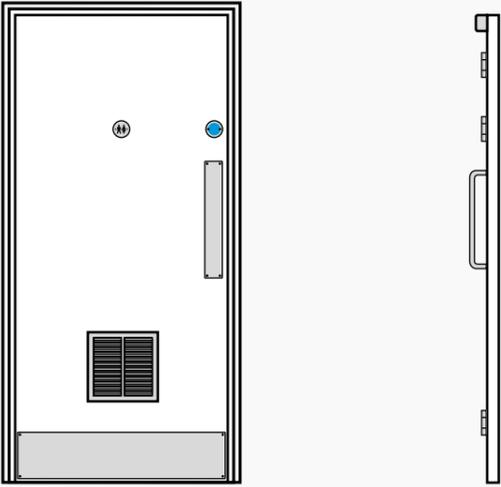
*For acoustic guidance please refer to BB93: acoustic design of schools - performance standards.

Standard closers ensure that fire doors are closed at all times in case of a fire.

CIRCULATION & PUBLIC SPACES

Doorsets for use in circulation spaces, halls, lecture theatres and auditoriums.

TYPE 05
Bathroom lobby, changing room lobby - keep shut, toilet or changing room lobby entrance door.



FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR 30 35 40

Specification

Configuration	Single
Operation	Push/Pull
Lining	Standard

Technical Details

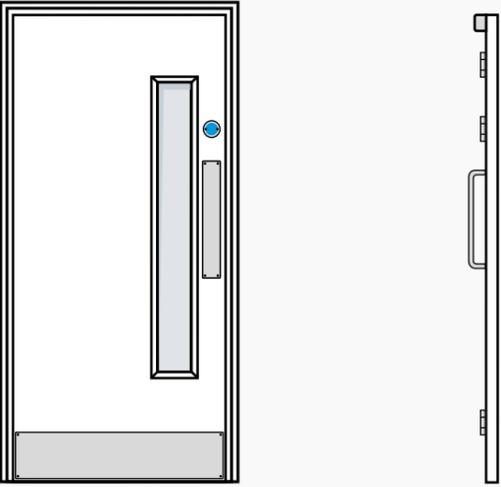
Door Core	Severecore™
Door Width (recommended)	926 mm
Structural Opening Width	1010 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items
Set 23 & Set 23.1

Qty	Component	Factory Fitted
3	Hinges	Yes
1	Standard Closer TS92	No
1	Pull Handle	No
2	FDKS Sign (Fr Only)	No
1	Toilet Sign	No
1	Push Plate	No
2	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
1	Wall or Floor Stop as Required	No
1	Air Transfer Grille (Set 23.1)	Yes

We are unable to offer acoustic ratings on set 23.1.

TYPE 06
Corridor, stairwell, teaching/mixed use spaces - keep shut, free access circulation door.



FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR 30 35 40

Specification

Configuration	Single
Vision Panel	Standard
Operation	Push/Pull
Lining	Standard

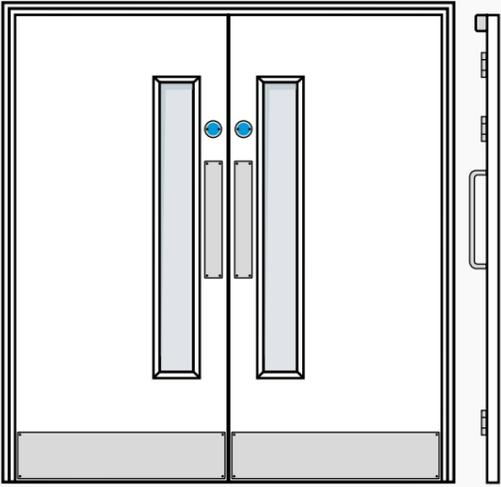
Technical Details

Door Core	Severecore™
Door Width (recommended)	926 mm
Structural Opening Width	1010 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items
Set 6

Qty	Component	Factory Fitted
3	Hinges	Yes
1	Standard Closer TS92	No
1	Pull Handle	No
2	FDKS Sign (Fr Only)	No
1	Push Plate	No
2	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
1	Wall or Floor Stop as Required	No

TYPE 07
Corridor, stairwell, teaching spaces - keep shut, free access circulation door.



FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR 30 35 40

Specification

Configuration	Double
Vision Panel	Standard
Operation	Push/Pull
Lining	Standard

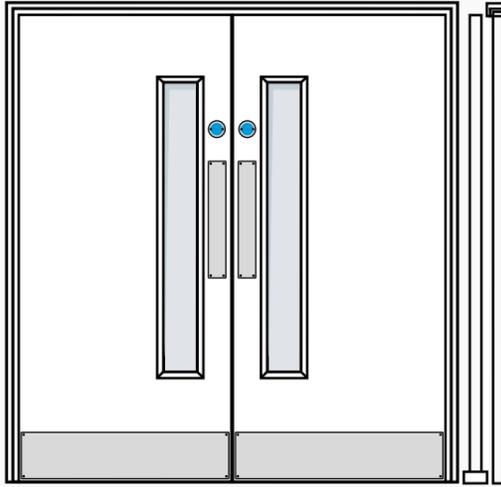
Technical Details

Door Core	Severecore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items
Set 8

Qty	Component	Factory Fitted
6	Hinges	Yes
2	Standard Closer TS92	No
2	Pull Handle	No
4	FDKS Sign (Fr Only)	No
2	Push Plate	No
4	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
2	Wall or Floor Stop as Required	No

TYPE 07DA
Corridor, stairwell, teaching spaces - keep shut, free access circulation double action door.



FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR

Specification

Configuration	Double
Vision Panel	Standard
Operation	Push/Pull
Lining	Double Action

Technical Details

Door Core	Timbercore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height*	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items
Set 26 & Set 26.1

Qty	Component	Factory Fitted
2	Floor Spring* BTS75V (Set 26)	Yes
2	Transom Closer RTS87 (Set 26.1)	Yes
4	FDKS Sign (Fr Only)	No
4	Push Plate	No
4	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
4	Wall or Floor Stop as Required	No

*Floor spring, if screed, can accommodate or inverse transom closer if required.

*For acoustic guidance please refer to BB93: acoustic design of schools - performance standards.

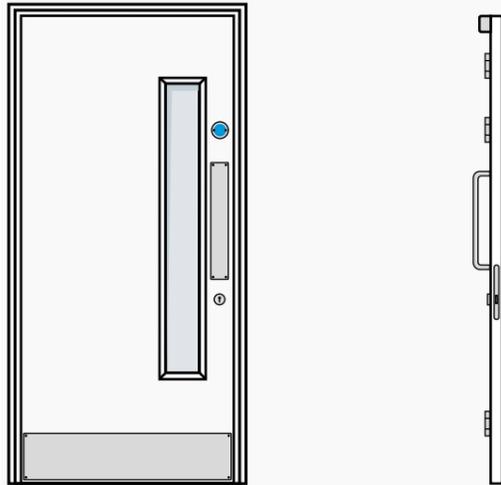
**Closers: Our ironmongery sets include a Dorma TS92 cam-action adjustable closer in a silver finish for fire-rated doorsets only. For further functionality such as back-check, or for VE options on closers, refer to page 54. Please state if closers are required on non-fire doors.

CIRCULATION & PUBLIC SPACES

Doorsets for use in circulation spaces, halls, lecture theatres and auditoriums.

TYPE 08

Corridor, stairwell, hall, teaching/mixed use spaces - keep shut, lockable circulation door.



FIRE RATING



ACOUSTIC RATING Rw(dB)*



Specification

Configuration	Single
Vision Panel	Standard
Locking	Deadlock
Operation	Push/Pull
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 mm
Structural Opening Width	1010 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

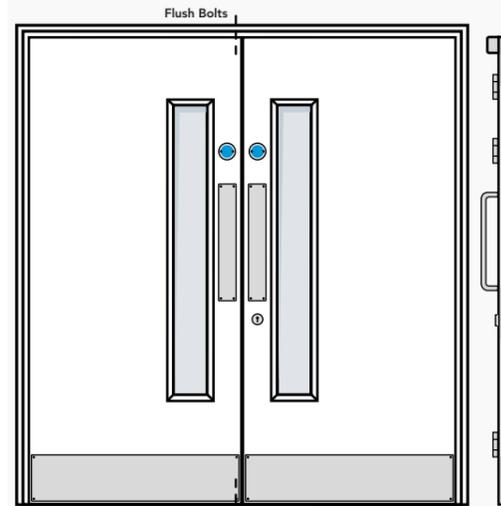
Ironmongery Items

Set 5

Qty Component	Factory Fitted
3 Hinges	Yes
1 Standard Closer TS92	No
1 Deadlock	Yes
1 Pull Handle	No
1 Cylinder	No
2 Escutcheon	Yes
2 FDKS Sign (Fr Only)	No
1 Push Plate	No
2 Kick Plate	Yes
1 Intumescent Pack for All Ironmongery (Fr Only)	Yes
1 Wall or Floor Stop as Required	No

TYPE 09

Corridor, stairwell, hall, mixed use spaces - keep shut, lockable circulation door.



FIRE RATING



ACOUSTIC RATING Rw(dB)*



Specification

Configuration	Double
Vision Panel	Standard
Locking	Deadlock
Operation	Push/Pull
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

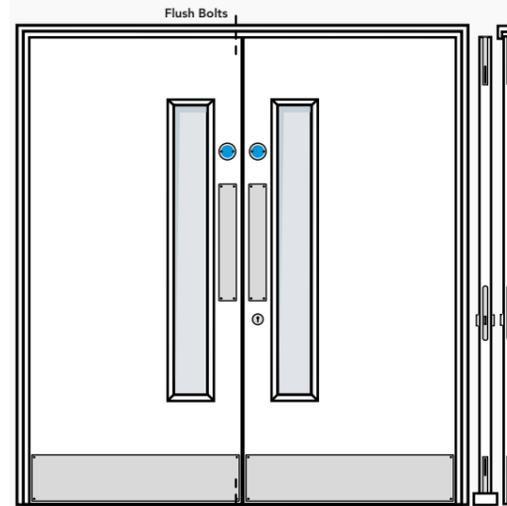
Ironmongery Items

Set 7

Qty Component	Factory Fitted
6 Hinges	Yes
2 Standard Closer TS92	No
1 Deadlock	Yes
2 Pull Handle	No
1 Cylinder	No
2 Escutcheon	Yes
4 FDKS Sign (Fr Only)	No
2 Push Plate	No
4 Kick Plate	Yes
2 Flush Bolt	Yes
1 Dust Excluding Socket	No
1 Intumescent Pack for All Ironmongery (Fr Only)	Yes
2 Wall or Floor Stop as Required	No

TYPE 09DA

Corridor, stairwell, hall, mixed use spaces - keep shut, lockable circulation double action door.



FIRE RATING



ACOUSTIC RATING Rw(dB)*



Specification

Configuration	Double
Vision Panel	Standard
Locking	Deadlock
Operation	Push/Pull
Lining	Double Action

Technical Details

Door Core	Timbercore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height*	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Set 27 & Set 27.1

Qty Component	Factory Fitted
2 Floor Spring* BTS75V (Set 27)	Yes
2 Transom Closer RTS87 (Set 27.1)	Yes
1 Deadlock	Yes
1 Cylinder	No
2 Escutcheon	Yes
4 FDKS Sign (Fr Only)	No
4 Push Plate	No
4 Kick Plate	Yes
2 Flush Bolt	Yes
1 Dust Excluding Socket	No
1 Intumescent Pack for All Ironmongery (Fr Only)	Yes
4 Wall or Floor Stop as Required	No



Bespoke walnut veneer fire doors.



American white oak in a new academy in West Sussex. Where possible these doors are fitted alongside screens to allow for increased transition of light. These fire rated screens also create a feeling of openness and brightness conducive to a pleasant learning environment.

*For acoustic guidance please refer to BB93: acoustic design of schools - performance standards.

**Closers: Our ironmongery sets include a Dorma TS92 cam-action adjustable closer in a silver finish for fire-rated doorsets only. For further functionality such as back-check, or for VE options on closers, refer to page 54. Please state if closers are required on non-fire doors.

*Floor spring, if screed, can accommodate or inverse transom closer if required.

CLASSROOMS & TEACHING SPACES

Doorsets for use in classrooms, teaching spaces and staff rooms.

Type 11

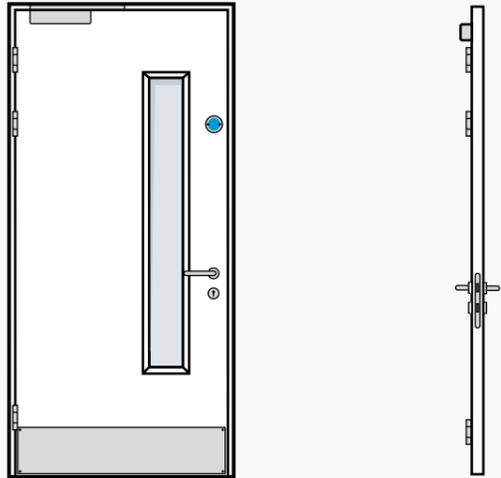
Unequal double doors (Type 11) should be specified in instances where large objects may need to pass through the opening e.g. design technology labs, music rooms.

The secondary leaf is secured to the frame and floor using flush bolts, which can be released to increase the size of the opening.

Please note that the secondary leaf should be no smaller than a third of the door opening size.

Care must be taken to ensure the closing device is suitable for the secondary leaf width size, especially on leaves below 485mm.

TYPE 10
Classroom, music room, staff room, general teaching spaces - keep shut door.



FIRE RATING: NFR, FD 30, FD 60
ACOUSTIC RATING Rw(dB)*: NR, 30, 35, 40

Specification

Configuration	Single
Vision Panel	Standard
Locking	Sashlock, Escape Lock or Sashlock Classroom
Operation	Lever
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 mm
Structural Opening Width	1010 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Set 9

Qty	Component	Factory Fitted
3	Hinges	Yes
1	Standard Closer TS92	No
1	Sashlock	Yes
1	Lever Handle Set	No
1	Cylinder	No
2	Escutcheon	Yes
2	FDKS Sign (Fr Only)	No
2	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
1	Wall or Floor Stop as Required	No



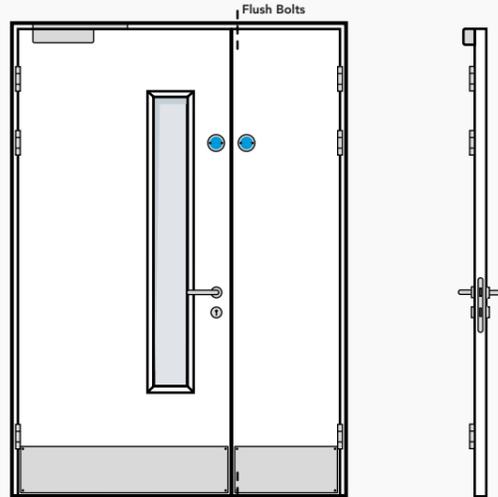
Set 15 (recommended if door is on escape route)

Qty	Component	Factory Fitted
3	Hinges	Yes
1	Standard Closer TS92	No
1	Escape Lock	Yes
1	Lever Handle Set	No
1	Cylinder	No
2	Escutcheon	Yes
2	FDKS Sign (FR Only)	No
2	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
1	Wall or Floor Stop as Required	No

Set 16

Qty	Component	Factory Fitted
3	Hinges	Yes
1	Standard Closer TS92	No
1	Sashlock	Yes
1	Lever Handle Set	No
1	Classroom Cylinder	No
2	Escutcheon	Yes
2	FDKS Sign (Fr Only)	No
2	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
1	Wall or Floor Stop as Required	No

TYPE 11
Classroom, music room, science, D&T labs, art rooms - keep shut door.



FIRE RATING: NFR, FD 30, FD 60
ACOUSTIC RATING Rw(dB)*: NR, 30, 35, 40

Specification

Configuration	Unequal Double
Vision Panel	Standard
Locking	Sashlock, Escape Lock or Sashlock Classroom
Operation	Lever
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 + 461 mm
Structural Opening Width	1475 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Set 9.1

Qty	Component	Factory Fitted
6	Hinges	Yes
1	Standard Closer TS92	No
1	Sashlock	Yes
1	Lever Handle Set	No
1	Cylinder	No
2	Escutcheon	Yes
2	FDKS Sign (Fr Only)	No
2	FDKL Sign (Fr Only)	No
4	Kick Plate	Yes
2	Flush Bolt	Yes
1	Dust Excluding Socket	No
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
2	Wall or Floor Stop as Required	No



Set 15.1 (recommended if door is on escape route)

Qty	Component	Factory Fitted
6	Hinges	Yes
1	Standard Closer TS92	No
1	Escape Lock	Yes
1	Lever Handle Set	No
1	Cylinder	No
2	Escutcheon	Yes
2	FDKS Sign (Fr Only)	No
2	FDKL Signs (Fr Only)	No
4	Kick Plate	Yes
2	Flush Bolt	Yes
1	Dust Excluding Socket	No
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
2	Wall or Floor Stop as Required	No

Set 16.1

Qty	Component	Factory Fitted
6	Hinges	Yes
1	Standard Closer TS92	No
1	Sashlock	Yes
1	Lever Handle Set	No
1	Classroom Cylinder	No
2	Escutcheon	Yes
2	FDKS Sign (Fr Only)	No
2	FDKL Sign (Fr Only)	No
4	Kick Plate	Yes
2	Flush Bolt	Yes
1	Dust Excluding Socket	No
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
2	Wall or Floor Stop as Required	No

*For acoustic guidance please refer to BB93: acoustic design of schools - performance standards.

**Closers: Our ironmongery sets include a Dorma TS92 cam-action adjustable closer in a silver finish for fire-rated doorsets only. For further functionality such as back-check, or for VE options on closers, refer to page 54. Please state if closers are required on non-fire doors.

STORE ROOMS & UTILITIES

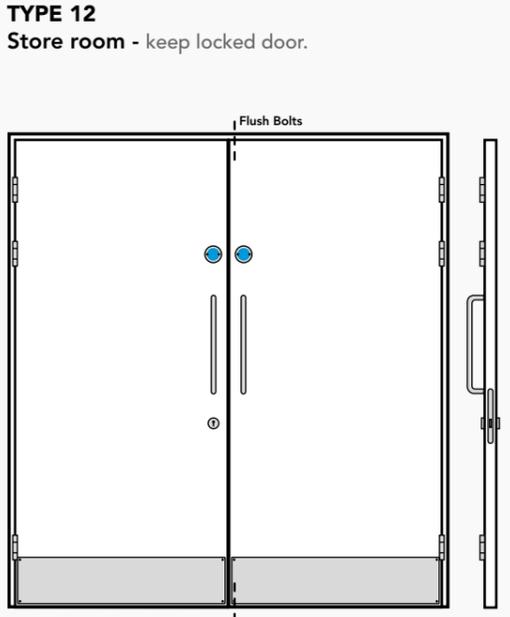
Doorsets for use in store rooms, plant rooms, service ducts and server rooms.

Type 15

This door functions as a secure room, implementing a night latch to lock automatically on closing.

A sashlock is used to increase the level of security.

This door should be used to secure an exam room store, or store for expensive or hazardous materials.



FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR 30 35 40

Specification

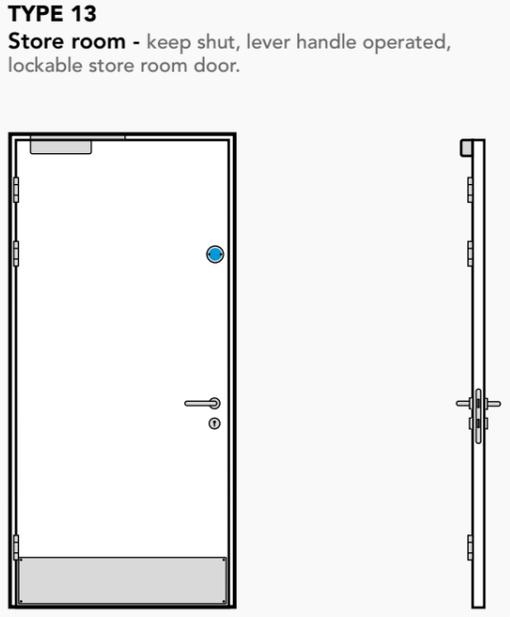
Configuration	Double
Locking	Deadlock
Operation	Push/Pull
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Qty	Component	Factory Fitted
6	Hinges	Yes
1	Deadlock	Yes
2	Pull Handle	No
1	Cylinder	No
2	Escutcheon	Yes
2	FDKL Sign (Fr Only)	No
2	Push Plate	No
4	Kick Plate	Yes
2	Flush Bolt	Yes
1	Dust Excluding Socket	No
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
2	Wall or Floor Stop as Required	No



FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR 30 35 40

Specification

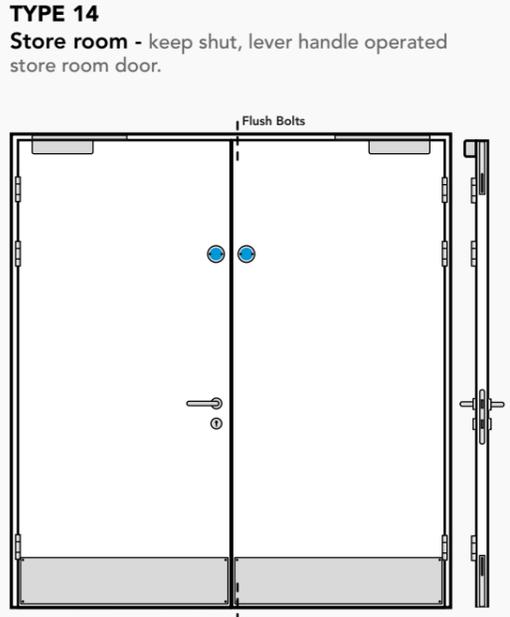
Configuration	Single
Locking	Sashlock
Operation	Lever
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 mm
Structural Opening Width	1010 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Qty	Component	Factory Fitted
3	Hinges	Yes
1	Standard Closer TS92	No
1	Sashlock	Yes
1	Lever Handle Set	No
1	Cylinder	No
2	Escutcheon	Yes
1	FDKS Sign (Fr Only)	No
2	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
1	Wall or Floor Stop as Required	No



FIRE RATING
NFR FD 30 FD 60

ACOUSTIC RATING Rw(dB)*
NR 30 35 40

Specification

Configuration	Double
Locking	Sashlock
Operation	Lever
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Qty	Component	Factory Fitted
6	Hinges	Yes
2	Standard Closer TS92	No
1	Sashlock	Yes
1	Lever Handle Set	No
1	Cylinder	No
2	Escutcheon	Yes
2	FDKS Sign (Fr Only)	No
4	Kick Plate	Yes
2	Flush Bolt	Yes
1	Dust Excluding Socket	No
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
2	Wall or Floor Stop as Required	No



FIRE RATING
NFR FD 30

ACOUSTIC RATING Rw(dB)*
NR 30 35 40

Specification

Configuration	Single
Locking	Deadlock, Nightlatch
Operation	Push/Pull & Lever
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 mm
Structural Opening Width	1010 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Qty	Component	Factory Fitted
3	Hinges	Yes
1	Standard Closer TS92	No
1	Night Latch	Yes
1	Deadlock	Yes
1	Lever Handle Half Set	No
1	Pull Handle	No
1	Cylinder	No
1	Single Cylinder	No
3	Escutcheon	Yes
1	Blank Rose	No
1	Half Spindle	No
1	FDKL Sign (Fr Only)	No
1	Push Plate	No
2	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
1	Wall or Floor Stop as Required	No

*For acoustic guidance please refer to BB93: acoustic design of schools - performance standards.
 **Closers: Our ironmongery sets include a Dorma TS92 cam-action adjustable closer in a silver finish for fire-rated doorsets only. For further functionality such as back-check, or for VE options on closers, refer to page 54. Please state if closers are required on non-fire doors.

STORE ROOMS & UTILITIES

Doorsets for use in store rooms, plant rooms, service ducts and server rooms.

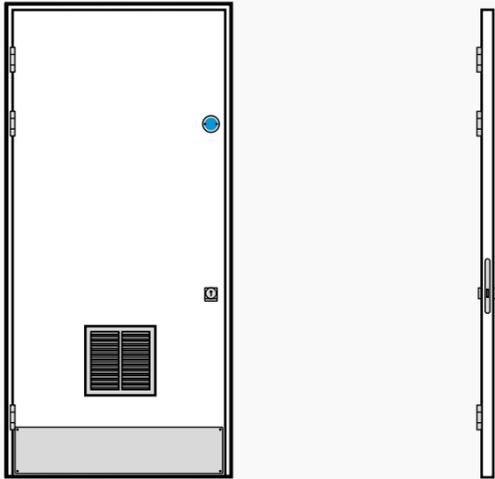
Type 16

If a store room will be used to store cleaning chemicals an air transfer grille is advisable. If required please specify ironmongery pack 13.1. If non-fire rated a larger undercut can be used (discuss with an Ahmarra representative).

Type 17

If a store room will be used to store cleaning chemicals an air transfer grille is advisable. If required please specify ironmongery pack 14.1.

TYPE 16
Store room, duct room, riser, cleaners cupboard - keep locked store room doors.



FIRE RATING: NFR, FD 30, FD 60
ACOUSTIC RATING Rw(dB)*: NR, 30, 35, 40

Specification

Configuration	Single
Locking	Deadlock
Operation	Cylinder Pull
Lining	Standard or Four Sided

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 mm
Structural Opening Width	1010 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Set 13 & Set 13.1

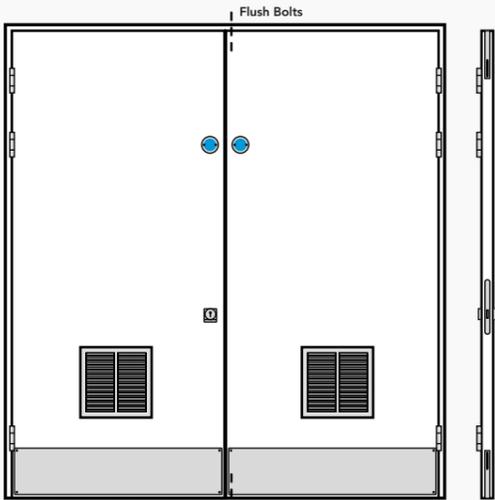
Qty	Component	Factory Fitted
3	Hinges	Yes
1	Deadlock	Yes
1	Cylinder	No
1	Cylinder Pull	No
1	Escutcheon	Yes
1	FDKL Sign (Fr Only)	No
2	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
1	Wall or Floor Stop as Required	No
1	Air Transfer Grille (Set 13.1)	Yes

We are unable to offer an acoustic rating with set 13.1.



Store room doors using both lever handles and cylinder pulls. Where store rooms will be opened infrequently, cylinder pulls may be more appropriate and cost effective. In this specific example, the hardware chosen adds to the clean, flush, architrave free style of the project.

TYPE 17
Store room, duct room, riser, cleaners cupboard - keep locked store room doors.



FIRE RATING: NFR, FD 30, FD 60
ACOUSTIC RATING Rw(dB)*: NR, 30, 35, 40

Specification

Configuration	Double
Locking	Deadlock
Operation	Cylinder Pull
Lining	Standard or Four Sided

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Set 14 & Set 14.1

Qty	Component	Factory Fitted
6	Hinges	Yes
1	Deadlock	Yes
1	Cylinder	No
1	Cylinder Pull	No
1	Escutcheon	Yes
2	FDKL Sign (Fr Only)	No
4	Kick Plate	Yes
2	Flush Bolt	Yes
1	Dust Excluding Socket	No
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
2	Wall or Floor Stop as Required	No
2	Air Transfer Grille (Set 14.1)	Yes

We are unable to offer an acoustic rating with set 14.1.

INTUMESCENT AIR TRANSFER GRILLE

Performance	Available for NFR, FD30 and FD60 doors
Test Evidence	Fire: BS 476-20/22: 1987, BS EN 1634-1: 2014 & BS EN 1364-5: 2017



Please note: If smoke control is required on doors with air transfer grilles, a smoke vent grille connected to the fire alarm system will be required as an additional-cost product.

*For acoustic guidance please refer to BB93: acoustic design of schools - performance standards. The inclusion of an air-transfer grille will virtually negate any acoustic performance of the doorset.

TOILETS, WASHROOMS & CHANGING ROOMS

Doorsets for use in toilets, washrooms and changing rooms.

Type 19
125 to 150 mm wall depth advised, otherwise a lining extension must be used.

Signage



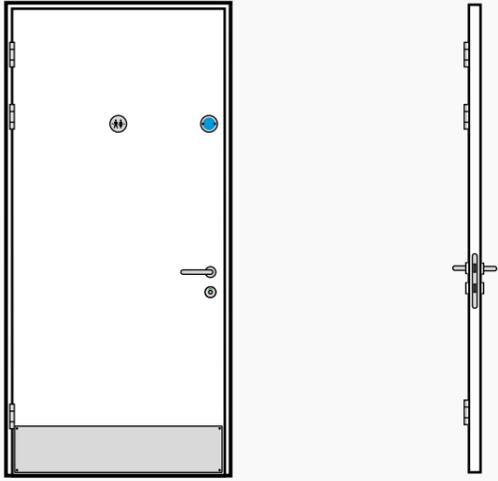
If gendered, or other specific bathroom signage is required please specify.

For cubicles door type 18, ironmongery set 17.1, you may desire an increased undercut for air flow.

We recommend a 20-200mm undercut (2040-1860mm door height).

Please note, with this undercut it would only be available as NFR.

TYPE 18
Male, female or unisex toilet, shower, changing room - lockable toilet door.



FIRE RATING



ACOUSTIC RATING Rw(dB)*



Specification

Configuration	Single
Locking	Bathroom
Operation	Lever or Turn/Release
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 mm
Structural Opening Width	1010 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

Ironmongery Items

Set 17

Qty Component	Factory Fitted
3 Hinges	Yes
1 Standard Closer TS92	No
1 Bathroom Lock	Yes
1 Lever Handle Set	No
1 Bathroom Turn/Release	No
1 FDKS Sign (Fr Only)	No
1 Toilet Sign	No
2 Kick Plate	Yes
1 Intumescent Pack for All Ironmongery (Fr Only)	Yes
1 Wall or Floor Stop as Required	No

Set 17.1

Qty Component	Factory Fitted
2 Rising Butt Hinges	Yes
1 Bathroom Deadbolt	Yes
1 Bathroom Turn/Release	No
2 Kick Plate	Yes
1 Wall or Floor Stop as Required	No

Set 17.1 is our recommended offering for cubicle doors. Not available as fire rated with this set. Please contact Ahmarra if you need to meet this requirement.

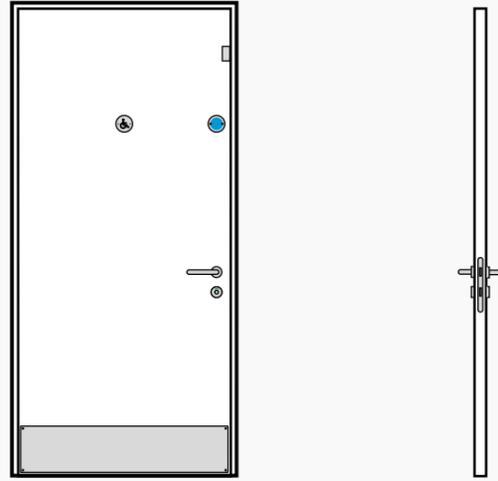


This toilet door features an American White Oak wood veneer. It also features AhmGuard integral finger protection.

For bathroom lobby doors, see type 5.

*For acoustic guidance please refer to BB93: acoustic design of schools - performance standards.

TYPE 19
Accessible toilet/changing room - accessible toilet door with emergency release doorstop.



FIRE RATING



ACOUSTIC RATING Rw(dB)*



Specification

Configuration	Single
Locking	Bathroom
Operation	Lever
Lining	Emergency Release or Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	1026 mm
Structural Opening Width	1110 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

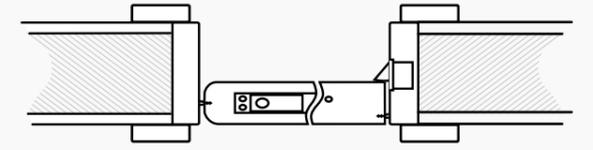
Ironmongery Items

Set 18 (recommended for door opening into WC)

Qty Component	Factory Fitted
1 Double Action Pivot Set	Yes
1 Bathroom Lock	Yes
1 Lever Handle Set	No
1 Bathroom Turn/Release	No
1 Accessible Toilet Sign	No
2 Kick Plate	Yes
2 Privacy Seal	Yes
1 Wall or Floor Stop as Required	No
1 Emergency Release Doorstop	Yes

Not available as fire rated with this pack. Please contact Ahmarra if you need to meet this requirement. We are unable to offer an acoustic rating with set 18.

Emergency Release Door Stops
Set 18
Suitable for door opening into WC



Set 18.1 (recommended for door opening out of WC)

Qty Component	Factory Fitted
3 Hinges	Yes
1 Standard Delayed Action Closer TS93	No
1 Bathroom Lock	Yes
1 Lever Handle Set	No
1 Bathroom Turn/Release	No
1 FDKS Sign (Fr Only)	No
1 Accessible Toilet Sign	No
2 Kick Plate	Yes
1 Intumescent Pack for All Ironmongery (Fr Only)	Yes
1 Wall or Floor Stop as Required	No

Conventionally hinge hung door, used when opening out.

*For acoustic guidance please refer to BB93: acoustic design of schools - performance standards.

TOILETS, WASHROOMS & CHANGING ROOMS

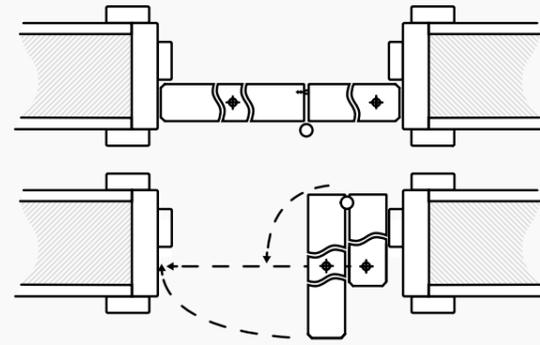
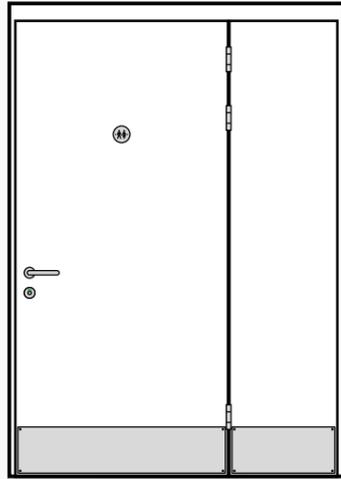
Doorsets for use in toilets, washrooms and changing rooms.

TYPE 20

Accessible toilet/changing room - bi-fold toilet door for use on accessible toilets where there is insufficient space for a regular door.

Bi-Fold Configuration

Bi-folding frame style featuring a custom track in the head of the frame and two hinged door leaves. Intended for corridors with restricted width.



FIRE RATING

NFR

ACOUSTIC RATING Rw(dB)*

NR

Specification

Configuration	Unequal Double
Locking	Bathroom Lock
Operation	Lever
Lining	Track in Head

Technical Details

Door Core	Timbercore™
Door Width (recommended)	926 + 497 mm
Structural Opening Width	1510 mm
Door Height	1997 mm
Structural Opening Height	2105 mm
Minimum Clear Opening Width	1234 mm

Ironmongery Items

Set 21

Qty	Component	Factory Fitted
3	Hinges	Yes
1	Bathroom Lock	Yes
1	Lever Handle Set	No
1	Bathroom Turn/Release	No
1	Accessible Toilet Sign	Yes
4	Kick Plate	Yes
1	Pin Support Bracket	Yes
1	Track Set	Yes
1	Top Pivot Pin	Yes
1	Double Action Pivot Set	Yes
1	Privacy Seal	Yes

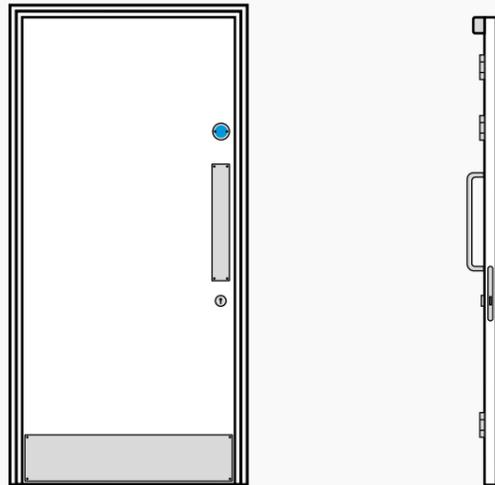


MULTI-USE

Doorsets for use in general areas.

TYPE 21

General - keep shut, lockable general doorset.



FIRE RATING



ACOUSTIC RATING Rw(dB)*



Specification

Configuration	Single
Locking	Deadlock
Operation	Push/Pull
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 mm
Structural Opening Width	1010 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

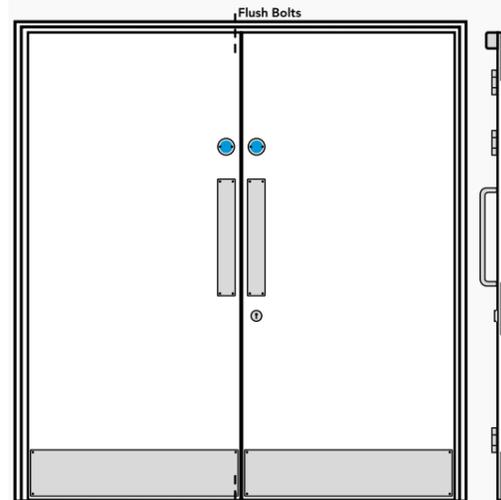
Ironmongery Items

Set 5

Qty	Component	Factory Fitted
3	Hinges	Yes
1	Standard Closer TS92	No
1	Deadlock	Yes
1	Pull Handle	No
1	Cylinder	No
2	Escutcheon	Yes
2	FDKS Sign (Fr Only)	No
1	Push Plate	No
2	Kick Plate	Yes
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
1	Wall or Floor Stop as Required	No

TYPE 22

General - keep shut, lockable general doorset.



FIRE RATING



ACOUSTIC RATING Rw(dB)*



Specification

Configuration	Double
Locking	Deadlock
Operation	Push/Pull
Lining	Standard

Technical Details

Door Core	Severecore™
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height	2050 mm
Structural Opening Height	2105 mm

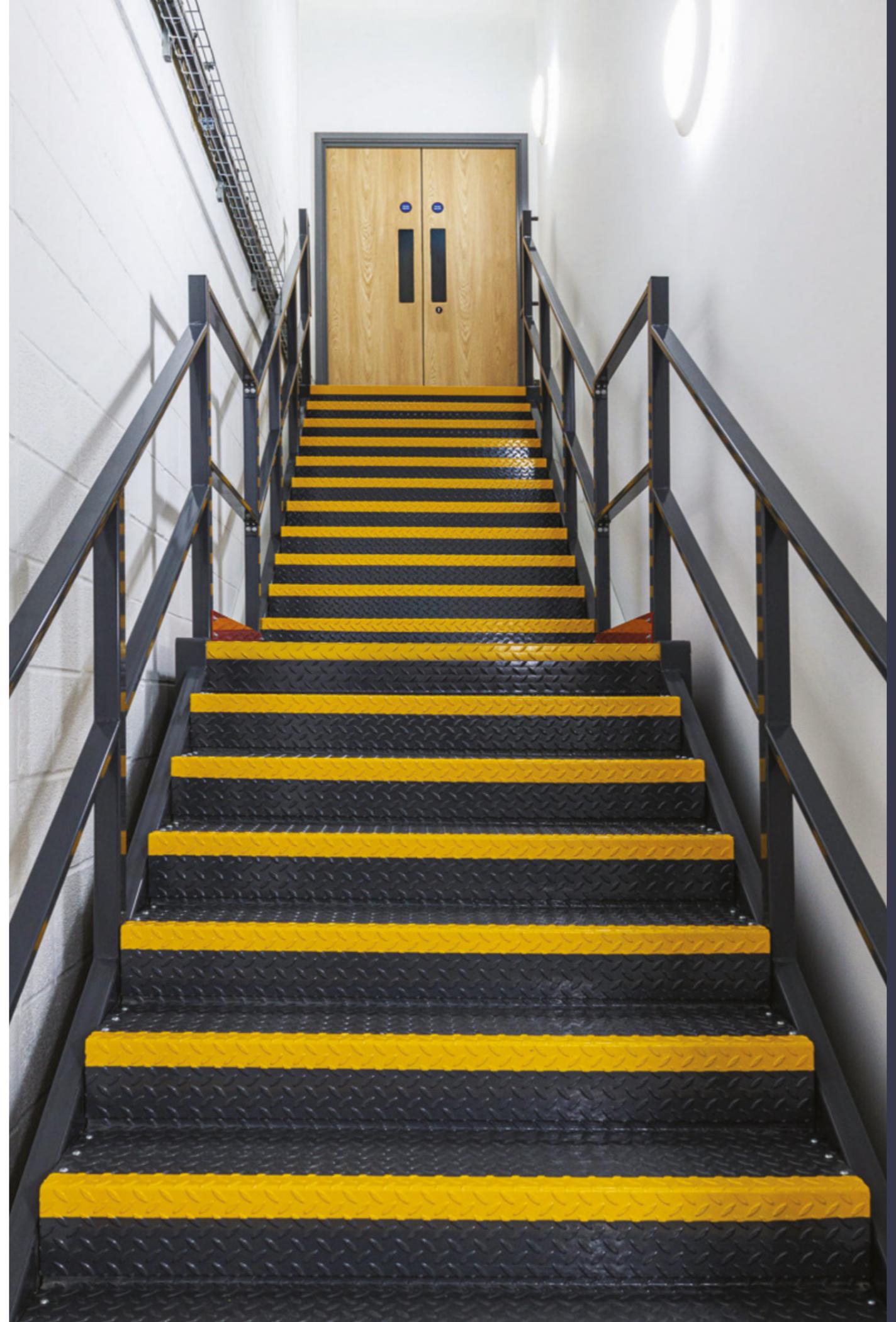
Ironmongery Items

Set 7

Qty	Component	Factory Fitted
6	Hinges	Yes
2	Standard Closer TS92	No
1	Deadlock	Yes
2	Pull Handle	No
1	Cylinder	No
2	Escutcheon	Yes
4	FDKS Sign (Fr Only)	No
2	Push Plate	No
4	Kick Plate	Yes
2	Flush Bolt	Yes
1	Dust Excluding Socket	No
1	Intumescent Pack for All Ironmongery (Fr Only)	Yes
2	Wall or Floor Stop as Required	No

*For acoustic guidance please refer to BB93: acoustic design of schools - performance standards.

**Closers: Our ironmongery sets include a Dorma TS92 cam-action adjustable closer in a silver finish for fire-rated doorsets only. For further functionality such as back-check, or for VE options on closers, refer to page 54. Please state if closers are required on non-fire doors.



Flush Detail

Flush frame detail with 10mm x 10mm shadow gaps. Available on request.

FRAMES & ARCHITRAVE

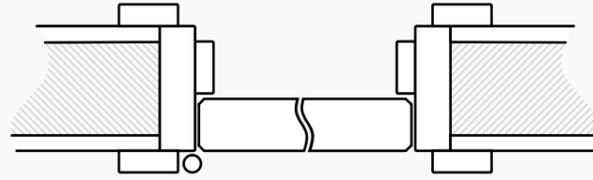
Standard frame and architrave details to suit most common wall types.

LINING WITH PLANTED DOOR STOPS (LNG)

Our most popular frame type, suitable for most project types.

Technical Details

Min. Wall Depth 75 mm
 Max. Wall Depth 195 mm
 Fire Rating NFR, FD30, FD60

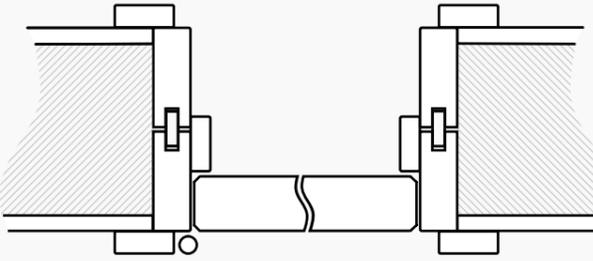


SPLIT LINING (SFR)

Most suitable for accommodating large/ varying wall depths (195mm+).

Technical Details

Min. Wall Depth 156 mm
 Max. Wall Depth 350 mm
 Fire Rating NFR, FD30, FD60

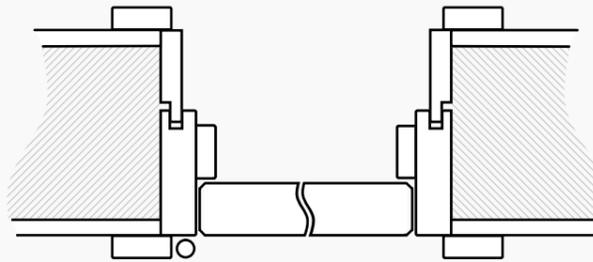


LINING WITH EXTENSION & PLANTED STOPS (LLE)

Suitable for refurbishment projects. Most suitable for accommodating large/ varying wall depths (195mm+).

Technical Details

Min. Wall Depth 125 mm
 Max. Wall Depth N/A
 Fire Rating NFR, FD30, FD60

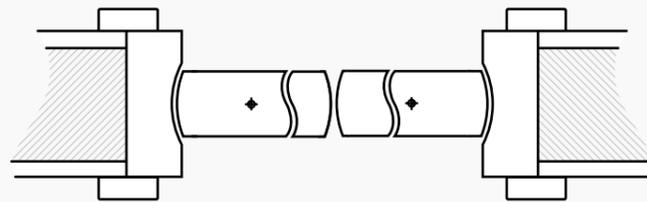


LINING DOUBLE ACTION (LDA)

Double action frame design for double doors.

Technical Details

Min. Wall Depth 94 mm
 Max. Wall Depth 175 mm
 Fire Rating NFR, FD30, FD60

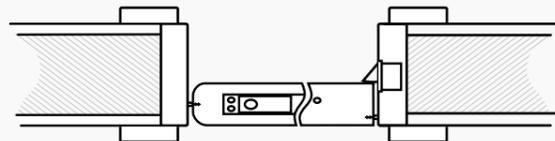


EMERGENCY RELEASE FRAME (ERF)

Designed for emergency release situations such as accessible bathrooms, allowing the door to open in the opposite direction when required.

Technical Details

Min. Wall Depth 90 mm
 Max. Wall Depth 195 mm
 Fire Rating NFR



FRAME MATERIALS

Engineered Softwood (ESWD)

- Overall cost saving
- Natural timber defects eliminated
- Consistent material appearance
- Long term product stability

Density >470Kg/M³
 Fire rating NFR, FD30
 Finish Primed for on-site painting
 Wood veneer



Engineered Hardwood (EHWD)

- Overall cost saving
- Natural timber defects eliminated
- Consistent material appearance
- Long term product stability

Density >650 Kg/M³
 Fire rating NFR, FD30, FD60
 Finish Primed for on-site painting
 Wood veneer



Solid Timber to Match Door

- Able to match door veneer to solid timber lining
- Durability
- Fire rated to 60 minutes on selected species

Density Various
 Fire rating NFR, FD30, FD60
 Finish Lacquered Timber



ARCHITRAVE

Standard (44 X 18 mm) EDARC1

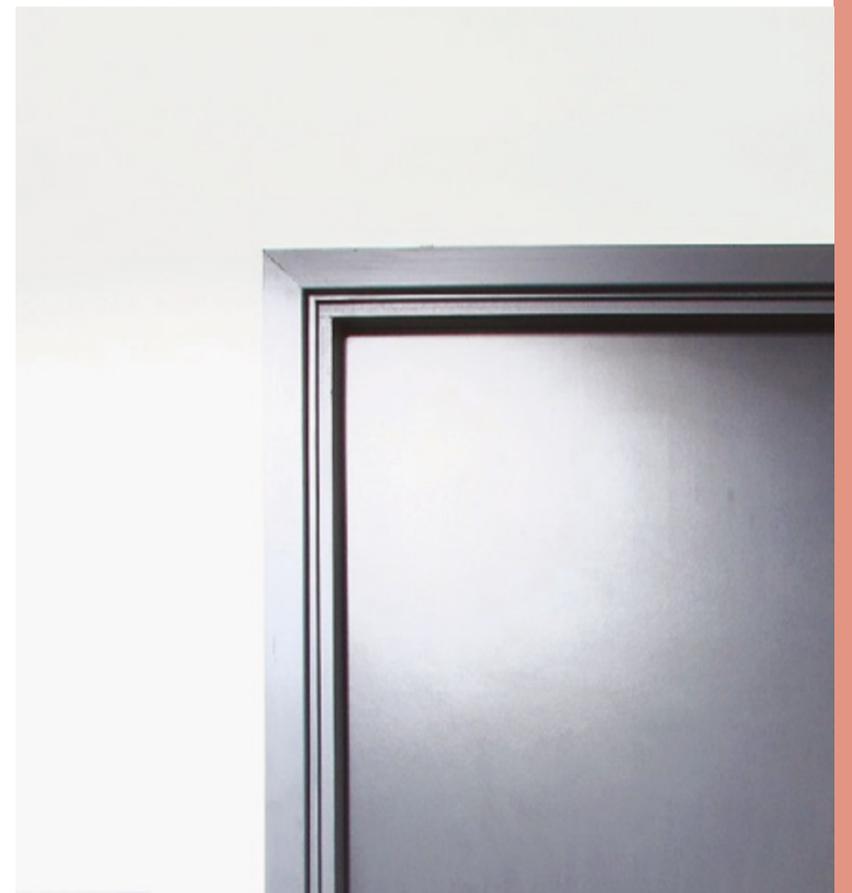


Ahmarra's standard architrave profile is 44 x 18 mm with 3mm radiused edges.

Extended (69 X 18 mm) EDARC2



Extended architraves (69 mm wide) may also be useful for refurbishment projects where structural openings may be inconsistent.



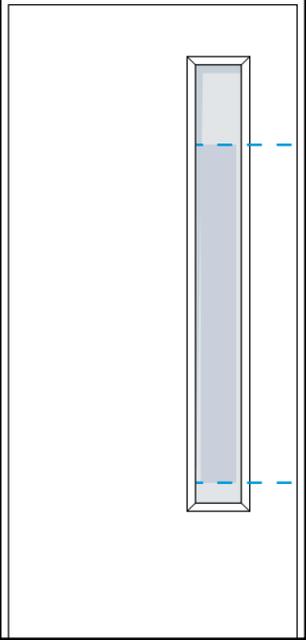
Design Considerations

According to BS 8300 the minimum zone of visibility should be between 500 mm and 1500 mm above floor level, with a maximum interruption of 350 mm vertically within the zone.

VISION PANELS

Standard vision panel style details, DDA compliant to BS 8300. Other vision panel sizes and configurations are available on request.

VP01
Single narrow vision panel
(standard unless specified otherwise).

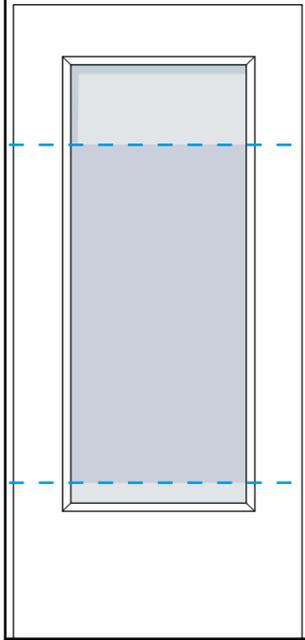


FIRE RATING
NFR FD 30 FD 60

Technical Details

Aperture Width	200 mm
Aperture Height	1400 mm

VP02
Single wide vision panel



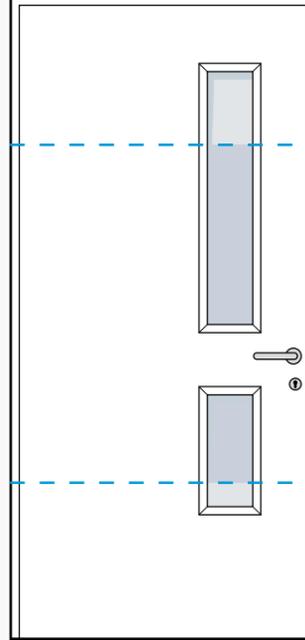
FIRE RATING
NFR FD 30 FD 60

Technical Details

Aperture Width	560 mm
(based on 926 mm wide door)	
Aperture Height	1400 mm

Unable to offer FD60 with a surface mounted overhead closer.

VP03
Narrow vision panels with middle rail

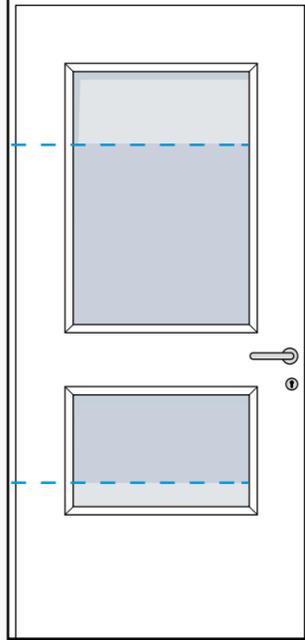


FIRE RATING
NFR FD 30 FD 60

Technical Details

Aperture Width	200 mm
Aperture Height	830 mm (top), 420 mm (bottom)

VP04
Wide vision panels with middle rail



FIRE RATING
NFR FD 30 FD 60

Technical Details

Aperture Width	560 mm
(based on 926 mm wide door)	
Aperture Height	830 mm (top), 420 mm (bottom)

Unable to offer FD60 with a surface mounted overhead closer.

BS 8300:2009

MINIMUM ZONES OF VISIBILITY

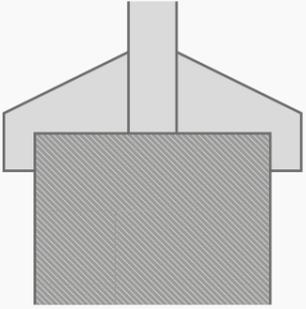


Vision panels allow students to view what is on the other side of the door and are an important safety feature, vital in preventing injury resulting from collision with opening doors.

GLAZING BEADS

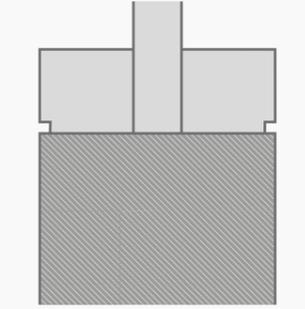
Bolection Bead

Hardwood Bolection Bead (Cloak Bead) material to match lipping - pin fixed.



Flush Bead

Hardwood Flush Bead (Quirk Bead) material to match lipping - pin fixed. Please note that this option has an increased cost.



The pre-primed paper has been designed as a time saving initiative for paint grade doors and is ideal for concealing any lippings ensuring a smoother finish.

LAMINATE & PRIMED ECO-VENEER

PRIMED ECO-VENEER

Ready Primed Eco-Veneer suitable for on-site painting.



Benefits

- Economic
- Surface damage can easily be fixed on-site
- Can be painted on-site to match the project's design scheme



HIGH PRESSURE LAMINATE (HPL)



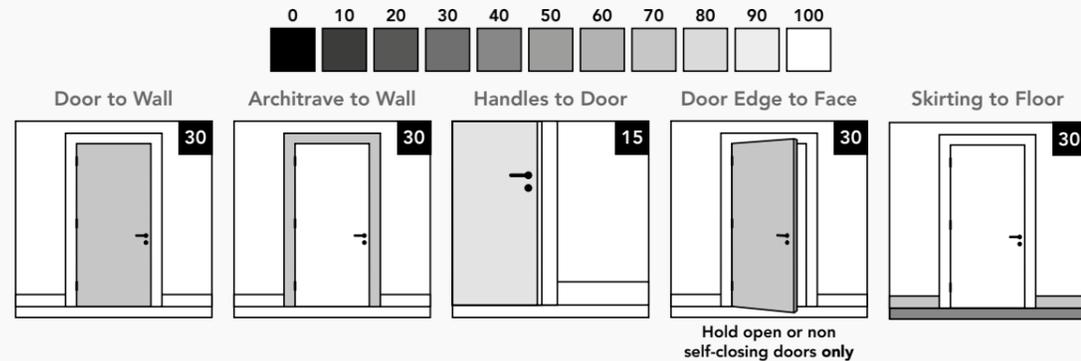
Benefits

- Easy to clean and maintain
- Impact resistant
- Hygienic
- Water resistant
- Chemically resistant
- Stain resistant



LIGHT REFLECTANCE VALUES (LRV)

Light reflectance values are a universal scale that measures the amount of visible and usable light that is reflected from a surface when illuminated by a light source. LRV is measured on a scale of 0 being completely absorbing black that reflects no light, to 100 being completely reflecting white that reflects all light.



The standards recommend an LRV contrast of at least 30 points, with 20 points being acceptable if the illuminance on the surfaces is 200 lux or more. If door opening furniture projects beyond the face of the door or creates an enhanced differentiation in shade, the LRV contrast must be a minimum of 15 points.

When specifying doors, it is important to consider the LRV contrast between the door facing and ironmongery, in order to comply with BS 8300 requirements. For further details, please refer to Building Regulations Approved Document Part M - Volume 2 and BS 8300, Annex B.

HIGH PRESSURE LAMINATE

Ahmarra supply laminate from Polyrey® and Formica®. There are a range of popular laminate colours below, but we are able to supply laminates from most major suppliers in a wide range of colour options. Please contact us for the full range.



Benefits

- Extensive range of trendy designs: 100 decors and 5 textures
- Highly resistant surface (impact, abrasion, stains, chemicals)
- Non-porous surface: easy to clean and resistant to disinfection protocols
- Antibacterial Sanitized® treatment as a standard, eliminates 99.9% of bacteria on the surface
- Volatile organic compounds (VOCs): Greenguard Gold Certified
- Suitable for high-traffic public environments

To view Polyrey's full range of laminate for doors, visit: bit.ly/PolyreyDoorLaminates



B117 FA Blanc Artic LRV 86.0	B070 FA Blanc Megève LRV 81.0	F026 FA Feutre LRV 52.0	G029 FA Gris Tourterelle LRV 55.0	G003 FA Gris Perle LRV 40.0
G075 FA Gris Cendre LRV 32.0	C118 FA Cèdre Bleu LRV 27.0	G076 FA Gris Acier LRV 15.0	B086 FA Bleu Caraïbes LRV 9.0	N005 FA Noir LRV 6.0
G031 FA Genêt LRV 57.0	P092 FA Pomme Verte LRV 50.0	F001 FA Florida LRV 24.0	R062 FA Rouge Fatal LRV 15.0	V108 FA Vert Sarcelle LRV 12.0
H028 SEV Hêtre Bergen LRV 53.0	D018 FA Chêne de Meymac LRV 39.0	N056 FA Noisetier Naturel LRV 32.0	F012 FA Fruitier Cendré LRV 25.0	B101 FA Bianch Noirici LRV 10.0



Benefits

- Huge range of stylish decors and innovative textures
- Four surface finishes available
- Greenguard and Carbon Trust certified as standard
- Stain, wear and impact resistant

To view Formica's full range of laminate for doors, visit: <https://www.formica.com/en-gb/products/door>



F2296 Sno White LRV 85.8	F6902 Grenadine LRV 16.2	F5349 Fossil LRV 42.9	F7912 Storm LRV 14.8
F6907 Amarena LRV 14.3	F1194 Iris LRV 63.3	F0233 Heather LRV 43.7	
F5341 Wasabi LRV 49.8	F7914 Marine Blue LRV 9.2		
	F7940 Spectrum Yellow LRV 54.5		



Full Veneer Range

We offer a full range of standard wood veneers and we are continually developing new stains for our veneers to meet customer needs as well as options for pre-dyed veneers.

Please contact our sales team to discuss the full range of veneers and finishes available.

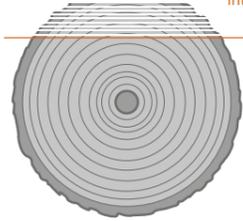
WOOD VENEERS

Consistent, durable finishes; perfectly suited to the education sector.

Each veneer is available in either a crown or quarter cut.

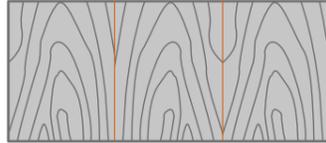
CROWN CUT

Log cut horizontally into flitches

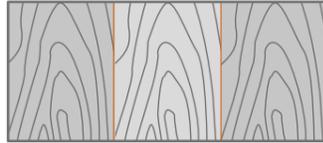


A slicer passes through the log on a plane tangential to these growth rings. The result is a roughly symmetrical, central grain pattern that is characterised by a 'cathedraling' of the grain and also ellipses and ovals. This form of slicing produces an attractive and regular form termed 'crown' veneer.

BOOK MATCH



SLIP MATCH



LRV 14.27

American Black Walnut
Crown cut



LRV 54.30

Maple
Crown cut

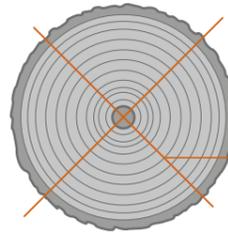


LRV 51.50

American Ash
Crown cut

QUARTER CUT

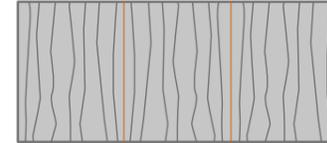
Log cut into quarters



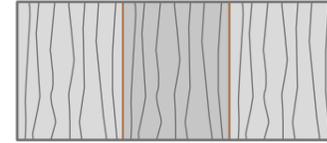
Quarters cut into flitches

Quarter cut veneer is straight grained, which allows for continuity to be achieved throughout a project.

BOOK MATCH



SLIP MATCH



LRV 23.40

American Cherry
Quarter cut



LRV 36.00

Steamed Beech
Quarter cut



LRV 35.42

American White Oak
Quarter cut

European white oak, quarter cut, slip matched doors.



Ahmarra have created a prescribed range of ironmongery to aid your specification process

LOCK TYPES

Guidance on the different types of locks featured in this range.

DEADLOCK
Single cylinder bolt operated by keys and/or thumb turns.

Typical Scenarios
Store rooms
Halls & mixed use spaces
Atriums
Classrooms
Server rooms
Plant rooms
Duct rooms
Circulation spaces

CORRIDOR SIDE
Key or turn operates deadbolt when door is closed.

ROOM SIDE
Turn operates deadbolt when door is closed. Preventing access from corridor side to non-key-holders.

SASHLOCK
Lever handles operating a latch bolt, keys and/or thumb turns operate a deadbolt.

Typical Scenarios
Classrooms
Halls & mixed use spaces
Science & technology labs

CORRIDOR SIDE
Lever handle retracts latch bolt.
Key operates deadbolt when door is closed.

ROOM SIDE
Lever handle retracts latch bolt.
Turn operates deadbolt when door is closed. Preventing access from corridor side to non-key-holders.

ESCAPE LOCK
Allows for an egress in a single operation in case of an emergency, even when the door is locked.

Typical Scenarios
Classrooms
Halls & mixed use spaces
Science & technology labs

CORRIDOR SIDE
Lever handle retracts latch bolt only.
Key operates deadbolt when door is closed.

ROOM SIDE
Lever handle retracts both bolts, allowing for emergency egress using only one operation.
Turn operates deadbolt when door is closed.

NIGHTLATCH
Latch bolt will automatically lock when the door closes.

Typical Scenarios
Exam paper storage
Areas which need to remain locked to non-key-holders
Store rooms containing hazardous or valuable items

CORRIDOR SIDE
Key operates latch bolt. This bolt will lock whenever the door closes.

ROOM SIDE
Turn operates latch when door is closed.

BATHROOM LOCK
Lever handles operate a latch bolt, thumb turn on bathroom side operates a deadbolt with an occupancy indicator on the external side.

Typical Scenarios
Bathrooms
Shower rooms
Changing rooms
NOT bathroom cubicles

CORRIDOR SIDE
Lever handle retracts latch bolt only.
Indicator displays occupancy.

ROOM SIDE
Lever handle retracts latch bolt only.
Turn operates deadbolt when door is closed. Preventing access from corridor side.

CLASSROOM FUNCTION
Allows a key-holder to open the door even if someone is attempting to barricade themselves in the room on the other side.

Typical Scenarios
Classrooms
Mixed use spaces
Halls
Auditoriums
Lecture theatres

CORRIDOR SIDE
Lever handle retracts latch bolt only.
Key operates deadbolt when door is closed. Overriding thumb turn.

ROOM SIDE
Prevents anyone from barricading themselves inside the room because it cannot be locked from inside.
Doors can always be unlocked from inside.

Fire Protection

For all fire rated doors, lock cases and keeps will be clad in intumescent fire protection where required, ensuring complete peace of mind.



DOOR FURNITURE

Handles and other protruding hardware.

LEVER HANDLE FURNITURE PACK

Patented 3 piece fixing rose and escutcheon system. Secure, quick and easy.

Components

- Lever handle & rose
- Bathroom turn & indicator
- Escutcheon

Benefits

- Push-fix rose, held tightly with heavy duty gasket.
- The solid mounting plate with 4 mm fixing lugs provides an easy assembly base. Complete with male/female fixings.
- Meets the dimensional recommendations of BS 8300 and Approved Document M and provides added safety with its return to door design.

Technical Details

Material **Grade 316 stainless steel**
 Grade (BS EN 1906) **4**
 Handle diameter **19 mm**

Finishes

Satin stainless steel is provided as standard, but other finishes are available.



Satin stainless steel
LRV 52.5



PULL HANDLE

A robust and functional 19 mm diameter, round bar D type pull handle.

Benefits

- FD30 and FD60 fire rated.
- Fixed with 2no M8 threaded bolts through the door giving the strongest fixing possible.
- 10 Year mechanical guarantee.
- Perfect for the education environment.

Sizes

Our standard size handle is 425 mm. More sizes are available upon request.

Technical Details

Material **Grade 304 stainless steel**
 Handle diameter **19 mm**

Finishes

Satin stainless steel is provided as standard, but a bright stainless steel finish is available upon request.



Satin stainless steel
LRV 52.5

PROTECTION PLATES PP02 (STANDARD)

Ahmarra's standard protection plates are supplied with rounded corners, drilled and countersunk for screws. Plates can also be supplied with square corners if required.

Push plates are not factory fitted, as there is a risk of damage when transporting doorsets with the pull handle already fitted (bolt-through pull-handle fixings are concealed by the push plate).

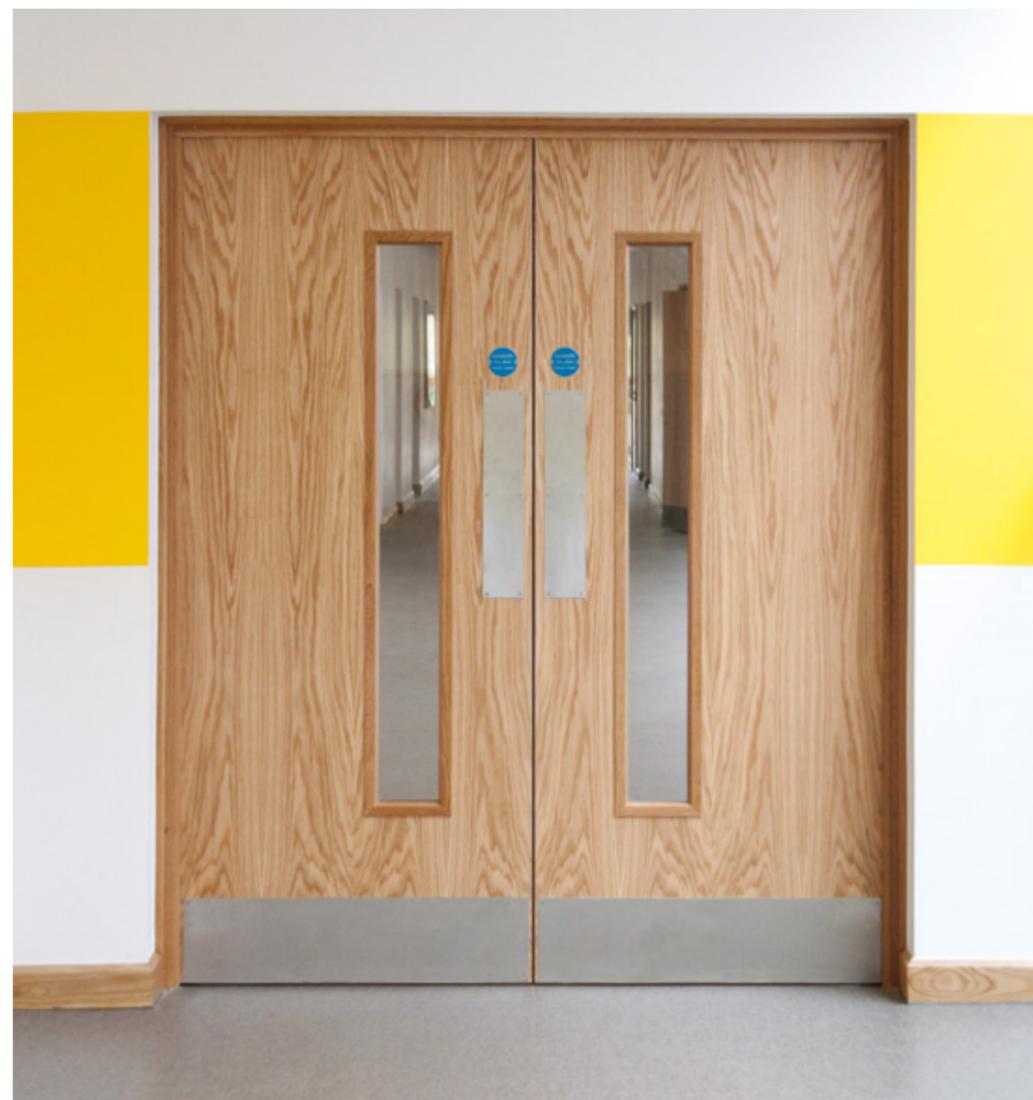
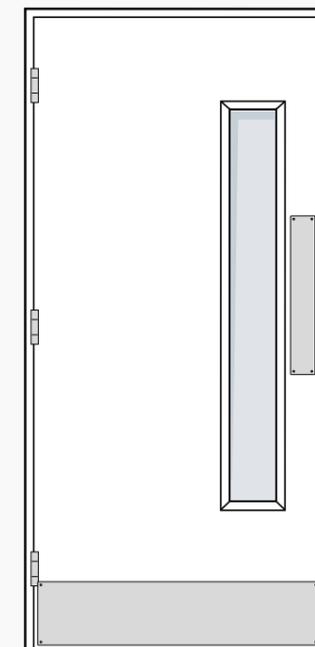
KICK PLATE TECHNICAL DETAILS

Width **To suit door width**
 Height **200mm as standard**
 Thickness **1.2 mm**
 Material **Satin stainless steel (Grade 304)**

PUSH PLATE TECHNICAL DETAILS

Width **100mm as standard**
 Height **500mm as standard**
 Thickness **1.2 mm**
 Material **Satin stainless steel (Grade 304)**

Please note: This is our standard protection plate specification. Custom sizes and other materials are available.



Nylon

Nylon offers an easy to clean, low maintenance, durable alternative to stainless steel. It also offers a great way to achieve contrasting colour and luminance, assisting blind and partially sighted people to identify and operate doors.

DOOR FURNITURE

Handles and other protruding hardware.

NYLON PACK

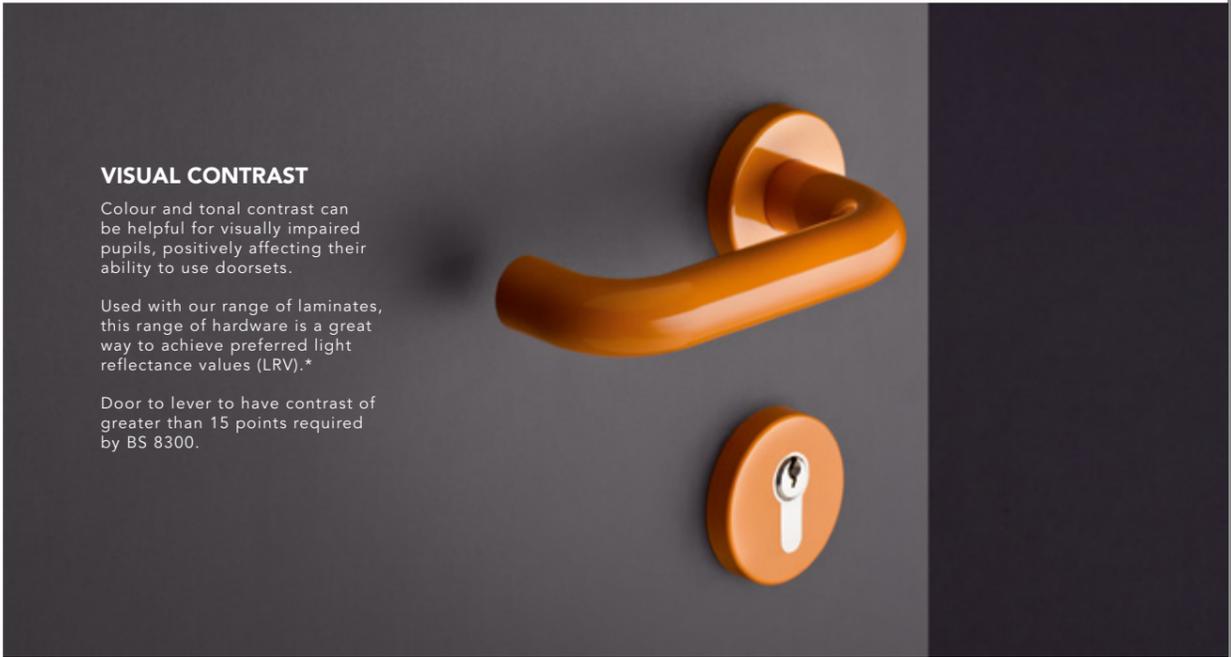
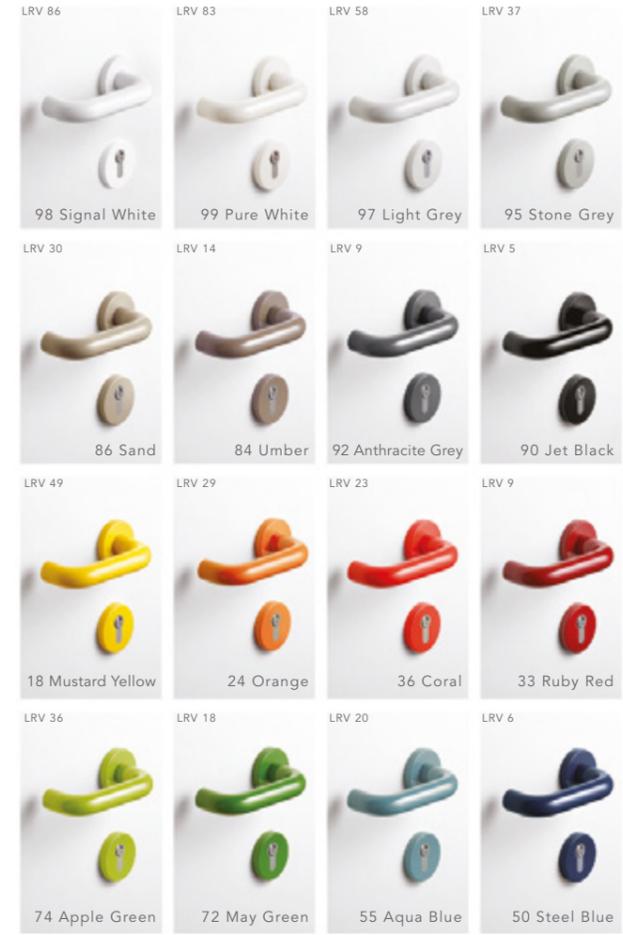
A durable furniture option consisting of a steel core inside the nylon lever handle, available in a range of colours.

Components

- Lever handle
- Accessible bathroom turn
- Escutcheon
- Disabled turn
- Pull handle
- Hooks (on request)
- Bathroom hardware (on request)

Technical Details

Grade	3 or 4
Materials	Nylon with steel core
Rose diameter	55 mm
Bar diameter	20 mm

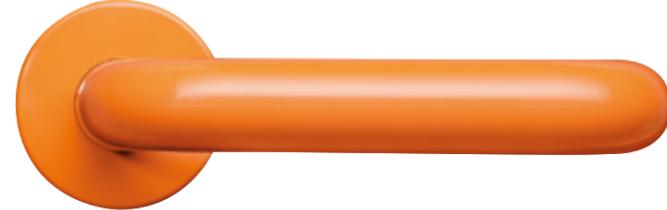


VISUAL CONTRAST

Colour and tonal contrast can be helpful for visually impaired pupils, positively affecting their ability to use doorsets.

Used with our range of laminates, this range of hardware is a great way to achieve preferred light reflectance values (LRV).*

Door to lever to have contrast of greater than 15 points required by BS 8300.



GLOSS

Gloss finish available in 15 colours to match your design scheme.



ANTI-MICROBIAL

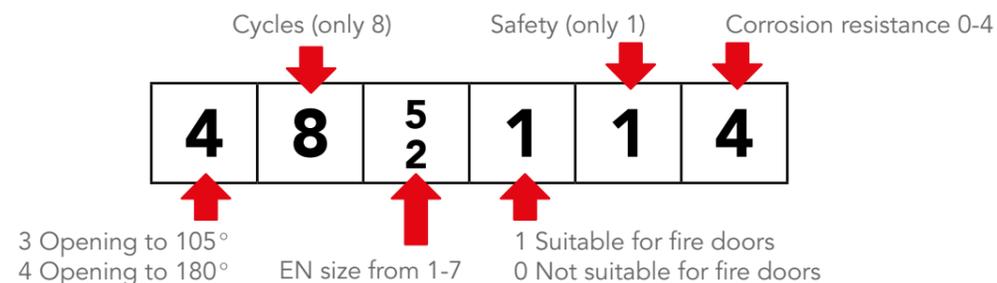
A microsilver coating, effective against bacteria and fungi. The microsilver discharges silver ions, which inhibit the growth of bacteria and other unwanted germs, therefore minimising the risk of infection for humans.

*Based on data from: The examination of the effects of differences between door faces and hardware in terms of light reflectance values (LRVs) and gloss levels, published by Research Group for Inclusive Environments, 2005.

DOOR CLOSERS

BS EN 1154/1155 classifies door closing devices using a six digit coding system. Each digit representing a different category:

- 1 Category of use
- 2 Number of test cycles
- 3 Test door mass/size
- 4 Fire behaviour
- 5 Safety
- 6 Corrosion resistance



Cam action slide arm closers provide a better solution for educational establishments due to their low opening forces enabling easy access for all users. Additionally, the slide arm and channel reduces the risk of abuse/vandalism.

SLIDE ARM/CAM ACTION CLOSER

TS92

Cam action door closer with slide arm.

Features

- Adjustable closing force
- Adjustable closing and latching speed



Technical Details

Closing Force EN1-4
 Max. Door Width 1100 mm
 Body Size 281 x 65 x 47 mm
 CE Marked to BS EN 1154
 Max. Opening Angle 180°

EN1154 Classification

1	2	3	4	5	6
4	8	1-4	1	1	3

ELECTROMAGNETIC HOLD OPEN CLOSER

TS92EMF

Electromagnetic hold open closer.

Features

- Adjustable closing force
- Selective hold open up to 140°
- Adjustable latch and closing speed
- Adjustable release force



Technical Details

Closing Force EN1-4
 Max. Door Width 1100 mm
 Body Size 281 x 65 x 47mm
 CE Marked to BS EN 1155
 Max. Opening Angle 140°
 Voltage 24V DC +/-15%

EN1155 Classification

1	2	3	4	5	6
3	8	5-3	1	1	3

SCISSOR ARM CLOSER

TS72VBC

Universal rack and pinion door closer with scissor arm.

Features

- Adjustable closing force
- Adjustable force sensitive back-check
- Hold open EMF option available



Technical Details

Closing Force EN2-4
 Max. Door Width 1100 mm
 Body Size 232 x 68 x 45 mm
 CE Marked to BS EN 1154
 Max. Opening Angle 180°

EN1154 Classification

1	2	3	4	5	6
4	8	2-4	1	1	2

SLIDE ARM/CAM ACTION CLOSER

TS93

Cam action door closer with slide arm.

Features

- Adjustable closing force
- Adjustable closing and latching speed
- Adjustable force sensitive back-check
- Adjustable delayed action
- Hold open EMF option available



Technical Details

Closing Force EN2-5
 Max. Door Width 1250 mm
 Body Size 275 x 60 x 53 mm
 CE Marked to BS EN 1154
 Max. Opening Angle 180°

EN1154 Classification

1	2	3	4	5	6
4	8	2-5	1	1	4

CONCEALED CLOSER (DOOR MOUNTED)

ITS96

Integrated door closer, mortised into the top of the door.

Features

- Adjustable closing force
- Adjustable closing and latching speed
- Optional electromagnetic hold open



Technical Details

Closing Force EN2-4
 Max. Door Width 1100 mm
 Body Size 277 x 42 x 32 mm
 CE Marked to BS EN 1154
 Max. Opening Angle 120°

EN1154 Classification

1	2	3	4	5	6
3	8	2-4	1	1	4

FLOOR SPRING

BTS75V

Adjustable powered universal floor spring.

Features

- Adjustable closing force
- Adjustable closing and latching speed
- Optional delayed action
- Optional mechanical hold open (not suitable for fire doors)



Technical Details

Closing Force EN1-4
 Max. Door Width 1100 mm
 Min. Door Width 767 mm
 Body Size 282 x 85 x 50 mm
 CE Marked to BS EN 1154
 Max. Opening Angle 175°

EN1154 Classification

1	2	3	4	5	6
3	8	1-4	1	1	4

TRANSOM CLOSER

RTS87

For double action doors where the mechanism is situated in a 70 mm frame head due to insufficient screed depth or to avoid under floor heating.



Technical Details

Closing Force EN1-4
 Max. Door Width 1100 mm
 Body Size 321 x 108 x 55 mm
 CE Marked to BS EN 1154
 Max. Opening Angle 175°

Features

- Adjustable closing force
- Adjustable closing and latching speed
- Optional delayed action (RTS87H)
- Optional electromagnetic hold open RTS80EMB

EN1154 Classification

1	2	3	4	5	6
3	8	1-4	1	1	4

ELECTROMAGNETIC HOLD OPEN FLOOR SPRING

BTS80EMB

Electromagnetic hold open universal floor spring.

Features

- Adjustable closing and latching speed
- Electromagnetic hold open from 85° to 175°
- Available for doors up to 1400 mm
- Free swing option available



Technical Details

Closing Force EN4
 Max. Door Width 1100 mm
 Body Size 341 x 78 x 60 mm
 CE Marked to BS EN 1155
 Max. Opening Angle 175°
 Voltage 24 V DC± 15%

EN1155 Classification

1	2	3	4	5	6
3	8	4	1	1	4

OPENING FORCES

BS 8300 gives guidance on maximum opening forces to ensure accessibility for all. Ahmarra take steps to ensure opening forces are minimised as far as practicable. We use seals that act in compression rather than friction, highly efficient closers, low friction hinges and accurate engineered tolerances. Other factors such as air pressure differentials can have a significant effect on opening forces. Please note that double doors typically have a higher opening force due to the smoke/wipe seal between the doors we would suggest the above be included in the projects access statement.

DOOR AUTOMATION

Automation operator for internal swing doors.

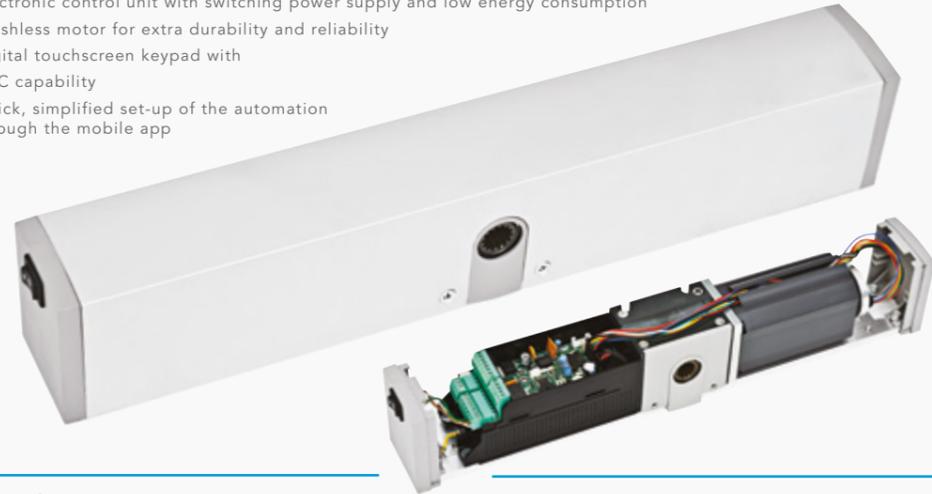
Ahmarra's door automation operator is designed to control the opening and closing of internal swing doors, where safety, quietness, and fluidity of motion are essential requirements. The versatility of this automation system makes it suitable for public and private offices, shops, hospitals, nursing homes, surgeries, hotels, restaurants and coffee bars.

Swing door automation can be controlled by a range of triggers, including activation sensors, push pads, key fobs or complete access control systems. The door can also be used manually with re-closing thanks to its virtual spring function.

The automation system, capable of operating swing doors weighing up to 150 kg for a leaf width of 1,000/1,200 mm, is equipped with a brushless motor with encoder, ensuring very low wear and the best durability over time.

Benefits

- Extra compact, slimline profile
- Electronic control unit with switching power supply and low energy consumption
- Brushless motor for extra durability and reliability
- Digital touchscreen keypad with
- NFC capability
- Quick, simplified set-up of the automation through the mobile app



Arm Selection

Choosing the correct arm is important for any installation, as requirements vary for each application. An example of some of our options are:

Outswing Push Articulated Arm 	Outswing Push Slide Arm 	Inswing Pull Slide Arm 	150mm/250mm Reveal 90 Degree Elbow Inswing Pull Slide Arm 
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Certification

- Electromagnetic Compatibility EMC 2014/30/UE (test report EMC_120283-3)
- EN 61000-6-2 Standard / EN 61000-6-3 Standard
- Low Voltage Directive LVD 2014/35/UE (test report SAFTR_120284-3)
- EN 60335-2-103 Standard
- Machinery Directive 2006/42/CE (test report MACTR_120699-4)
- EN 13849-1 Standard / EN 13849-2 Standard
- Category=2, PL=d
- EN 16005



Activation Options

Key Fob 	Push Button 	Push Pad 	Touch to Open 	Touch Free Sensor 
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Additional Options

Safety Sensor 	Microwave Motion Sensor 	Electromagnet for Door Lock 	Digital Selector 
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	420	520	620									
	1 leaf	1 leaf with battery	2 leaves	2 leaves with battery	1 leaf	1 leaf with battery	2 leaves	2 leaves with battery	1 leaf	1 leaf with battery	2 leaves	2 leaves with battery
	Motor Powered Closing				Spring Powered Closing				Motor Powered Closing			
Dimensions (L x H x W)	420mm x 60mm x 76 mm				520mm x 60mm x 76 mm				420mm x 60mm x 76mm			
Maximum weight of the leaf	75 kg				120 kg				150 kg			
Maximum width of the leaf	1000 mm				1200 mm				1200 mm			
Maximum opening angle	110°											
Power supply	115 - 230 Vac 50/60 Hz											
Maximum power	40 W											
Stand-by power	5 W											
Motor	24Vdc brushless motor with encoder											
Duty cycle	100%											
Maximum load of external accessories	0.5A 24Vdc											
Output for electric lock	Relay with N.O. / N.C. contact											
Protection class	IP 32											
Operating temperature	-15°C +50°C											
Operation without current	With built-in battery (optional)											
Opening speed (up to 90°)	Adjustable from 2 to 12 seconds											
Closing speed	Adjustable from 4 to 12 seconds											
Pause time	Adjustable from 0.5 to 60 seconds											
Pause time (disabled people)	Adjustable from 0.5 to 60 seconds											

ACCESS CONTROL

Ahmarra offers a comprehensive range of electronic access devices. These components have historically formed part of the mechanical and engineering contractors' package, and are often retro fitted onto fire doors. However, the draft of BS 8214 (under consultation in September 2024) requires that all electronic access and security controls for fire doors should be planned in advance with the fire door manufacturer to ensure that the supporting evidence for the door (e.g. the Field of Application Report and fire door specification) includes the item within the list of approved components.

Ahmarra are able to offer fully certified solutions to suit most access control requirements, including magnetic locks, electronic strikes, and electronic locks to work with the activation options on page 57.

This offers specifiers and end customers the reassurance that these products are fully compatible with the doorset as a whole assembly, with full third-party certification.



SEND SCHOOLS SPECIAL EDUCATIONAL NEEDS & DISABILITIES

Bespoke doorsets tailored to the diverse needs of SEND and SEMH learning environments.

Over recent years there has been a much needed increase in the provision of specialised facilities for children with SEND (Special Educational Needs and Disabilities) and Social, Emotional and Mental Health Difficulties (SEMH).

There has also been a growth in awareness and understanding of the requirement for a tailored approach to the design of SEND educational spaces, in order to provide an accessible, inclusive and secure learning environment that enables every pupil to thrive.

As a bespoke door manufacturer that specialises in SEND environments, we are keen to engage and work closely with trusts and architects from the early design stage, to ensure the diverse needs of the staff, pupils and visitors are met. Specialist SEND schools often require variations in door and ironmongery specification to accommodate the requirements of the particular cohort of students. Our specification team are available to discuss the most appropriate specifications to meet the requirements and experience of the end-user.

CASE STUDY

FREEMANTLES SEND SCHOOL

Manufacture of 130+ NFR, FD30s and FD60s doorsets, as well as glazed screens & internal windows, for a school that provides specialist education for children that have complex social communication needs.

Ahmarra worked with Morgan Sindall, Bond Bryan Architects and the school team to assist with the design and specification.

Key Features

Access control was an important requirement for the school and they opted for surface mounted maglocks operated by wall readers. Circulation and office doors can be opened by staff using a security fob, whilst classroom doors are operated using a fob from the outside and a push button from the inside.

Design Considerations

All doors feature a finger guard - a resilient blind that covers the gap between the hinge edge of the door and the frame. Robust aluminium housing protects the blind and prevents damage to it when it's not in use.

Doors are faced with Polyrey's D018 Chêne de Meymac wood-effect high-pressure laminate with built in anti-bacterial protection.



"The staff and students are thrilled with our new school. Doors were identified as a key component of our project that we, as the School Leadership team, wanted to be involved with. Ahmarra were engaged from the early design stage through to completion of the project working with the main contractor, architect and installation contractor.

Despite the doors being designed with robustness and safety in mind, they remain very easy to use and we believe this is due to them being made as complete doorsets."

Karin Ferris - Business Manager, Freemantles School



FINGER PROTECTION

Timber doorsets are available with retro-fit finger protection or integral finger protection.

Eliminating Risk

Thousands of people trap their fingers in doors every year, which can cause serious injury and often results in the need for surgery. This is particularly true in environments where young children are present such as primary schools and nurseries, but also in hospitals, care homes and leisure centres. AhmGuard's integral finger protection designs out the gap between the door and frame - minimising the chance of wandering fingers being trapped.

Every year 30,000 children trap their fingers in doors, with more than 1,500 of these needing surgery.

The Royal Society for the Prevention of Accidents (RoSPA)

The Necessity for Finger Guards in Spaces Used by Young Children

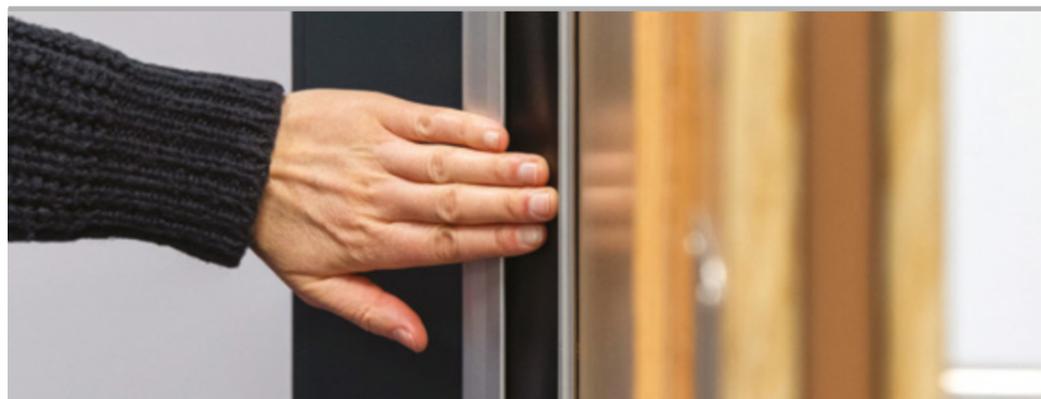
The Department for Education's Design Brief (December 2023) states that new doors in all areas used by young children should have finger guards. The design brief states;

5.8 Finger Guards

5.8.1 Finger guards shall be fitted to all doors to all spaces used by Early Years and Key Stage 1 pupils, and in any space identified for SEN, where it is very likely for pupils to be present (i.e. spaces that are categorised as Basic Teaching, Learning Resources or Halls, Dining and PE as defined in BB103 or BB104).

5.8.2 Finger guards shall be provided in non-teaching spaces if required in the School-Specific Brief (SSB).

5.8.3 Where new doors require finger guards, the guard mechanism shall be either built into the door and frame, with a rounded stile, or surface fixed to the door face and frame. In both cases they shall comply with Classification Class 2 as defined in Table 1, BS 8613:2017 - 'Finger protection devices for pedestrian doors'.



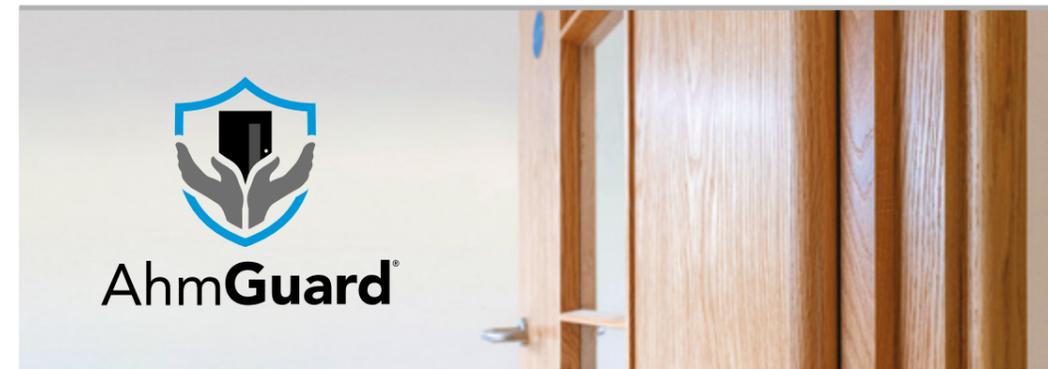
RETRO PROTECT FINGER GUARD

The Retro Protect finger guard is a high quality resilient blind that prevents fingers entering the gap between the edge of the door and the frame. Unlike a concertina style blind, which is constantly exposed, thus prone to damage and vandalism, a robust aluminium housing protects the blind and will prevent damage when not in use.

- BS:EN 1935
Meets and exceeds Life Cycle Testing (tested to over one million open and close cycles).
- BS:EN 16654
Meets provisional guidelines for finger protrusion and entrapment.

Features & Benefits

- Easy to fit and maintenance free with hidden fixings
- Bespoke design for hinged and pivoting doors
- Continuous design - safety blind extends to over 200mm, covering most gaps between door and frame
- Provides privacy - no gap to see through
- Resistant to bacterial growth:
Hygienic, wipe clean material and hidden fixings



AHM GUARD INTEGRAL FINGER PROTECTION

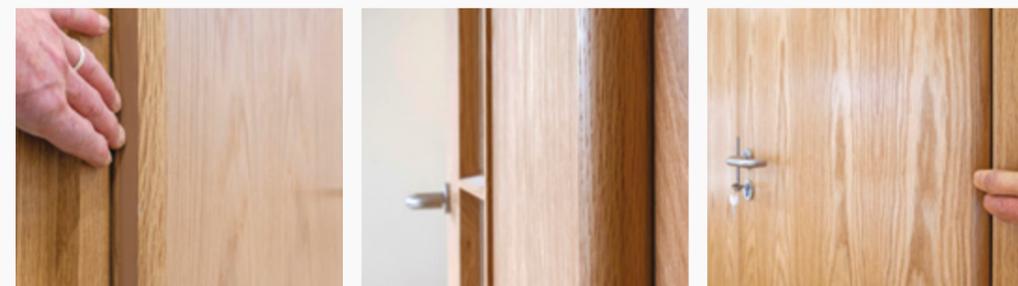
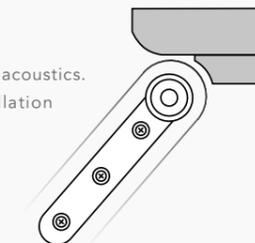
AhmGuard is an innovation in finger protection with its effective, seamless design, incorporating the patent protected finger safe Safehinge pivot system.

The majority of anti-fingertrap solutions are retro-fit and are often unattractive and cumbersome. They work on the premise of covering the gap between the door and frame.

AhmGuard's engineered geometry ensures fingers won't be crushed regardless if the child is standing on the opening or closing side of the door. The smooth curve is an integral part of the timber doorset rather than an add-on feature. AhmGuard's discreet and ergonomic solution forms part of the full doorset and allows the customer to select from a wide choice of timber veneer and high pressure laminate options to achieve the perfect aesthetics for the building.

Features & Benefits

- Aesthetically pleasing profile - perfect for design-led projects.
- Satisfies performance requirements for; anti-finger-trapping, fire, sustainability and acoustics.
- Negates the need for installers to install retro-fit devices on-site, reducing installation time and the risk of compromising compliance.
- Fully compliant with building regulations.
- Durable, integral solution - cannot be forcibly removed.
- Choice of frame material, including; engineered softwood for primed frames or various lacquered hardwoods such as oak, ash, maple and walnut.
- Available in the Ahmarra "Education Range" as a complete doorset with ironmongery.

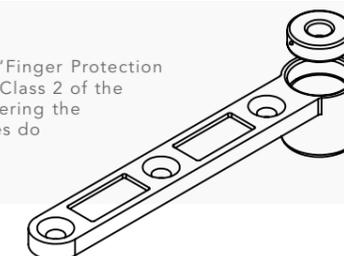


Technical Data

Door type suitability	Single leaf, single swing Internal doors of 44 mm thickness
Fire rating	FD30
Acoustic rating	30RwdB
Test evidence	BS 8613:2017 - Type A, Class 2 Primary fire tested in accordance with BS 476 pt22
Durability	Cyclic tested to a minimum of 200,000 cycles
Opening diameter	95°

Fully Certified

AhmGuard has been tested to the British Standard BS 8613:2017 "Finger Protection Devices for Pedestrian Doors". The solution met the more onerous Class 2 of the standard, which assesses the device's ability to prevent fingers entering the gap between the door and frame when force is used. Class 1 devices do not undergo this part of the testing. Our doorsets are also certified for fire performance under the BM TRADA Q-Mark scheme.



Light Transmission

For optimum light transmission a side screen can be paired with a fanlight. Please note that each screen/fanlight must be contained in its own frame, these frames can be separated on the horizontal edge by a transom.

Document N

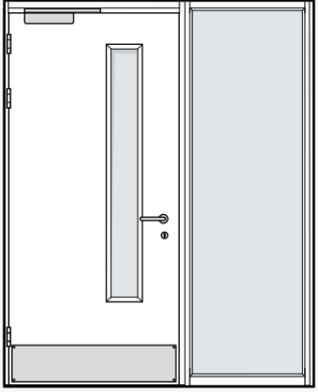
According to Document N (protection against impact) the "critical location" of a side screen is between finished floor level and 1500 mm above that level. Starting a side screen above this level may provide protection from breakage, as well as cost saving in glass size and safety requirements of said glass.

SCREENS, INTERNAL WINDOWS & FANLIGHTS

Screens and fanlights provide transfer of natural light in internal spaces. Standard configurations are shown below.

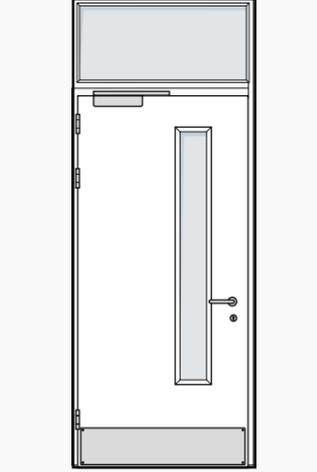
SIDE SCREEN (SS01)
Screen adjacent to a door.

Technical Data
Max. screen width 900 mm
Fire rating NFR, FD30, FD60



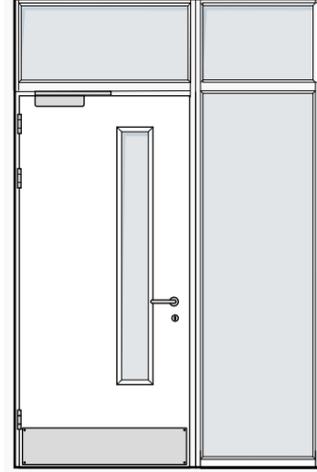
FANLIGHT (FL01)
Screen above a door.

Technical Data
Max. screen width To suit door
Fire rating NFR, FD30, FD60



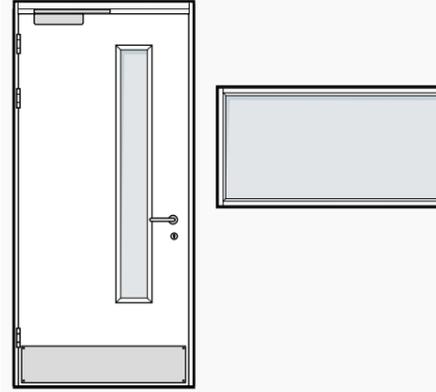
SIDE SCREEN & FANLIGHT (SSFL01)
Side screen with adjacent fanlight.

Technical Data
Max. screen width 900 mm
Fire rating NFR, FD30, FD60



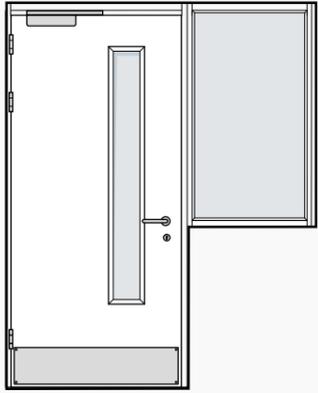
INTERNAL WINDOW (IW01)
Screen, elevated from floor level. Screen not attached to door.

Technical Data
Max. screen width N/A
Fire rating NFR, FD30, FD60



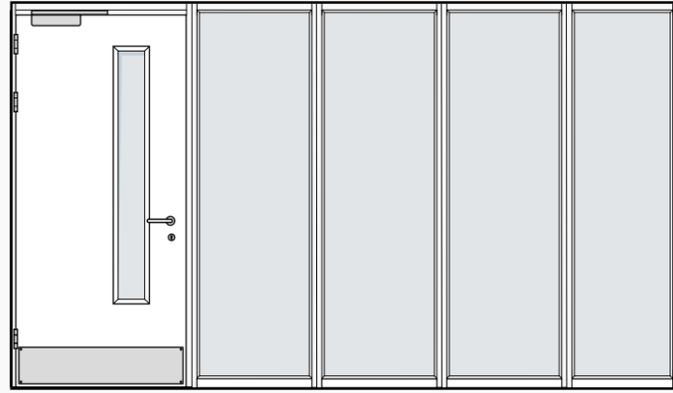
ELEVATED SIDE SCREEN (SS02)
Side screen elevated above the ground.

Technical Data
Max. screen width N/A
Fire rating NFR, FD30, FD60



MULTIPLE SCREENS (SS03)
Single door with multiple side screens.

Technical Data
Max. screen width 900 mm each module
Fire rating NFR, FD30, FD60



GLAZING CONFIGURATIONS

Specification Code	Acoustic Rating	Fire Rating	Fire Insulation	Classification	Safety Ratings	Glass Thickness	Minimum Frame Depth
SRB-35-0	35 RwdB	NFR	0		1B1	6.8 mm	75 mm
SRB-40-0	40 RwdB	NFR	0		1B1	12.8 mm	85 mm
SRB-40-0	40 RwdB	NFR	0		1B1	16.8 mm	85 mm
SRB-46-0	46 RwdB	NFR	0		1B1	8.8 mm 12 mm Spacer 8.8 mm	100 mm
SRB-50-0	50 RwdB	NFR	0		1B1	12.8 mm 12 mm Spacer 12.8 mm	110 mm
SRB-51-0	51 RwdB	NFR	0		1B1	16.8 mm 12 mm Spacer 16.8 mm	115 mm
SRB-34-30	34 RwdB	FD30	0	EW	3B3	7 mm	75 mm
SRB-44-30	44 RwdB	FD30	0	EW	3B3	7 mm 12 mm Spacer 8.8 mm	100 mm
SRB-39-60	39 RwdB	FD60	30	EI	2B2	16 mm	85 mm
SRB-40-60	40 RwdB	FD60	60	EI	1B1	25mm	95 mm
SRB-45-60	45 RwdB	FD60	30	EI	2B2	16mm 12 mm Spacer 6.8mm	105 mm

Insulating Glass

Ahmarra would recommend the architect / BCO refer to Approved Document B of the Building regulations: Table A4, which gives guidance on the 'Limitations of the use of uninsulated glazed elements on escape routes'.

Classification

EW= Integrity and low heat radiation or the ability of the element to prevent the passage of flames and to limit the level of heat transfer through the element

EI= Integrity and insulation or the ability of the element to prevent the passage of flames and to block the heat transfer through the element.

The required fire protection rating is specified by the respective national building regulations following a risk assessment based on the building characteristics and the location of the fire rated element (facade, partitioning walls, stairways etc).

Safety Rating

For glass to be classified as an impact-safe material, it must undergo the Safety Standard Test. This test is used to define the level at which glass will 'break safely', meaning there will be no large shards of glass, only small fragments that will cause less injury.

The classifications within BS EN 12600 are;
Class 1B1 (highest performing)
Class 2B2
Class 3B3 (lowest performing)





FREE ADVICE & SAMPLE SERVICE

Our experienced team are happy to offer you expert advice and veneer samples if required, please contact us at:

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 website: www.ahmarra.co.uk

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FIRE DOOR INSTALLATION & MAINTENANCE GUIDE

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Please note: We reserve the right to amend/upgrade the products within this range and any images are representative of what will be provided. British standards, guidance documents, best practice specifications and many other factors are regularly revised and updated in the fire door sector. Ahmarra are keen to provide compliant and cost effective components to our customers, which may result in similar products being utilised occasionally. Fully detailed specifications will be provided on a job specific basis.



Based in Hampshire, Ahmarra have been manufacturing doors for over 30 years.

We are proud to fly the flag for British manufacturing and use traditional craftsmanship, cutting edge technology and the finest materials to guarantee exceptional standards.

