



LONGDEN

HANDCRAFTED SINCE 1838





A SPECIFIER'S GUIDE

Bathgate Road, Wimbledon

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HISTORY

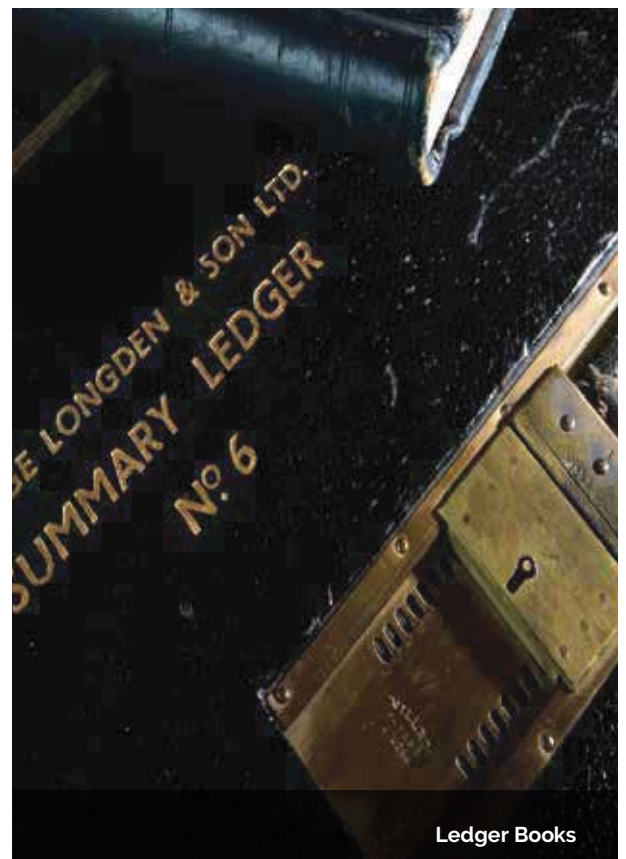


House, St Georges Hill
University of Cambridge, Magdalene College
The Old Patent Office, Chancery Lane

Generations of tradition and craftsmanship breathe life into every Longden door.

In 1838 John Longden founded John Longden & Sons as a small-time builder largely servicing Sheffield's steel industry. It was John's son George and grandson James who really established Longden as a Building and Contracting business. Longden swiftly grew to become one of the top ten building and civil engineering contractors in 19th century Britain. With endless prestigious contracts, including The George Hotel, Sheffield City Hall, Sheffield Hillsborough Garrison and the Prudential Assurance Company. Then, as is the case today, Longden considers traditional, apprentice-based craftsmanship and the development of skills as its major strength.

As the architectural joinery and the production of high quality, solid timber panelled doors flourished, Longden moved away from the contractor business in 1978. Today, our tradition of combining time-honoured skills with the latest techniques to meet modern, exacting performance standards continues. It is the Longden name that has remained and enshrined on our present-day range of beautiful handmade doors.



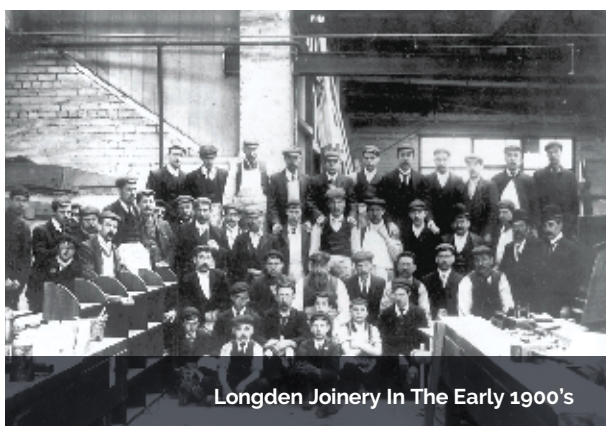
Ledger Books





INTRODUCTION

Coworth Park Hotel, Sunningdale, Berks.



Longden Joinery In The Early 1900's



Longden Construction In The Early 1900's

The Longden range of hardwood doorsets combines the highest quality of traditional craftsmanship with the performance levels needed to meet today's technical criteria.

Longden's tradition of quality which had its origins in the 19th century continues into the 21st with doors of remarkable beauty; doors fit to grace some of the finest building projects such as Kensington Palace, Windsor Castle, Hampton Court Palace, 10 Downing Street, Dorchester Hotel, The Ned Hotel, Coworth Park Hotel, Limewood Hotel, Connaught Hotel, Cambridge and Oxford University, Eton, Harrow and Epsom College to name but a few.

In an ever-changing marketplace, where the demands of the construction industry continue to grow, Longden is perfectly placed to meet those demands thanks to a combination of the highest joinery standards and many years of manufacturing excellence.

Many of our historic listed buildings have relied on Longden's traditional craftsmanship and expertise to maintain and preserve their heritage. Not only has Longden maintained traditional joinery practises but it manufactures to the latest industry standards. This brochure demonstrates what the Longden range can offer; but the real inspiration for your project will come from you, the designer, working with us to achieve your aims.



THE LONGDEN APPROACH

Chester Square, Belgravia

Attention to detail is at the heart of every Longden project.

At Longden Doors we are experts in manufacturing hand crafted, solid timber doors. With each door completely bespoke, we take great pride in that every door is hand-made in Britain and finished by artisans devoted to their trade. With our long and unique heritage, we consider our traditional apprentice-based craftsmanship and development of skills as a major strength within the industry.

Capability

With the capacity to deliver, whatever the requirement or size of project, Longden is a major player in the solid timber door market. This is underlined by the extensive product portfolio which includes panelled doors, both raised and fielded and flat panel, as well as horizontal or vertical boarded doors and screens.

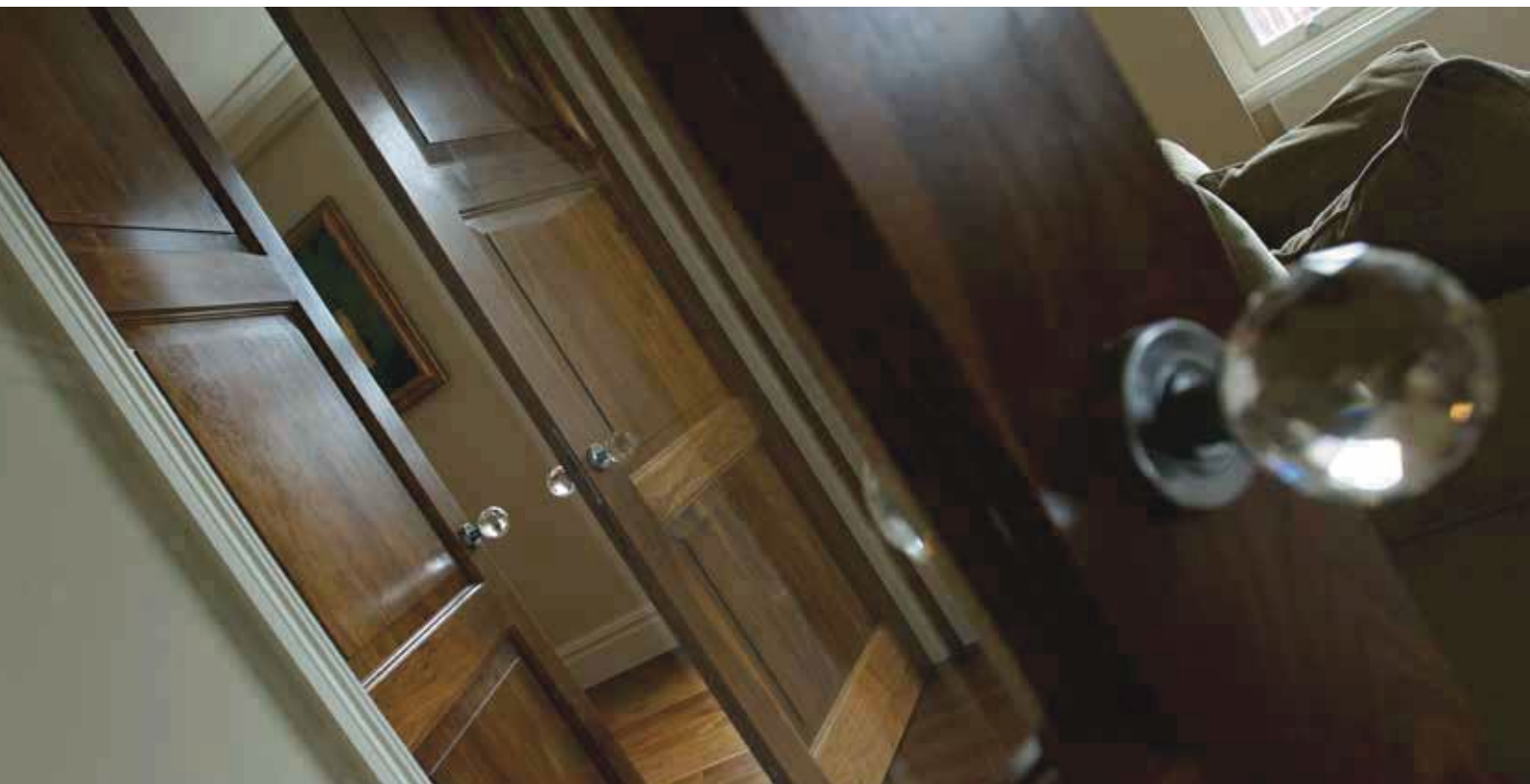
Support

Technical expertise is available at all stages of the specification and procurement process. At Longden, we also recognise the skills needed to install doorsets correctly and as such, can offer assistance on the latest techniques to help installers.

Sustainability

Longden shares its customers' concern for sustaining the earth's resources. Doors and doorsets from Longden can be specified using solid timber and timber-based raw materials exclusively from well-managed and sustainable sources.

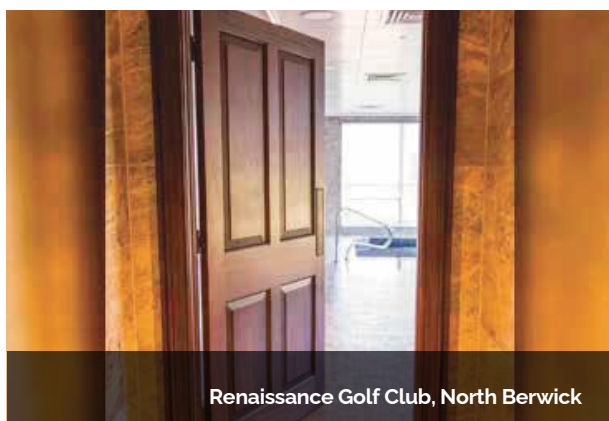




Park Street, Mayfair



Lancaster Road, Wimbledon



Renaissance Golf Club, North Berwick



The Lalit, London Bridge



THE LONGDEN PROMISE

Astons Road, Moor Park

Quality That Endures For A Lifetime

At Longden you are not just buying a door. You are buying a history of craftsmanship combined with modern technology and design.

Doorsets that have graced many of the UK's most prestigious locations, ready to become a part of your house or project. With tradition and expertise at the heart of every Longden door you can order with us in the knowledge that you will be covered by The Longden Promise.

Nothing Off The Shelf

Every door set is made to order. No matter if you are looking for a modern contemporary design or wishing to find a match to a traditional heritage setting, no Longden door is off the shelf.

Solid Hardwood Timber

At the core of what we produce are quality materials, with the right solid hardwood timber chosen to best fit your projects.

With You Every Step

From initial contact to final fitting, you will have a named Project Manager with you every step of the way.

Lovingly Crafted In The UK

All our doors are manufactured right here in the UK by our team of expert craftsmen with generations of experience.

Bespoke Design

No design is too difficult. Our team liaise with you to create every door to your exact requirements. Not sure on the best option? Our designers can provide support and advice.

Quality Guaranteed

All our door sets are guaranteed and have a long history of customer satisfaction across the UK.



YOUR LONGDEN JOURNEY

Ongar, Essex

01 Expert Assistance From Design To Delivery

Your journey to a beautifully crafted, bespoke door should be seamless. We'll guide you through every step, ensuring your experience matches the exceptional quality of our doors.

02 Your Enquiry

Your initial contact can be by phone or email and we're happy to speak with you no matter how much or how little you know you want at this stage. Your journey has started.

03 Define Your Requirements

We'll help you choose the right door by discussing your project's needs, considering design, performance, looks, and budget. We can offer advice and will finalise your specifications.

04 Prepare Your Quotation

Our team will prepare a quotation and you will be assigned a named Project Manager.

05 Place Your Order

You are ready to place your order. Simply follow the instructions on your quote and our team will confirm your order and timeline.

06 CAD Drawings For Client Approval

Once we've finalised your specifications, we'll create CAD drawings. This is your opportunity to review sizes, request changes, and ensure your door is exactly as you envisioned.

07 Enter Manufacture

Your door set is ready to be manufactured right here in the UK. Our Master Craftsmen will get to work and your Project Manager will keep you updated on its progress.

08 Delivery

Your door will then be ready for delivery. We will liaise with you to ensure timings are in line with your project and confirm options for fitting.



SUPPORTING BRITISH MANUFACTURING

The Royal Belgium Embassy,
Belgravia

Choosing Longden Doors means more than just selecting a beautiful and high-quality product; it's an investment in British heritage, craftsmanship, and community.

In a market increasingly dominated by overseas production, we stand as a proud testament to the enduring value of British manufacturing.

For over 200 years, Longden Doors has been a proud supporter of British manufacturing.

Our doors are fully manufactured and hand-made in the UK by a team of locally trained craftspeople, ensuring the highest quality and attention to detail.

We are committed to using local suppliers and sourcing timber locally wherever possible, reducing our environmental impact and supporting the local economy. Our dedicated team works diligently to create beautiful, bespoke doors.

Unlike many door manufacturers, we remain deeply rooted in the UK, safeguarding traditional skills and delivering a level of bespoke quality that is increasingly rare. When you choose Longden, you choose a piece of British history, built to last for generations to come.



The Dorchester Hotel, Mayfair



Belgrave Square, Belgravia



Spraying



Longden Factory



Tenoner



SUPPLY CHAIN AND SUSTAINABILITY

We're essentially a timber based manufacturing company and we're proud of it.

Probably the most sustainable building material available to the British building industry today, wood is naturally renewable, readily recyclable and carbon neutral. With so many environmental advantages, wood can benefit the entire global community – but only if forests continue to be managed responsibly. Unfortunately, in some countries, as much as 80% of timber is harvested illegally, often involving the destruction of protected forests, the loss of biodiversity and the violation of human rights.

We'll keep supporting the world's forests – with both feet on the ground.

To help overcome deforestation, the loss of biodiversity, poverty and the violation of human rights, we must overcome the illegal and unsustainable harvesting of timber. Longden will keep taking practical, realistic and workable steps to support the growth of responsible forest management around the world. For a copy of our complete environmental and timber purchasing policy visit www.longdendoors.co.uk.





10 STEPS TO SUSTAINABLE SOURCING

1. Responsibility

We will recognise our responsibility to all our customers, suppliers and staff to base our commercial activities on well-managed forests.

2. Legality and sustainability

We commit to avoiding involvement in the following activities:

- Illegal logging or the trade in illegal wood or forest products
- Violation of traditional and human rights in forestry operations
- Destruction of high conservation values in forest operations
- Significant conversion of forests to plantations or non-forest use
- Introduction of genetically modified organisms in forestry operations
- Violation of any of the ILO Core Conventions, as defined in the ILO Declaration on Fundamental Principles and Rights at Work, 1998.

3. Endangered species

We will not source any timber species prohibited under Appendix I of the Convention on International Trade in Endangered Species (CITES).

4. Traceability and supplier monitoring

We will continue to seek from our suppliers:

- Evidence of their commitment to continuous improvement in environmental performance
- Clearest practicable information on the sources of wood products
- Evidence of good forest management practice at the origin of wood products

5. Timber certification

We will seek to use certified timber sources which include claims of environmental soundness or sustainability if these are supported

by publicly available standards drawn up in a fully participatory, transparent and objective manner and may be backed by independent inspection. Where this is not available the timber supply will be risk assessed in accordance with the UK government appointed CPET recommendations.

6. Avoid boycotts

We will not encourage boycotts or bans on specific species of timber. Notwithstanding this, we will cease to source any species if its supply is in breach of principles 2 or 3 above.

7. Avoid misleading claims

We will, at all times, strive to avoid misleading and unsubstantiated environmental claims in relation to wood product supplies.

8. Preparing staff

We will ensure that all employees associated with timber purchasing are encouraged to act in accordance with this Policy and are given appropriate education and training to do so, if required.

9. Management

We have appointed a Senior Executive who is responsible for the implementation of this Policy and will ensure that relevant environmental issues relevant to the Policy are discussed regularly and addressed at the highest level of management.

10. Continuous improvement

We will continue to define our own programmes, objectives and targets to achieve continuous improvement in environmental performance.



HOTELS

The Lime Wood Hotel, Lyndhurst

Longden doors are perfect for any exclusive hotel whether city chic, cool coast or comfortable country retreat.

The individual personality of Longden's beautiful, hand finished, solid timber doors adds a sense of quality and elegance to contemporary flair or traditional splendour. Timber stiles, rails and muntins can be combined with profile moulds or applied mouldings to match products such as panelling, skirting, dados and a complete range of complementary architectural hardware. True bespoke joinery combines craftsmanship with modern manufacturing techniques to achieve a perfect balance of style and function with performance options such as fire resistance, sound reduction and security by the way of steel reinforced panels. It's no wonder that such fine Longden doors have graced some of the UK's finest buildings for well over a hundred years.



Coworth Park Hotel, Sunningdale, Berks.

HOTELS

Blue Waters Resort
(Antigua, West Indies)

Bristol Harbour Hotel & Spa
(Bristol)

Celtic Manor Hotel
(Newport, South Wales)

Coworth Park Hotel
(Sunningdale, Berkshire)

Culloden Estate and Spa
(Holywood, Belfast, N. Ireland)

Great Eastern Hotel
(Liverpool Street, London)

Hotel Gotham
(Manchester)

Kingsway Hall Hotel
(Bloomsbury, London)

Lime Wood Hotel
(Lyndhurst, New Forest, Hampshire)

The Connaught
(Mayfair, London)

The Dorchester
(Park Lane, London)

The Gainsborough Bath Spa
(Bath)

The Lalit
(London Bridge, London)

The Langham Hotel
(Marylebone, London)

The Ned
(Bank, London)

The Principal London
(Russell Square London)



The Langham Hotel, Marylebone



Blue Waters Resort, Antigua



Lime Wood Hotel, Lyndhurst



The Lalit, London Bridge



RESIDENTIAL

Wentworth Estate, Virginia Waters

Longden doors bring a breath of fresh air to the market for luxury residential doors.

By working closely with customers, interior designers and architects, Longden can provide a complete end-to-end solution which can include design, joinery, ironmongery and ancillary items such as dado rails, skirting, plinth blocks and screens. There is no limit to what can be achieved, virtually any finish can be applied and no two doors are the same. We understand the importance of achieving a balance between style and function and use only the finest quality timbers, finishes and ironmongery for results that will enhance the more exclusive property, both aesthetically and practically. Whether you require fire certification to the principle areas, sound reduction for doors to the cinema room or if you require steel reinforced doors to panic rooms or wine cellars then Longden can combine its craftsmanship with modern manufacturing techniques to achieve a perfect balance of style and function.



Wentworth Estate, Virginia Waters

RESIDENTIAL

Astons Road

(Moor Park, Middlesex)

Broadway

(Hale, Altrincham, Cheshire)

Bollin Hill

(Wilmslow, Berkshire)

Craven Hill Gardens

(Bayswater, London)

Customs House Apartments

(Albert Sq., Belfast, N. Ireland)

Hill Top

(Hale, Altrincham, Cheshire)

Rappax Road

(Hale, Altrincham, Cheshire)

St Georges Hill

(East Rd., Granville Cl., Granville Rd., Old Ave., Tor Lane, West Rd., Weybridge)

Wentworth Estate

(East Dr., Lake Rd., Oakwood Rd., Portnall Rise, North Dr., West Dr., Woodlands Rd., Virginia Water, Surrey)

Belgravia

(Chester Sq., Eaton Sq., Belgrave Sq., Lowndes Sq., London)

Kensington

(Holland Pk., Addison Rd., Queens Gate, Kensington Palace Gardens, London)

Knightsbridge

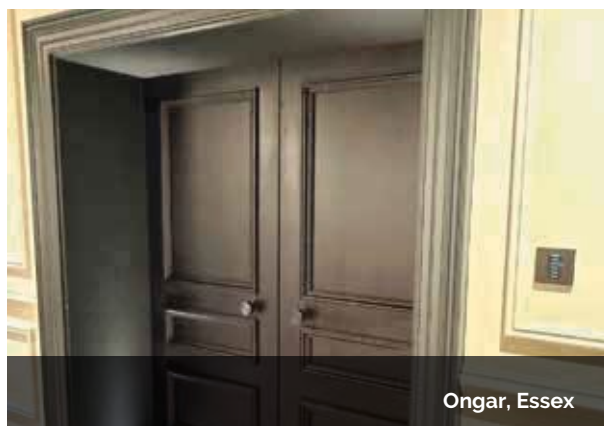
(Ennismore Gardens, Pont St., Rutland Gate, Rutland Gardens, London)

Mayfair

(Grosvenor Sq., Green St., Mount St., N & S Audley St., Park St., London)



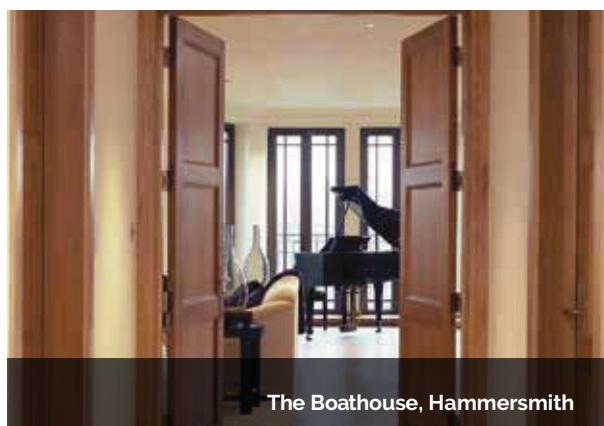
Craven Hill Gardens, Bayswater



Ongar, Essex



Grosvenor Square, Mayfair



The Boathouse, Hammersmith



CONSERVATION AND HERITAGE

St Georges Hill, Weybridge

Generations of tradition and craftsmanship combined with high performance characteristics help to ensure the longevity of our historic buildings.

Minimal intervention and the retention of as much of the existing fabric as possible is vitally important to many great projects. The key is a combination of traditional craftsmanship, specialist conservation experience and an innovative, highly engineered approach to detailed design and construction.

Projects are considered individually and in detail, with Longden's involvement being summarised as follows:

- Replacement of existing doors with new performance doors or doorsets. These can be made to suit retained frames, architraves and other opening details such as reveal panelling or curved door-heads.
- Replacement of existing doors with new performance doors or doorsets incorporating retained panels, carvings or other features from original doors.
- Addition of new doorsets to accommodate revised layouts either replicating existing, or alternatively, in a contrasting or possibly more modern style. In order to ensure the long-term usability and viability of historic buildings, there may well be a requirement to meet stringent performance standards, as indicated by today's Building Regulations.

For doors, frames, architraves, reveal panelling and other similar elements, this can present a real challenge, requiring a considered balance between intervention to achieve compliance and protection of essential architectural characteristics.

The Longden range is particularly suited to the restoration of historic and traditional buildings of all types and has been used extensively in notable monuments and listed buildings throughout the country. The company's approach to conservation and its expertise in replicating original features and traditional craftsmanship are widely recognised by architects, conservation experts and organisations such as English Heritage & The National Trust.

Specific performance levels may be called for in terms of accessibility, fire-protection, smoke containment, sound reduction and security – particularly with a change of building use or altered room arrangements. Whilst Building Regulations may be relaxed in the case of listed buildings and other performance standards waived, this approach should be treated with caution. For example, fire-resistant doorsets are the most effective means of protecting historic buildings from the spread of fire and smoke, without the damaging after-effects of sprinkler systems. Similarly, a security doorset can prevent unauthorised access and the resulting theft, vandalism and arson. Therefore, there is a strong case for the considered use of performance doorsets to protect historic buildings in the wider sense.

CONSERVATION & HERITAGE

10 Downing Street

Grade I (London, SW1)

Blenheim Palace

Grade I - World Heritage Site, (Oxfordshire)

Buckingham Palace

Grade I (London, SW1A)

Devonshire SPA

Grade II* (Buxton)

Euston Hall

Grade II* (Euston Park, Suffolk)

Hampton Court Palace

Grade I (Hampton Court, Surrey)

Kensington Palace

Grade I (London, W8)

Palace House

Grade II (Newmarket, Suffolk)

Royal Sutton Place

Grade II (Sutton Coldfield, W.Midlands)

Sheffield City Hall

Grade II* (Sheffiled)

Stormont House

(Belfast, N. Ireland)

Tate Britain

Grade II* (London, Sw1)

Windsor Castle

Grade I (Windsor, Berkshire)





EDUCATION

St. John's School, Leatherhead

Certain buildings lend themselves to only the finest doors and doorsets.

Many projects demand something more than a standard offering whether it be a hotel, office, court or school. Longden solid timber panelled doorsets provide an impressive solution to the challenges presented by Building Regulations and other statutory requirements, whilst still retaining a high quality, traditional appearance.

Longden offers a stunning range of products which includes internal and external doors and doorsets, screens and other joinery items, in a variety of different styles suitable for commercial applications.

Whilst meeting all the performance criteria required, Longden will work with you to deliver the visual challenges of your project.



City of London

EDUCATION

Bedford School
(Bedford)

Cheltenham Ladies College
(Cheltenham, Gloucestershire)

Christs Hospital
(Horsham, West Surrey)

Epsom College
(Epsom)

Fettes College
(Edinburgh)

Harrow School
(Harrow on the Hill)

Imperial College London
(Kensington, London)

Radnor House School
(Twickenham)

St. John's School
(Leatherhead)

University of Cambridge
(Madingley Hall, St. John's College, Trinity College, Cambridge)

University of Exeter
(Exeter, Devon)

University of Oxford
(All Souls College, Magdalene College, Trinity College, Oxford)



University of Cambridge, Magdalene College



Whitelands College, Roehampton



Epsom College, Surrey



St John's School, Leatherhead



GOLF

The Nottinghamshire Golf & Country Club, Nottingham

Helping to provide a premium look and feel, Longden Doors proudly supplies its hand crafted panelled timber doors to complement the existing ambience and architecture of some of the UK's most prestigious and iconic Golf Club.

Working with some of the most exclusive golf venues in the country, including the Twenty Ten clubhouse at the Celtic Manor resort, Heswall Golf Club on the Wirral peninsula, The Renaissance Club in East Lothian – the area which is often coined as the home of golf, The Royal Troon Golf Club, The Nottinghamshire Golf & Country Club and looking further afield, The Dutch Golf Club located in Netherlands, Longden is familiar with the varying needs of Golf Club and is able to provide a doors solution to suit.

Appearance in these situations is key – as such, Longden is well equipped to deliver incredibly high quality panelled timber doors, carefully and thoughtfully designed and manufactured in line with the requirements of the individual Golf Club.



Royal Troon Golf Club, South Ayrshire

GOLF

Beaverbrook Golf Club
(Leatherhead)

Celtic Manor Hotel
(Newport, South Wales)

Foxhills Golf Club
(Ottershaw, Surrey)

Heswall Golf Club
(Heswall, Wirral)

Morley Hayes Golf Club
(Morley, Derby)

The Nottinghamshire Golf & Country Club
(Nottingham)

Renaissance Golf Club
(North Berwick, Scotland)

RAC Woodcote Park
(Epsom, Surrey)

Royal Ascot Golf Club
(Ascot, Berkshire)

Royal Troon Golf Club
(South Ayrshire, Scotland)

Royal Wimbledon Golf Club
(Wimbledon)

The Dutch Golf Club
(Gelderland, Netherlands)

Westernham Golf Club
(Westernham, Kent)

Woburn Golf & Country Club
(Milton Keynes, Buckinghamshire)



Celtic Manor Hotel, Newport



Beaverbrook Golf Club, Leatherhead



Royal Troon Golf Club, South Ayrshire



Renaissance Golf Club, North Berwick



SPECIFICATION

The Lalit, London Bridge

There are many items to consider when it comes to the specification of your project. If you need any help please get in touch.

All Longden timber doors and doorsets are manufactured individually to order, allowing complete design freedom and the capability to match existing doors. We work in partnership with interior designers and architects to achieve unique design briefs.

At Longden we are set up to assist designers with their own specifications and door schedules.

Please note all dimensions given in this brochure are in millimetres unless otherwise stated.



Grantley Hall, Ripon



PANEL STYLES

Copeland Panel

Have you thought about what panel style you want?

As a bespoke manufacturer, we can create almost any style of door to suit your project, typically classified into the styles below. Pages 31 and 32 detail specifics on all our popular styles:

Panelled doors

The Longden range of panelled doors can be classified into four types that being; Chippendale, Copeland, Hepplewhite and Sheraton panels. Panel doors are suitable for either internal or external applications depending on timber selection. In addition, glazing can be used in place of any of the panels.

Boarded doors

Longden also manufacture boarded doors in contemporary or traditional styles. These can be in either a horizontal or vertical design and beaded glazed apertures can be incorporated into the design.

Glazed doors

Glazed doors and doorsets are included within the Longden range and can either be fully glazed, as in the Rivelin doorset, or by replacing any number of the panels in the door with glass to create the desired effect.

Whatever the environment or requirement, we can work with you from the standard to the absolutely unique.

At Longden we pride ourselves on being truly bespoke manufacturers. As such we are able to adapt, create and suggest door styles suitable for your project surroundings.



Grosvenor Square, Mayfair



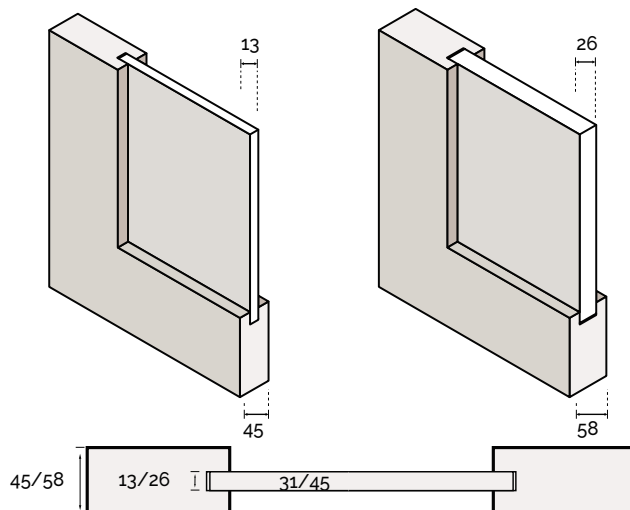
SHERATON PANELS

Sheraton (The Recessed)

Sheraton flat panel doorsets offer the perfect combination of classic contemporary styling and high quality traditional construction. The flat panels within the Sheraton range are manufactured from high performance materials, selected to suit particular applications. The flat panels are tongued into grooves within the framings; they are typically 13mm thick for FD30 doors and 26mm for FD60. These dimensions represent the minimum needed to achieve fire resistance but other panel thicknesses can be supplied.

Sheraton FD30

Sheraton FD60



The Connaught, Mayfair

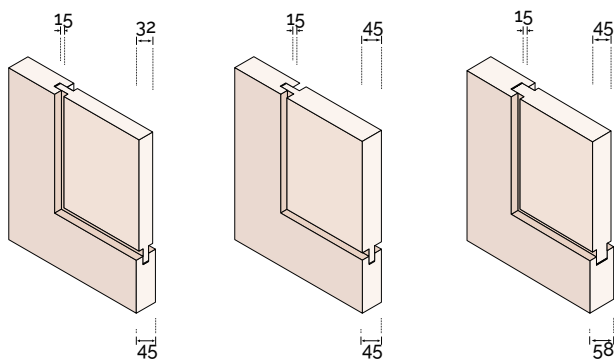


HEPPLEWHITE PANELS

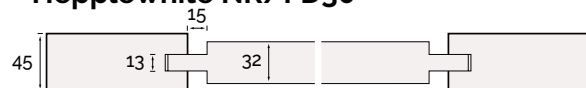
Hepplewhite (The Block)

Hepplewhite panels are available in 32mm or 45mm thick panels, with the gap between the panels, stile and rails of the door being 15mm. The 45mm thick panels are the same width as the door itself – providing a sleek flush finish. Additionally, the Hepplewhite can be specified with glazed panels - adding that extra bit of light into a room – as well as being available in a variety of FSC® accredited hardwoods including European Oak, Rock Maple and American Black Walnut.

Hepplewhite NR/FD30 Hepplewhite NR/FD30 Hepplewhite FD60



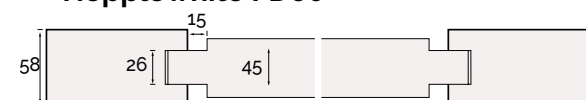
Hepplewhite NR/FD30



Hepplewhite NR/FD30



Hepplewhite FD60





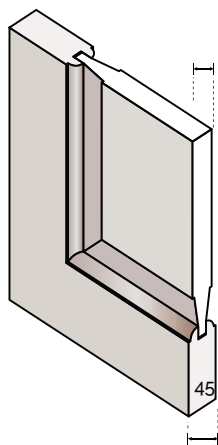
CHIPPENDALE PANELS

Chippendale (The Raised and Fielded)

Typically raised and fielded Chippendale panels are constructed from timber. The panels are tongued into grooves within the framings; they are typically 32mm thick for non-rated and FD30 doors and 45mm thick for FD60.

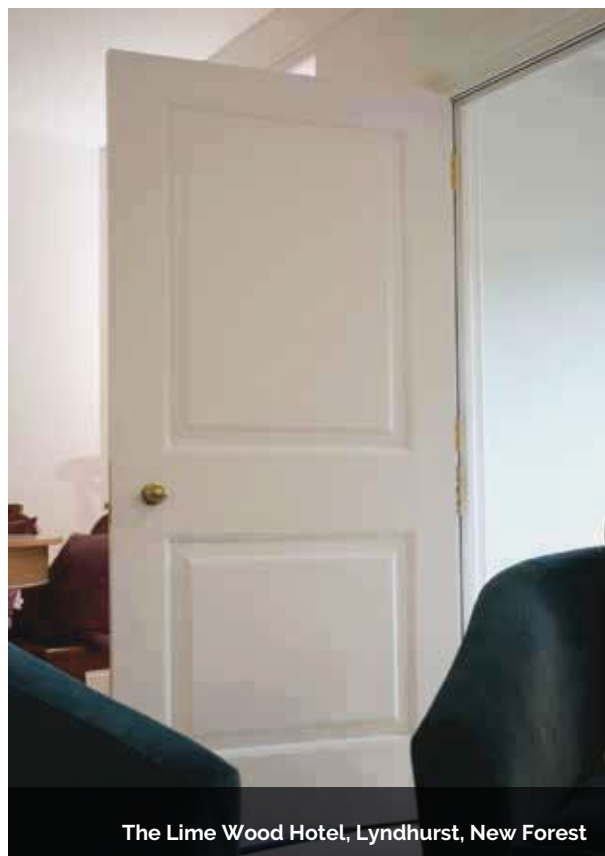
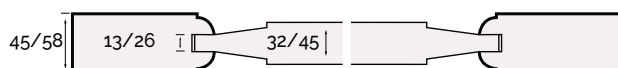
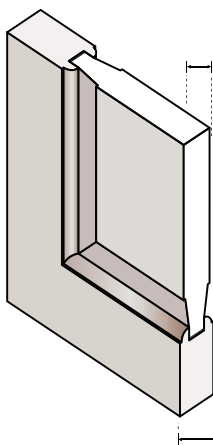
Chippendale FD30

32



Chippendale FD60

45



The Lime Wood Hotel, Lyndhurst, New Forest

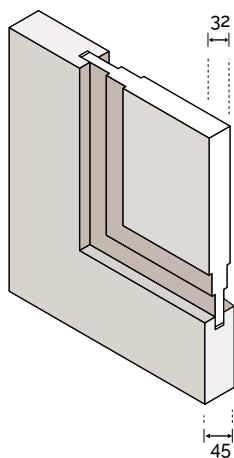


COPELAND PANELS

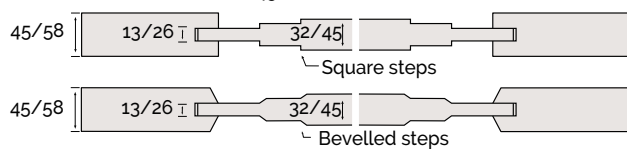
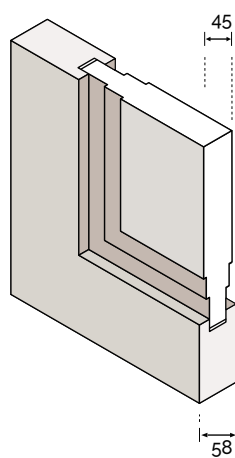
Copeland (The Stepped)

Add a contemporary touch to traditional raised and fielded panel constructions with the Copeland panel incorporating a square shoulder or splay profile. As with the Chippendale panel construction, the panels are tongued into grooves within the framings; they are typically 32mm thick for non-rated and FD30 doors and 45mm thick for FD60.

Copeland FD30



Copeland FD60



Astons Road, Moor Park



STEEL REINFORCED PANELS

Parkside, Wimbledon Village

An Englishman's home is his castle and peace of mind is paramount, especially when it comes to luxury properties.

But unfortunately, security and style don't often go hand-in-hand – especially when it comes to doors.

However, Longden's Churchill doorset is different. Available in a variety of beautiful panelled styles including the Raised and Fielded Chippendale, the Copeland, the Sheraton flat or the contemporary Boarded, each is individually handcrafted to order from the highest quality timber.

Unlike regular fire resistant and sound reduction panelled doors, the Churchill doorset incorporates reinforced steel in each of the panels. It can achieve a sound reduction of up to 30Rw dB for FD30's and 37Rw dB for FD60's.

This makes Longden's Churchill door the natural choice for gunrooms or wine stores, in addition to the more traditional external apartment entrance doors. In fact, whatever your requirements, Longden's experts can suggest, adapt and create the perfect custom door for you.



Weston Park Museum, Sheffield



Chester Square, Belgravia



Whitelands College, Roehampton



Lancaster Road, Wimbledon Village



Bathgate Road, Wimbledon Village

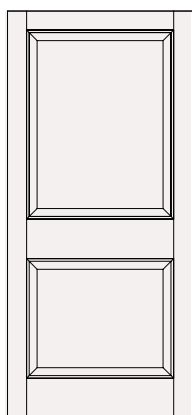
Door Styles

Solid timber hardwood doorsets from Longden come in a number of different styles and constructions to suit luxury hotels, heritage and conservation buildings, as well as modern contemporary homes and commercial offices. The range includes the traditional and contemporary styles below that can be produced in either the Copeland, Chippendale, Hepplewhite or Sheraton styles but, as a bespoke manufacturer, Longden has the ability to create virtually any other style and design. All doors incorporating glass will be factory glazed. Many glazed styles can be certificated with up to 60 minutes fire resistance. Single doors or pairs of doors can be supplied for either single or double action, as well as other configurations for bespoke designs.

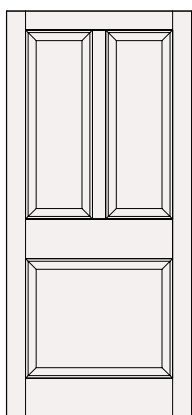
We encourage an early involvement with specifiers to help develop their designs to meet all performance and aesthetic requirements. The majority of the door styles can offer the following performance characteristics: Fire: Non-rated, FD30 and FD60 Acoustics: 18, 28, 30, 36 or 37Rw dB

Panelled Doors

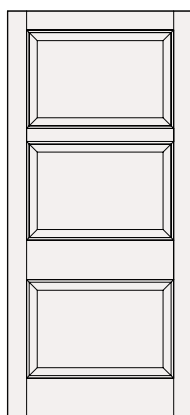
Sheraton, Hepplewhite, Chippendale or Copeland (flat panel or raised and fielded panel)



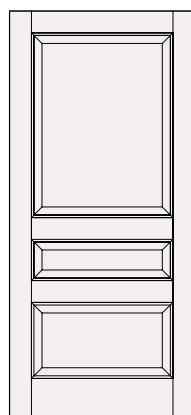
Dorchester



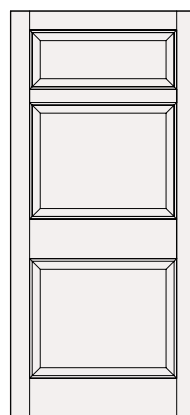
Bath



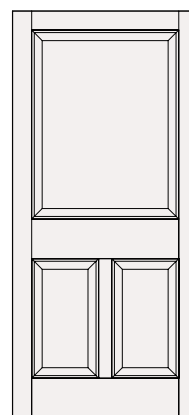
Boston



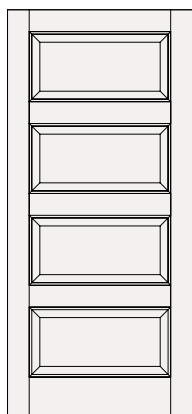
Grosvenor



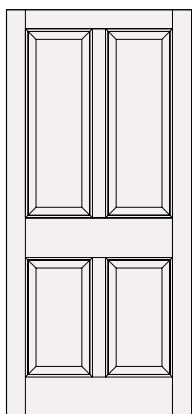
Lincoln



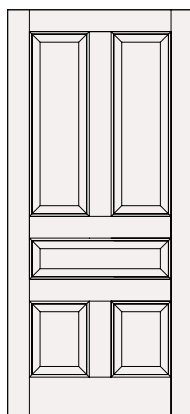
York



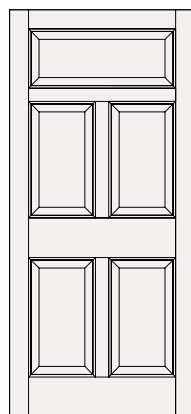
Mayfair



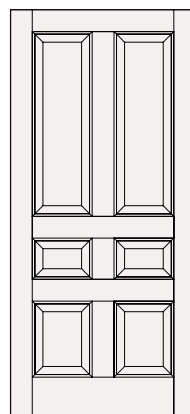
Sussex



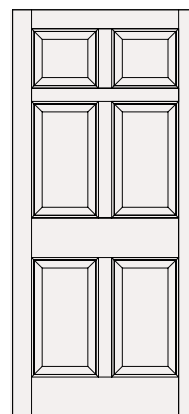
Oxford



Spencer



Buckingham

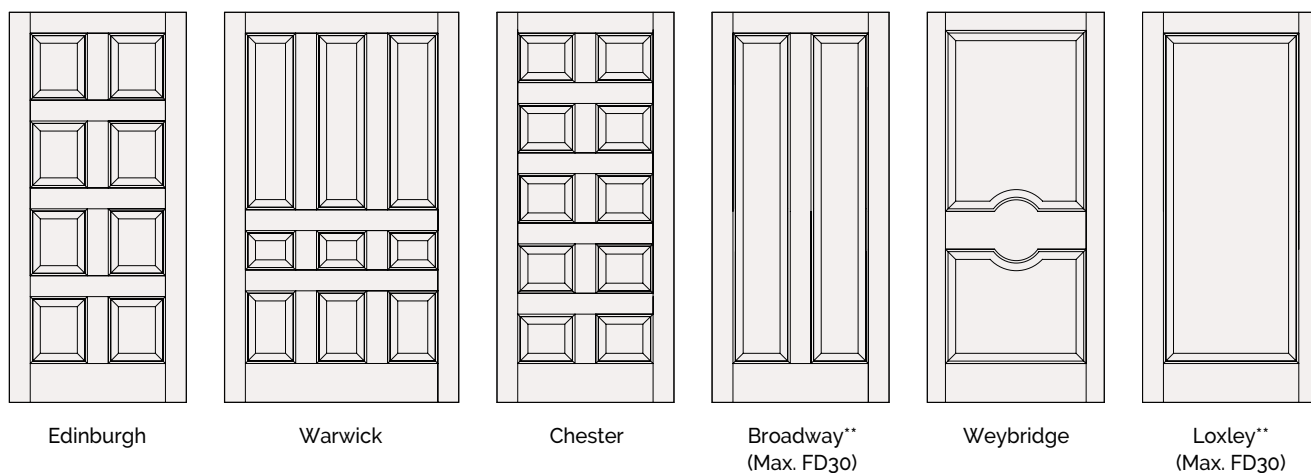


Chelsea

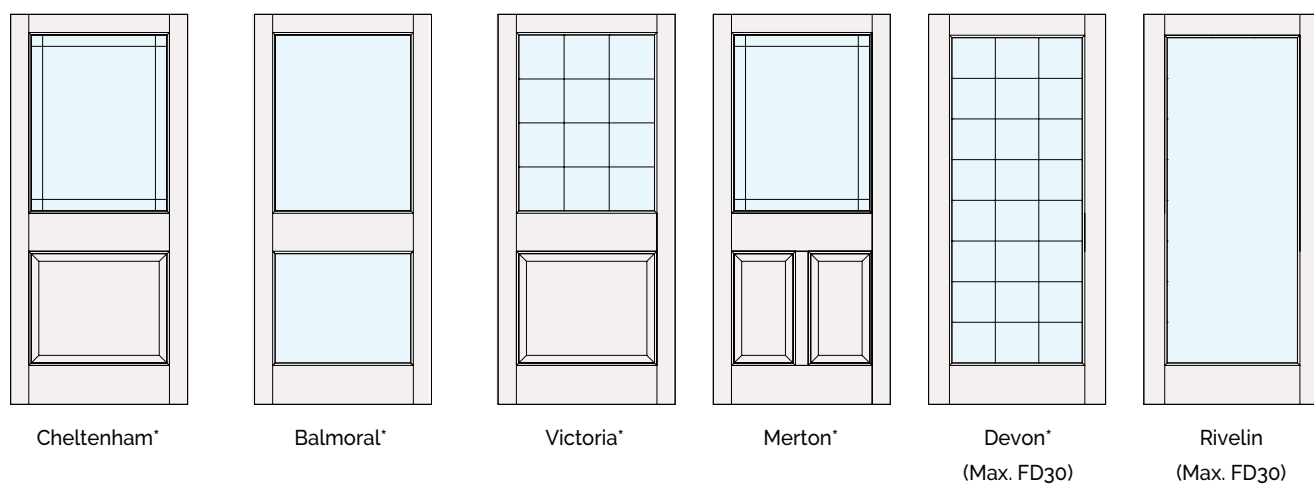
Note: The style and rail dimensions may vary depending on performance specification.

*These styles are created by using planted on glazing bars which are fixed over the glazing (refer to page 40 for standard profile).

Note: Fire rated applications will require the use of specific glass types for FD30 and for FD60. Consult Longden's technical services department for further guidance. Note: The style and rail dimensions may vary depending on performance specification.



Glazed Doors



Boarded Doors



**These doors are all a minimum thickness of 50mm for a FD30 fire rating.

If a greater fire rating is required (than a FD30) then please speak with us as we may be able to change the door construction method.

Door Components

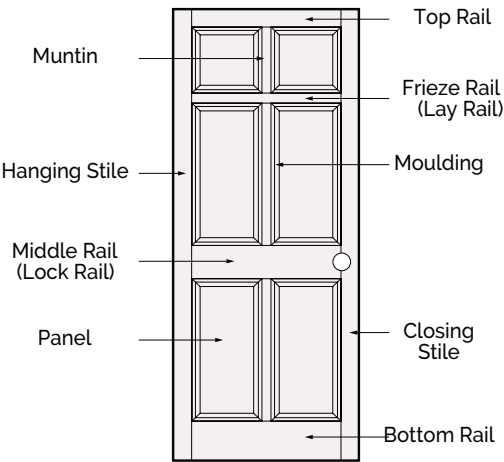
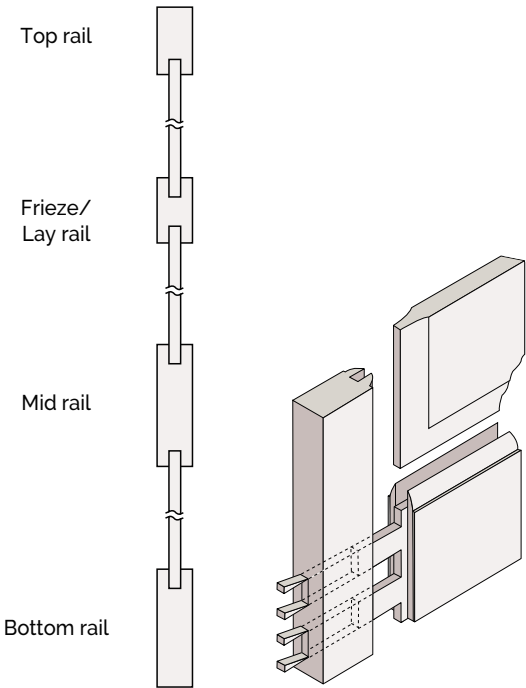
Flat Panel or Raised & Fielded

All Longden panel styles are traditionally constructed with solid timber stiles, rails and muntins. All main joints are through mortice and tenon, wedged joints using a water-proof adhesive for maximum durability. Framing members can be moulded on the edges adjacent to the panel or applied mouldings added.

Unless otherwise specified, finished sizes for framing members will be as below: wherever possible, these should be regarded as minimum dimensions for all doors to avoid any possible fire certification problems.



Vertical section through panelled door



Horizontal section through panelled door



Door Components Table (all dimensions in mm)

	Ovolo		Stepped Ovolo		Square Shoulder		Lamb's Tongue		Duplex		Splay		Stepped Rebate	
	Overall Width	Flat Width	Overall Width	Flat Width	Overall Width	Flat Width	Overall Width	Flat Width	Overall Width	Flat Width	Overall Width	Flat Width	Overall Width	Flat Width
Top Rail & Stiles	108	95	108	95	108	N/A	118	95	110	95	108	102	115	109
Frieze/Lay Rail & Muntins	92	66	92	66	92	N/A	112	66	96	66	92	80	92	80
Mid Rail	187	161	187	161	187	N/A	207	161	191	161	187	175	187	175
Bottom Rail	187	174	187	174	187	N/A	197	174	189	174	187	181	187	181

Door Styles: Balmoral, Bath, Boston, Chelsea, Cheltenham, Devon, Dorchester, Lincoln, Merton, Rivelin, Spencer, Sussex, Victoria, Weybridge & York.* Rivelin can be 45mm thick. If painted then rails & stiles can be Tulipwood but glazing beads must have a timber density of at least 640KG/M3.^ Loxley must be 50mm thick. If painted then the timber density must be at least 640KG/M3.Cheltenham, Balmoral, Victoria, Merton, Devon - where painted the glazing beads must have a timber density of at least 640KG/M3.Other Notes on Door Thickness 45mm for Non-Rated and FD30 (except where the door height is above 2350mm then 58mm thick). 58mm for FD60 doors.

	Ovolo		Stepped Ovolo		Square Shoulder		Lamb's Tongue		Duplex		Splay		Stepped Rebate	
	Overall Width	Flat Width	Overall Width	Flat Width	Overall Width	Flat Width	Overall Width	Flat Width	Overall Width	Flat Width	Overall Width	Flat Width	Overall Width	Flat Width
Top Rail & Stiles	122	109	122	109	122	N/A	132	109	124	109	122	116	122	116
Frieze/Lay Rail & Muntins	135	109	135	109	135	N/A	155	109	139	109	135	123	135	123
Mid Rail	187	161	187	161	187	N/A	207	161	191	161	187	175	187	175
Bottom Rail	187	174	187	174	187	N/A	197	174	189	174	187	181	187	181

Door styles: Boulevard, Broadway, Buckingham, Chester, Edinburgh, Grosvenor, Mayfair, New York, Oxford, Warwick Other Notes on Door Thickness 45mm for Non-Rated and FD30 (except where the door height is above 2350mm then 58mm thick). 58mm for FD60 doors.

In addition to the door style and panel type, the visual characteristics of a panelled door are also determined by any profile mould applied to panel edges of framings.

Moulds

The visual characteristics of a panelled door are also determined by any profile mould applied to panel edges of framings.

Stepped Rebate



Profile Moulds

Duplex



Lamb's Tongue



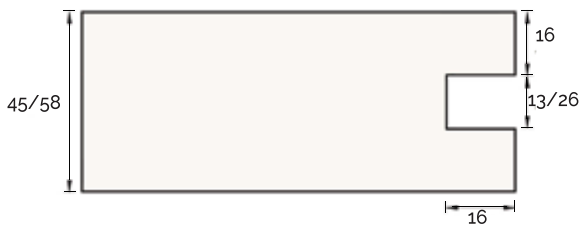
Ovolo



Splay



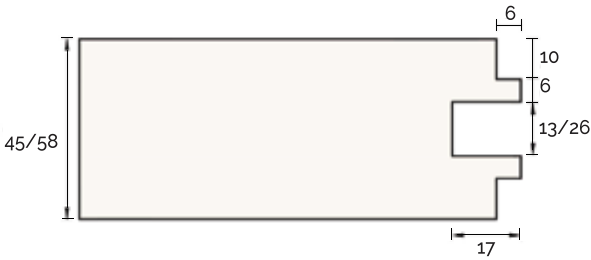
Square Shoulder



Stepped Ovolo



Stepped Rebate

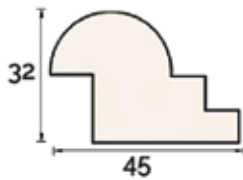


Applied Mouldings

Applied mouldings can be added to provide extra details to panels either flat or raised and fielded. There are two types of applied mouldings bolection and bed. Both can be used in conjunction with square profile moulds. Longden can also replicate existing mouldings where there is a construction requirement.

Bolection Moulds

BL1



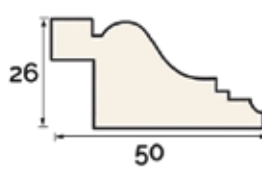
Internal or
External

BL2



Internal or
External

BL3



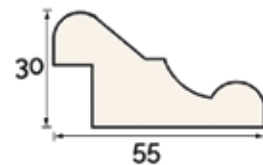
Internal

BL4



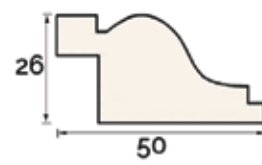
Internal

BL5



Internal or
External

BL6



Internal or
External

BL7



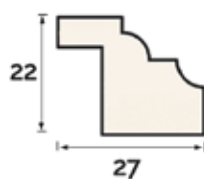
Internal or
External

BL8



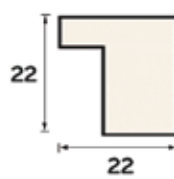
Internal or
External

BL9



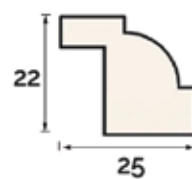
Internal

BL10



Internal

BL11



Internal or
External

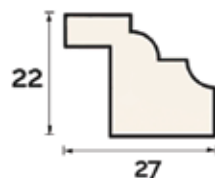
Bolection Moulds for FD60 Glazed Doors

BL8



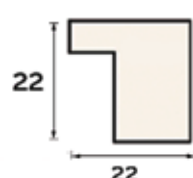
Internal or
External

BL9



Internal or
External

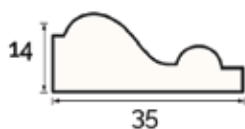
BL10



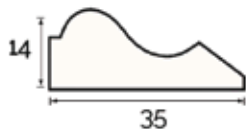
Internal or
External

Bed Moulds

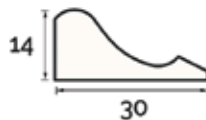
BM1



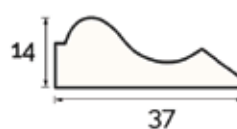
BM2



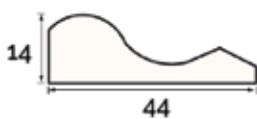
BM3



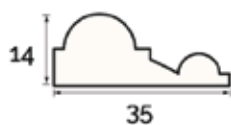
BM4



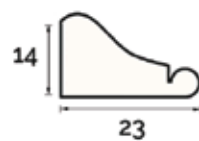
BM5



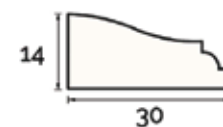
BM6



BM7



BM8



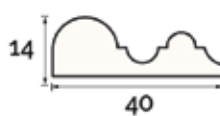
BM9



BM10



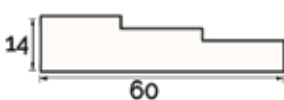
BM11



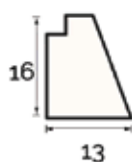
BM12



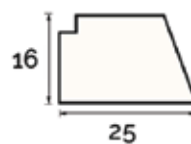
BM13



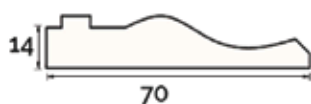
BM14A



BM14B



BM15



BM16A



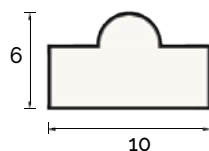
BM16B



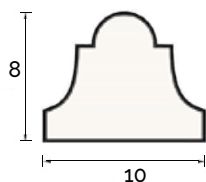
Panel Beads

Three standard panel bead designs are offered. Each can be applied to flat surfaces to create intricate detail.

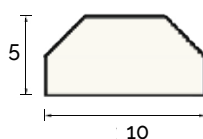
PB1



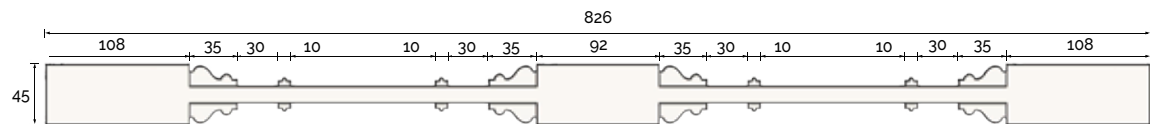
PB2



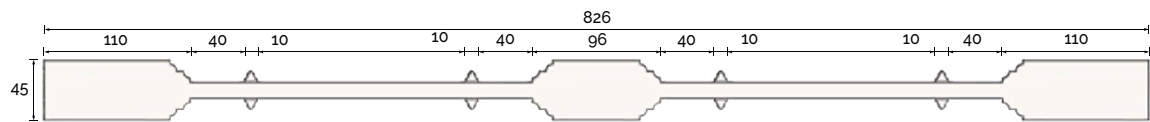
PB3



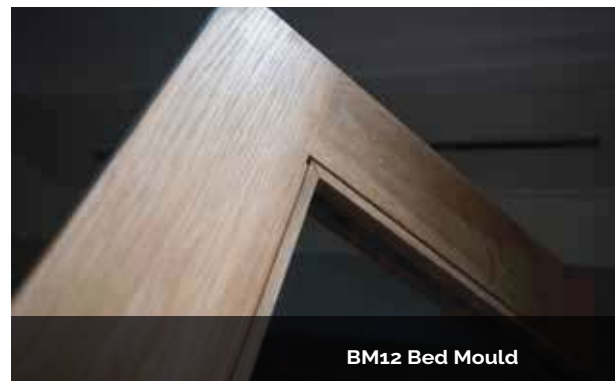
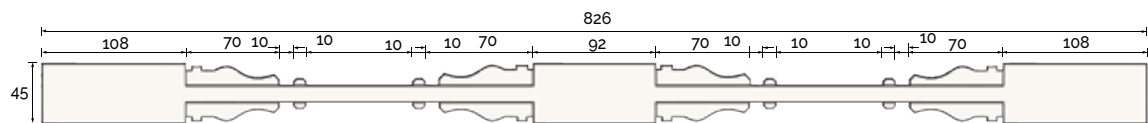
Example of a PB1 panel bead on a Sheraton flat panel with BM1 bed mouldings.



Example of a PB2 panel bead on a Sheraton flat panel with Duplex profile mouldings.



Example of a PB3 panel bead on a Sheraton flat panel with BM15 bed mouldings.



Panels and Mouldings

An Ovolo profile mould



Splay profile mould - bevelled steps



Square shoulder profile mould with an applied BM6 bed mould



Square shoulder profile mould with an applied BL1 bolecion mould



Square shoulder profile mould with an applied BL1 bolecion mould



An Ovolo profile mould



Square shoulder profile mould one side and applied bed mould the other





BURR VENEERS

Burr Veneers - A Rare and Exquisite Option

The beauty of the burr veneer finish reveals itself by the unique and rare formation; where the grain has grown in a deformed manner, creating spectacular swirls and patterns. This highly ornate option offers specifiers and designers an attractive and wholly distinctive surface finish befitting the grandest of environments. Burr is available in a range of veneers, including American black walnut and white oak and can be incorporated into the raised part of the Longden Chippendale panel or in the centre of a Sheraton flat panel, producing a spectacular look - complete with no detrimental effect on the performance of the doorset.

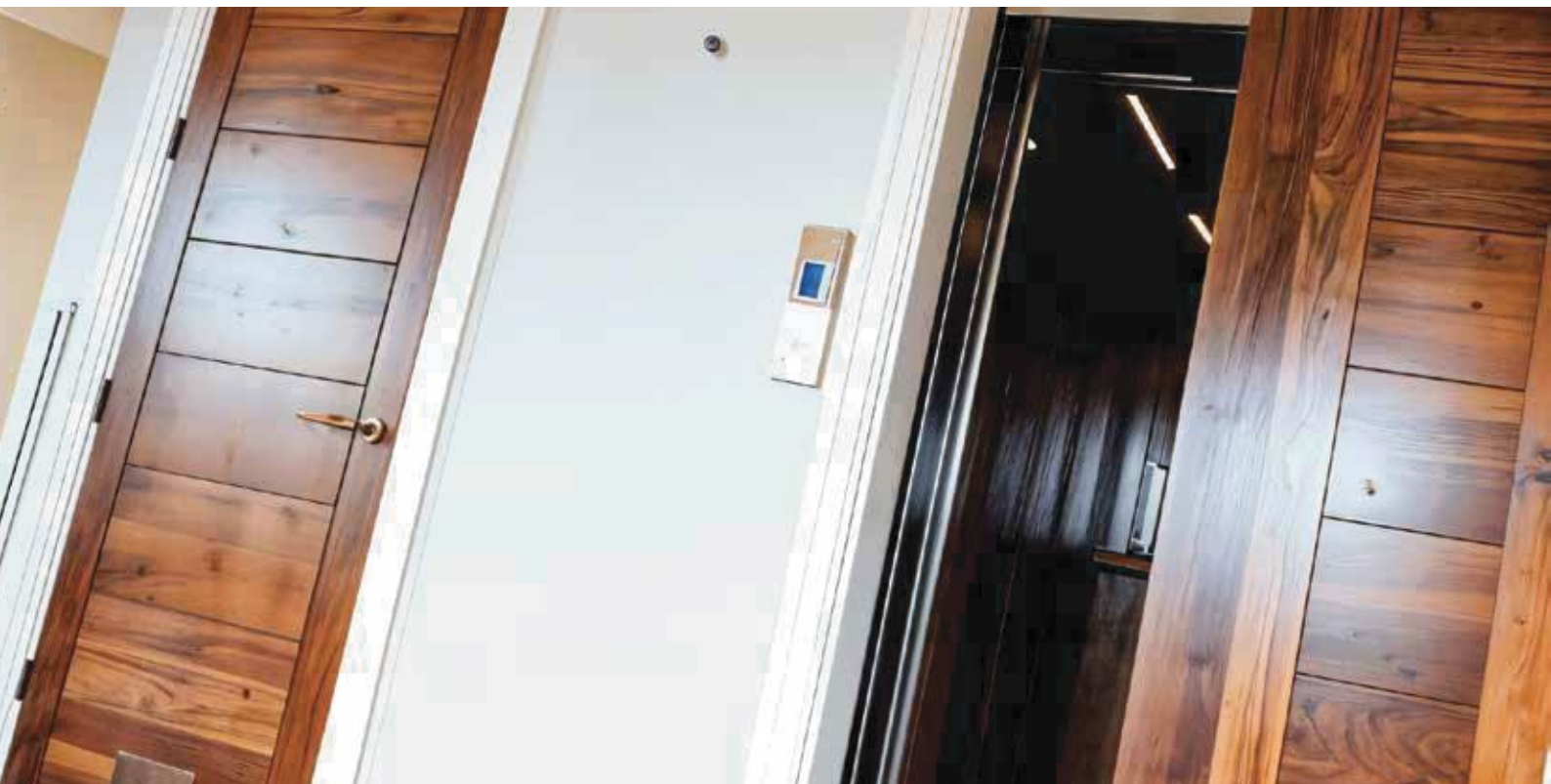
Top: Sheraton panel in American White Oak burr veneer with Duplex moulding and Chippendale panel in American Black Walnut burr veneer with BL7 moulding.

Bottom Left: Chippendale panel in American White Oak burr veneer with BL7 moulding.

Bottom Centre: Sheraton panel American Black Walnut burr veneer with Duplex moulding.

Bottom Right: Sheraton panel in American White Oak burr veneer with Lambs Tongue moulding.





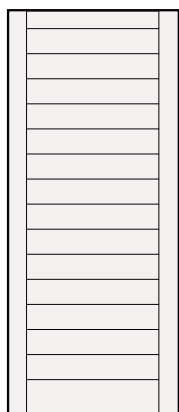
BOARDED DOORS

Craven Hill Gardens, Bayswater

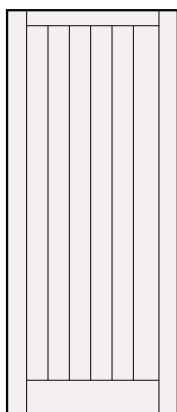
Boarded doors with vertical or horizontal boarding.

With boarded doors both vertically and horizontally boarded styles are generally constructed using 45mm thick x 108mm* (minimum) wide stiles and top rails, and a concealed middle rail. For vertical boarded doors a concealed bottom rail can be provided. Boards are solid, tongued and grooved with 'V' or square joints, and laid out to give equal board widths to suit the door size. Boarded doors will generally be manufactured from Tulipwood for paint finish.

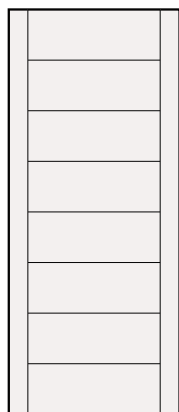
A full range of timbers are available as shown on page 55 and a variety of finishes can be applied. Boarded doors are available non-rated or fire rated for 30 minutes fire resistance, including FD30S for restricted smoke leakage. Glazed apertures can be incorporated with sizes to suit modules of whole board widths, with glass retained by a glazing bead. For FD30 stiles and top rails are 45mm thick x 108mm wide minimum. Note: Longden do not recommend the use of oak for external boarded doors.



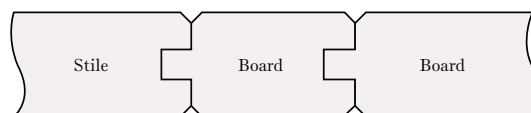
Gloucester



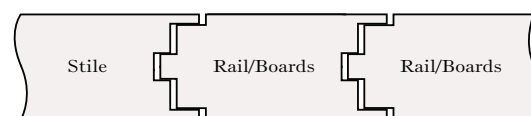
Hereford



Manhattan™



Horizontal section through a vertical boarded door



Horizontal section through a Manhattan boarded door



GLAZED DOORS

Astons Road, Moor Park

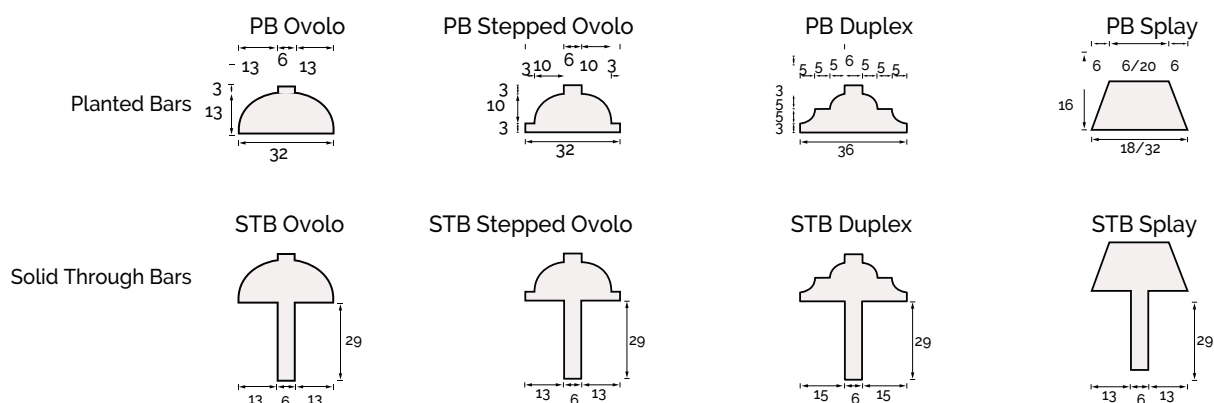
As well as traditional panelled and boarded doors, Longden also offers a fully glazed doorset

The Rivelin fully glazed doorset offers designers and specifiers an option to combine design with performance characteristics. The Rivelin offers 30 minutes fire resistance and acoustic properties with appropriate perimeter sealing.

In addition to fully glazed doors, all panelled door styles shown on pages 31 and 32 can incorporate glazed panels, examples of which are shown.

Planted and Solid Through Bars

Certain door styles may incorporate glazing through the use of planted or solid bar through glazing beads using the standard profiles shown below. Please note that through glazing bars are only suitable for non fire rated doors. Below are examples of mouldings to glass.



GLAZING

Longden glass types

GLASS REF.	THICKNESS	Type		FIRE RATING			INSULATION	ACOUSTIC	FEATURES				SAFETY	WEIGHT
	MM	GLASS	SUPPLIER	NR	FD30	FD60		Rw dB	UNWIRED	WIRED	ETCHED	OBSCURE	RATING	KG/M2
Laminated	6.4	Laminated	✓	✓				33	✓		✓	✓	2B2	15
Laminated	8.8	Laminated	✓	✓				33	✓		✓	✓	1B1	20
Laminated Anti-Bandit	11.5	Laminated	✓	✓				35					1B1	28.5
Toughened	6	Toughened	✓	✓				32	✓			✓	1C1	16.7
Pyrobelite 7	7	Laminated	AGC Flat Glass UK		✓			34	✓			✓	3B3	17
Pyrobelite 9EG	12	Laminated	AGC Flat Glass UK		✓			37	✓		✓	✓	1B1	28
Pyrobelite 12	12	Laminated	AGC Flat Glass UK		✓	✓		39	✓				2B2	40
Pyroclear 60-001	25	Laminated	AGC Flat Glass UK			✓		40	✓		✓	✓	1B1	60
Pyrobel 26	6	Monolithic	Pilkington			✓		32	✓		✓	✓	1C1	16.7
Pyrosheild 2 Safety Clear	6	Cast	Pilkington		✓	✓		32		✓			3B3	16.7
Pyrodur 30-104	7	Laminated	Pilkington		✓			35	✓		✓	✓	2B2	17
Pyrodur 30-203	11	Laminated	Pilkington		✓			37	✓		✓	✓	1B1	27
Pyrodur 60-10	10	Laminated	Pilkington		✓	✓		36	✓		✓	✓	2B2	24
Pyrodur 60-20	13	Laminated	Pilkington		✓			38	✓		✓	✓	1B1	31
Pyrostop 60-101	15	Laminated	Pilkington		✓	✓	30 mins	38	✓		✓	✓	1B1	36
Pyrostop 30-11	23	Laminated	Pilkington			✓		41	✓		✓	✓	1B1	49
Pyroguard (EW 30)	7	Laminated	Pyroguard UK		✓			33	✓		✓	✓	3B3	17
Pyroguard (EW Maxi)	11*	Laminated	Pyroguard UK		✓			35	✓		✓	✓	2B2	26.7
Pyroguard (Ei 60)	15	Laminated	Pyroguard UK		✓		30 mins	38	✓		✓	✓	1B1	37.6
Pyroguard (Ei 30)	23	Laminated	Pyroguard UK			✓		40	✓		✓	✓	1B1	58
Pyroguard (EW 60)	11	Laminated	Pyroguard UK			✓		35	✓		✓	✓	2B2	27
Pyrostem	6	Cast	Pyroguard UK		✓			32		✓			3B3	18
Pyran S	6	Toughened	Schott UK Ltd		✓	✓		31	✓			✓	1C1	14
Pyranova 15 – S2.0	11	Laminated	Schott UK Ltd		✓		30 mins	36	✓			✓	1B1	26
Contraflam Door Lite	11	Laminated	Vetrotech Saint-Gobain		✓			37	✓				1B1	25
Contraflam (EW 60)	16	Laminated	Vetrotech Saint-Gobain		✓	✓		39	✓			✓	1B1	36
Contraflam Lite	14	Laminated	Vetrotech Saint-Gobain		✓	✓		38	✓			✓	1B1	31

SPECIALITY GLAZING

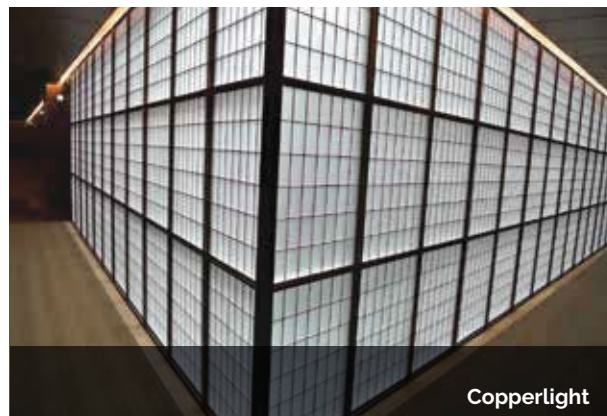
Longden can offer speciality glazing options which adds something truly special to your glazed door, doorset or screen.

Longden can offer a custom design service for all glazed products including a wide range of decorative effects such as acid etching, sand blasting, glass painting, traditional leaded glass, colour laminated glass and glue-chipping – an age-old process which uses special glues to remove small pieces of glass from the surface to give a beautiful, random, fern-like effect. By combining some of these processes with other decorative methods, even more amazing finishes and patterns can be achieved.

As a bespoke manufacturer, Longden can work closely with designers to produce a virtually unlimited range of special effects and designs.

Copperlight Glazing

The Copperlight glazing offers a retrospective style and elegance borrowed from the 1920s Art Deco period. Today we can combine a Copper and Stainless Steel framing with 6mm glass to create a glazing principle, which is extremely strong and attractive.



Copperlight



Copperlight

Steelight Glazing

Steelight glazing is a similar principle to the traditional Copperlight but adapted to the use of stainless steel. As with Copperlight 6mm, glass is used to produce totally clear or diffused glazing options.

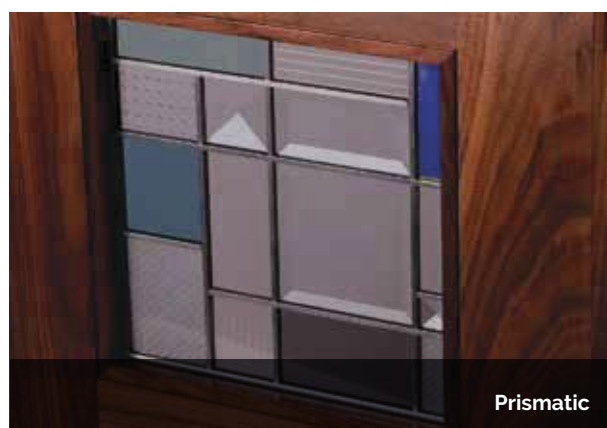


Steelight

Prismatic Steelight Glazing

The Prismatic glazing system is an extremely strong constructive method to contain a highly decorative and artistic allows for a more creative and attractive input, both in the use of the steelwork and the various types of glass, including the use of bevelled and prismatic glass to accommodate contemporary design and architectural standards. In addition, design variations such as contrasting glass coloured glass and textures bring to life any environment.

Copperlight, Steelight & Prismatic are available as Non-Fire only.



Prismatic



SCREENS

West Tenter Street, London

Intumescent strips and seals

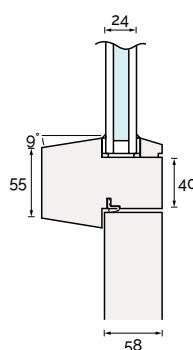
Intumescent strips to suit the required fire performance will be fitted within door leaf edges or frames to ensure certification. Where smoke protection is also required, combined intumescent and smoke seals will be fitted. If necessary, intumescent strips can be supplied for on-site fitting to existing frames. As a default the colour of intumescent strips will be chosen as the closest match to the choice of timber.

Glazed screens

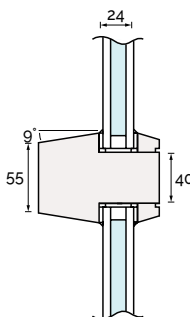
Door leaves can be incorporated into glazed screens constructed using frame sections which conform to fire performance certification. It should be noted that in some situations safety glass may be required. Screens are supplied ready for glazing by others on-site. The glass can be supplied loose, cut to size with mitred beading.

External glazed screen options

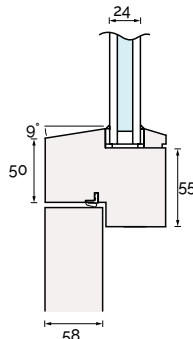
Inward opening



Glass to glass



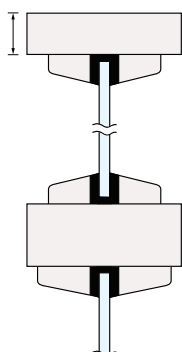
Outward opening



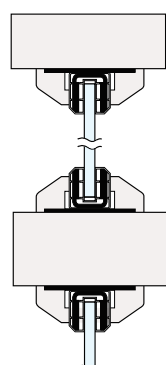
Glazed screens (Fire)

32

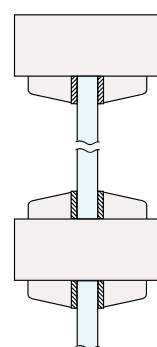
Non-rated/FD30



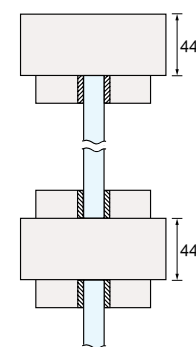
FD60



FD60/60 - FD60/30



FD60/60 - FD60/30



ACCESSORIES

Intumescent Packs

To help you meet performance requirements for fire and smoke, Longden can provide intumescent packs containing all the necessary seals for fitting within door leaf edges or frames. The seals are colour matched to the chosen timber and are available as fire seals or where smoke protection is also required, combined fire and smoke seals.

Door Protection

Available upon request, Longden can provide durable door protection sheets (shown opposite) to help protect your door or doorset against on-site damage.

Ironmongery

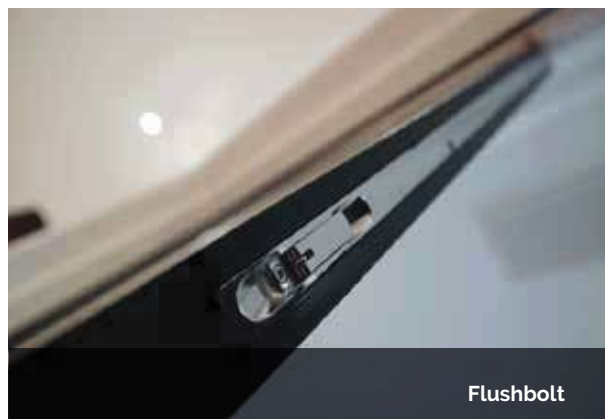
We can offer a complete ironmongery fitting service for the Longden range. In this case, doors and doorsets are delivered with factory fitted ironmongery and hinges. However, all protruding items, such as handles and strike plates, are supplied loose for on-site fitting. Factory fitting as many items as possible ensures a perfect fit and avoids the risk of damage on-site. Early discussion of ironmongery requirements with us is essential to avoid problems. For example, fitting the wrong lock could destroy mortice and tenon joints, invalidating fire certification and guarantees. It is also important to ensure you fit the correct lock type to match your lever or knob type. We can ensure you are selecting the right combination. Locks offered include: Mortice locks, Sash locks, Dead locks and Bathroom locks. For items supplied by others, it is strongly recommended that approved ironmongery is used for all fire rated doors, otherwise certification may be invalidated. Please visit our website for further information.

Finishes

Virtually any form of finish can be applied to Longden timber doors and doorsets, including primed for paint, clear varnish, stain, wax and oil finish, all of which can be factory applied. Please note that with clear finishes, variations in colour and grain of timber may occur as timber is a natural material. Doors ordered for on-site painting can be supplied pre-primed. Longden do not recommend that product is left clean for on-site finishing. Standard door finishes: 2 coats primer Standard consists of two water-based primer, de-nib between coats. Top coats added on-site by brush or spray and should be of a quality suitable to the location either internal or external. 2 coats acid catalyst lacquer This has a 30% – 40% satin sheen as standard. Alternatively, matt 10% – 20% or gloss 50% – 70% can be supplied. Tinted lacquers are also available. Note: For the best results, Longden recommends the use of a minimum of 20% matt lacquer to complement your doorset.

Waterborne microporous

This is the standard finish used on external doors and doorsets.



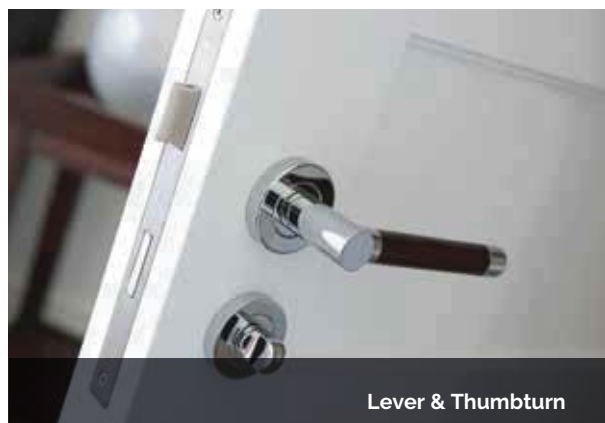
Flushbolt



Projection Hinge



Hinges



Lever & Thumbturn



EXTERNAL DOORS

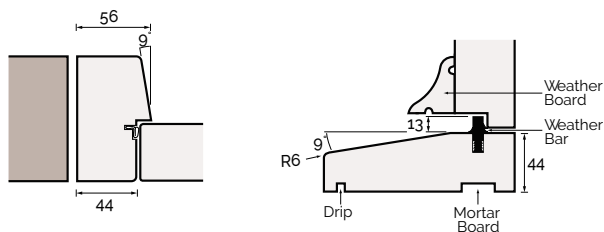
Craven Hill Gardens, Bayswater

Longden offers an extensive range of external doorsets.

The external doorsets range from the traditional panel configurations, such as Chippendale and Sheraton, to more contemporary designs which include, stable doors, boarded doors, french doors and louvred doors.

Longden has developed the Churchill external panelled door which is available in any door style, as shown on pages 31 and 32. The Churchill provides additional security through the inclusion of a steel plate within the construction. Longden can offer weather boards, weather cills and a low profile threshold solution for Part M and BS8300 compliance as indicated in the drawings below.

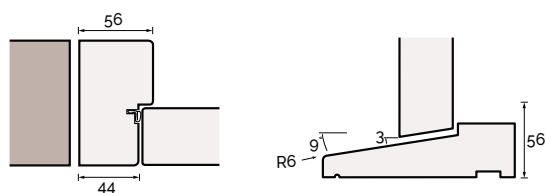
Inward opening



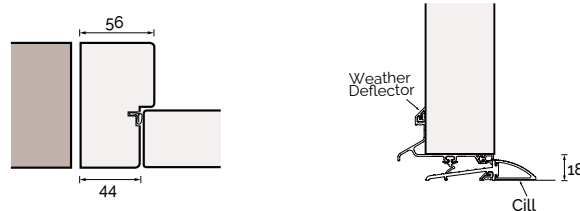
Inward opening – Part M and BS8300 compliant



Outward opening



Outward opening – Part M and BS8300 compliant

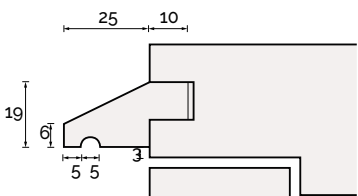


External Sheraton doors can only be supplied in paint finish.

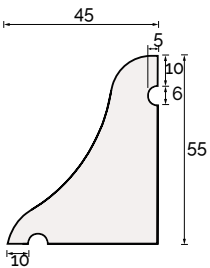


St John's Almshouses, Bath

Frame head drip



Standard weatherboard



Camp Road, Wimbledon Village



Belgrave Square, London



FRAMES

Wentworth, South Yourshire

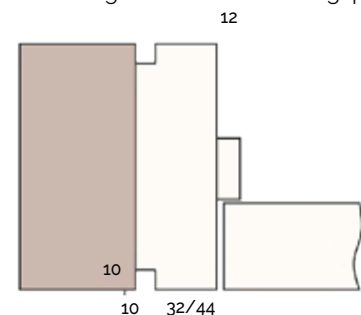
Longden timber doors can be supplied with matching frames or as factory pre-hung door-sets.

Longden doorset frames can be manufactured from the same solid timber as the door leaves. Generally, they are manufactured to the sections shown but alternative designs incorporating mouldings can be accommodated. These frames are for both internal and external use. Typically for exclusive home projects, frames and architraves are supplied primed for on-site painting. Frames and architraves can also be supplied in matching timber to complement the doors.

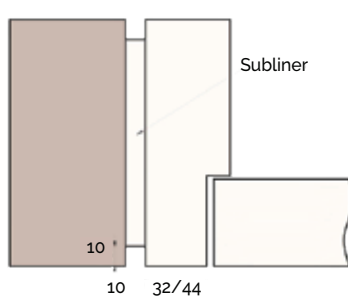
Sidelights and fanlights

Sidelights and fanlights can also be incorporated.

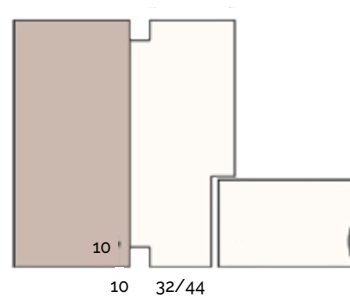
Plain lining frame with shadow gap detail



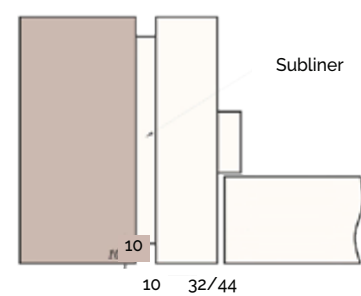
Rebated frame with hardwood subliner

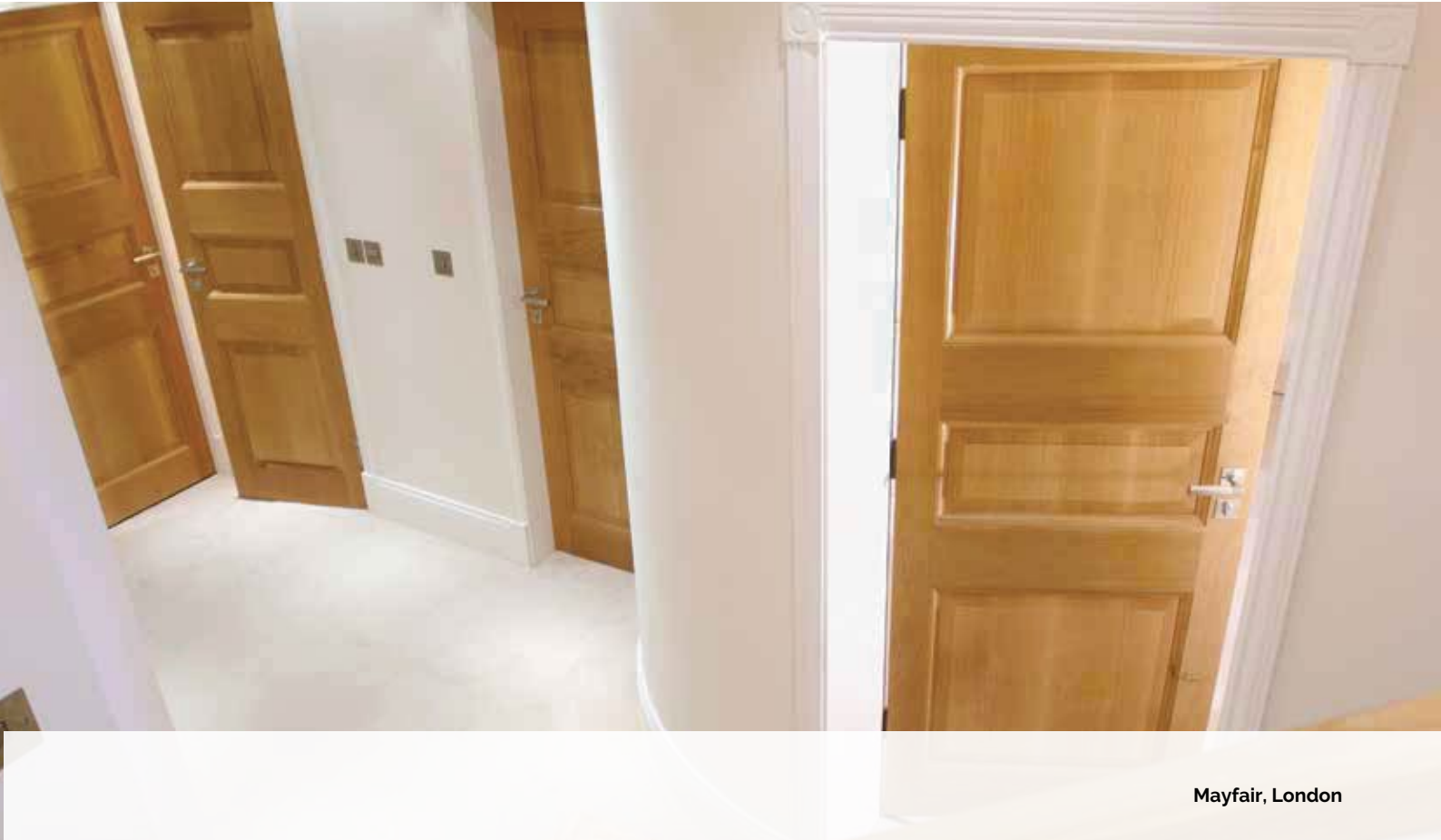


Rebated frame with shadow gap detail

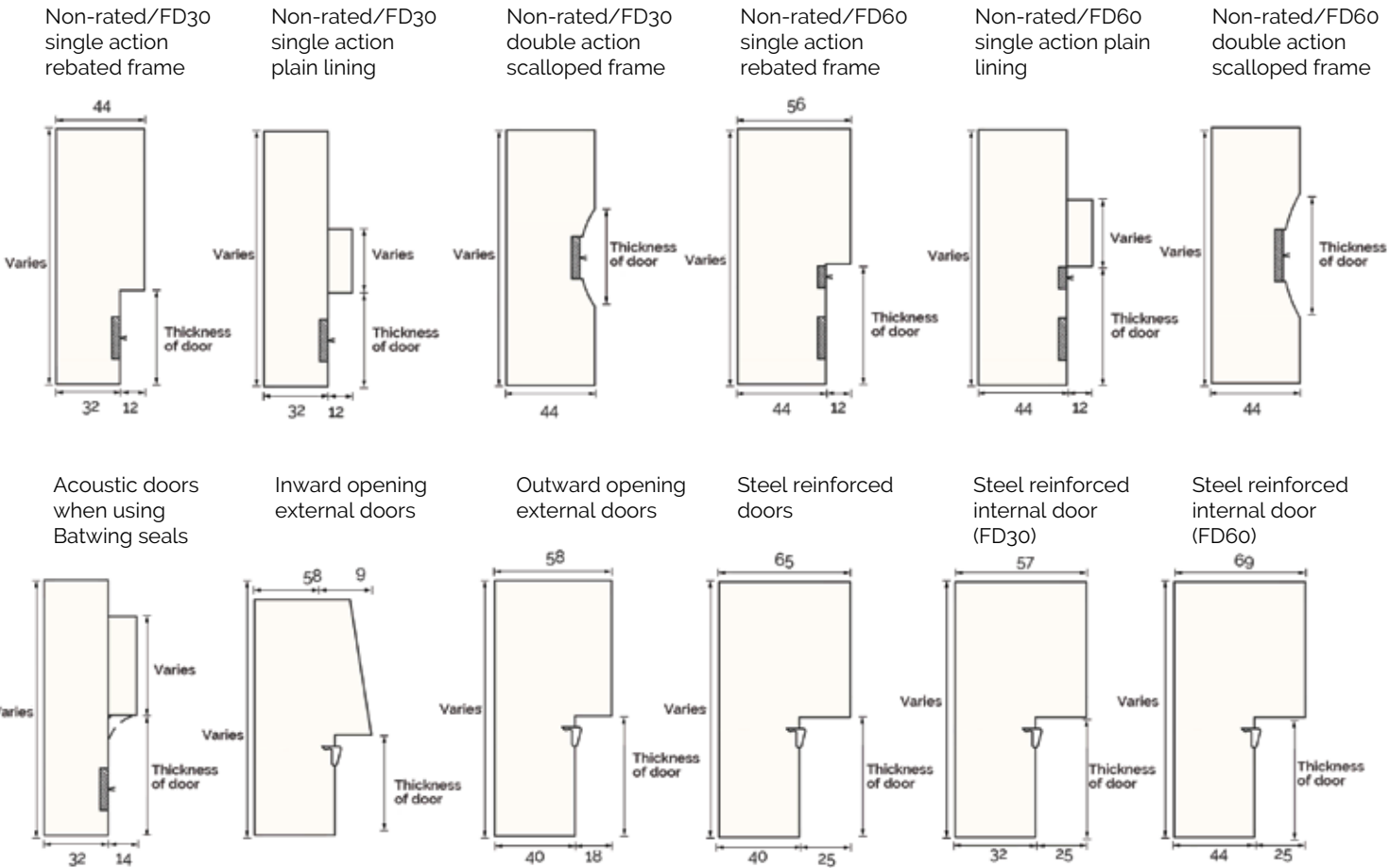


Plain lining frame with hardwood subliner





Mayfair, London



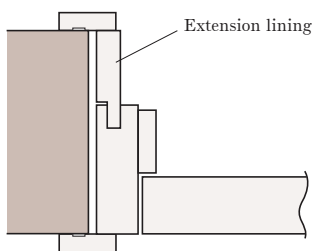


EXTENSION LINING

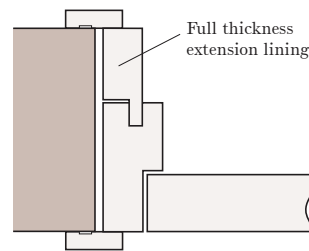
Parkside, Wimbledon

Extension linings can be used to extend the width of the frame to fill the reveal. Alternatively, Longden can supply reveal panelling to complement doors and other joinery.

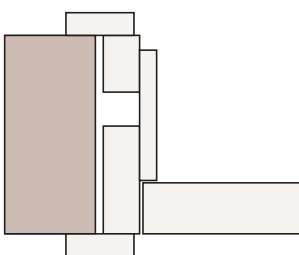
Lining and stop with a stepped extension lining



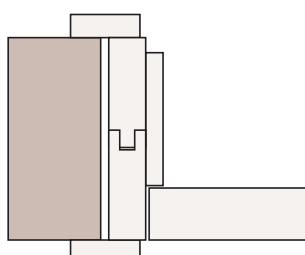
Rebated frame with a full thickness extension lining



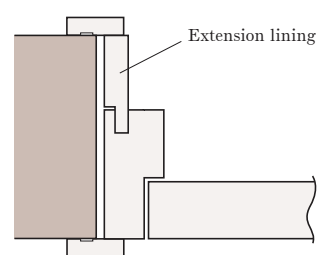
Split frame



Full thickness extension with loose stop



Rebated frame with a stepped extension lining

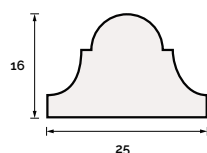


DADOS, SKIRTING, ARCHITRAVE AND PLINTH BLOCKS

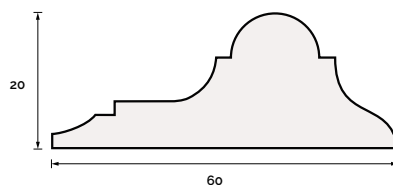
Below are our standard profiles for dado mouldings, skirtings, architraves and plinth blocks. However, we are usually able to match existing profiles or bespoke profiles that may be required.

Dado mouldings

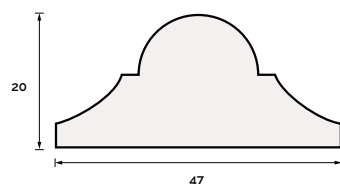
DD1



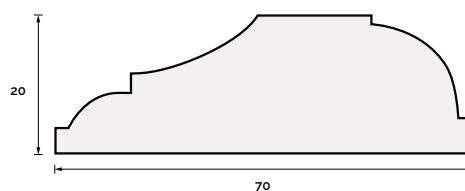
DD3



DD2

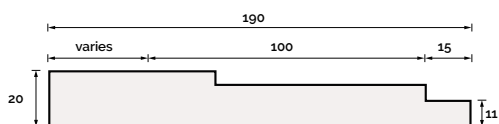


DD4

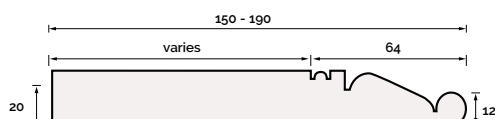


Skirtings

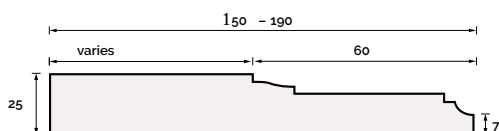
SKRT1



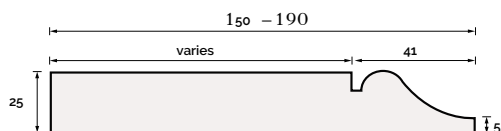
SKRT2



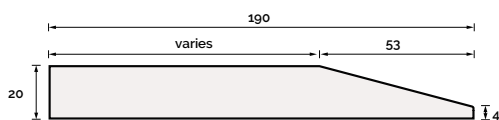
SKRT3



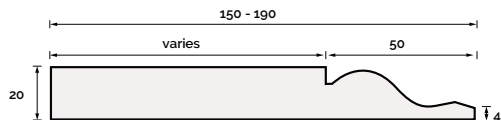
SKRT4



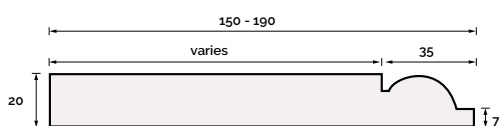
SKRT5



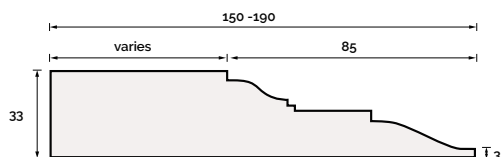
SKRT6



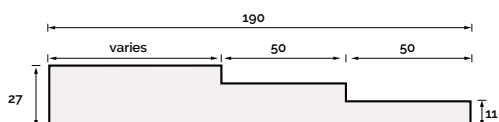
SKRT7



SKRT8



SKRT9



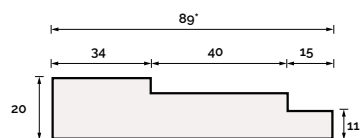
Note: for sizes above 190mm a two piece construction can be supplied.



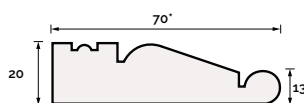
The Dorchester, Mayfair

Architraves

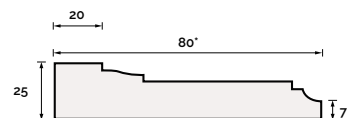
ARC1



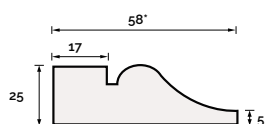
ARC2



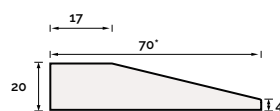
ARC3



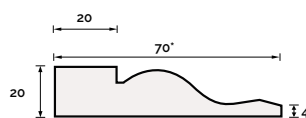
ARC4



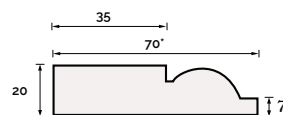
ARC5



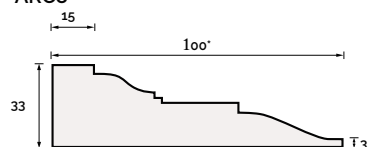
ARC6



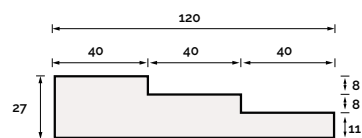
ARC7



ARC8

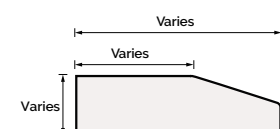


ARC9

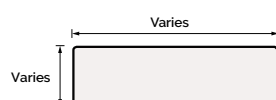


Plinth blocks

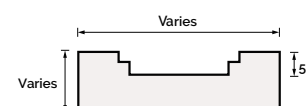
PBK1



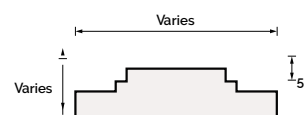
PBK2



PBK3



PBK4





JOINERY DETAILS

Lime Wood Hotel, Lyndhurst, New Forest

Longden has used its many years of experience and expertise to develop joinery techniques that enhance the overall appearance of doors when certain visual effects are required. Such details include:

Stopped chamfer

A stopped chamfer detail can be applied to rails and stiles as shown.



Stopped Chamfer



Bead And Butt



Gun Stock Shoulder

Bead and Butt

A traditional door construction/style. Probably the most famous example of this is the black front door to 10 Downing Street, London.

Gun stock shoulder

This detail is used where doors have a combination of solid panels and vision panels. It creates a transitional joint between the two panels as illustrated.

THE CASE FOR DOORSETS

The doorset is a fully finished engineered element, comprising frame, pre-hung door leaf and essential ironmongery, all matched and pre-assembled in the factory. It is delivered to site as a package for reassembly and simple installation.

In contrast, traditional door assemblies consist of the same elements but usually from various different sources, with final assembly and finishing carried out on-site – frequently involving different trades. Longden doorsets are designed as complete, engineered units to meet specific performance requirements and are manufactured to exacting standards from established components under factory conditions ensuring:

- Minimised intervention on-site
- Consistent fitness for purpose
- Straightforward replication of certified test conditions within the building

The importance of doorsets is acknowledged by BS 8214: 1990 'Code of practice for fire door assemblies with non-metallic leaves': "It is strongly recommended that pre-hung, pre-finished, fire doors (i.e. doorsets) are specified whenever possible as this reduces the amount of site work necessary and allows normal factory quality control procedures to be applied to the finishing operations". BS 8214 calls for testing of complete fire door assemblies or doorsets, fully representative of all aspects of how they will be used on-site. For door assemblies, this is far more problematic with potential for combinations of mismatched, uncertified components and poor site practices. In addition to fire resistance, other performance criteria can be achieved and maintained more easily with doorsets, including:

- Smoke containment
- Sound reduction
- Durability

This is due to the factory finishing, matching and fitting of the various components which work together to meet performance levels.

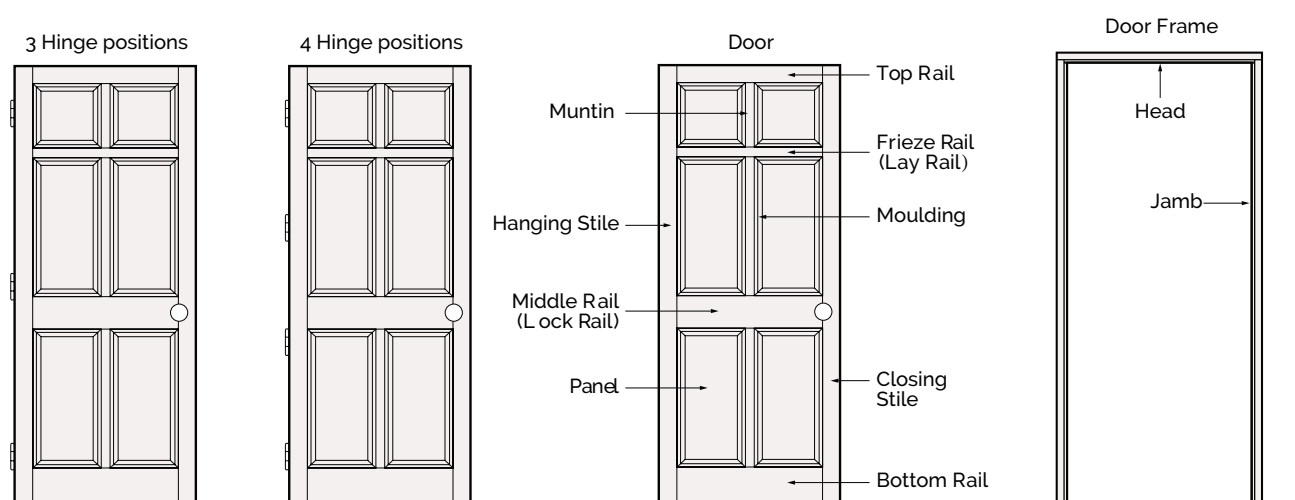
Independent research has addressed commonly held misconceptions about the capital costs of doorsets by using an objective comparison of realistic, current market prices compared with those of site-assembled unitary components. This research used single stage tenders for three real projects from reputable, national door contractors. With all building types considered, savings in capital costs were shown for doorsets over the average for contractors using site assembled unitary components clearly showing that: Doorsets can save up to half the initial capital cost of traditional door assemblies.

The doorset concept is a well-established example of the prefabrication and off-site product techniques advocated today under the 'Modern Methods of Construction' banner. Current initiatives, based on 'Constructing Excellence' principles, call for greater efficiency and savings in all areas of the building industry, not just construction costs. To satisfy these requirements, research has analysed differences in the procurement process and consequential time implications for architect, consultant quantity surveyor and main contractor's estimator, between doorsets and unitary component assemblies. This analysis showed that doorsets substantially simplified the procurement process and offered overall time/cost savings of 50%. Over 60 different components make up a typical storey height door assembly. It is generally accepted within the building industry that:

Substantial installation time and cost savings are achieved on-site with doorsets over unitary component assemblies.

"There is an overwhelming case for the use of performance doorsets in place of site assemblies of unitary door components in today's building industry."

Doorset terminology



Note: Doorsets with a height exceeding 2100mm will require 4 hinge fittings.

*Independent research carried out by Gleeds Consultancy.



Western House Hotel, Ayr

Design considerations

Configurations and handings

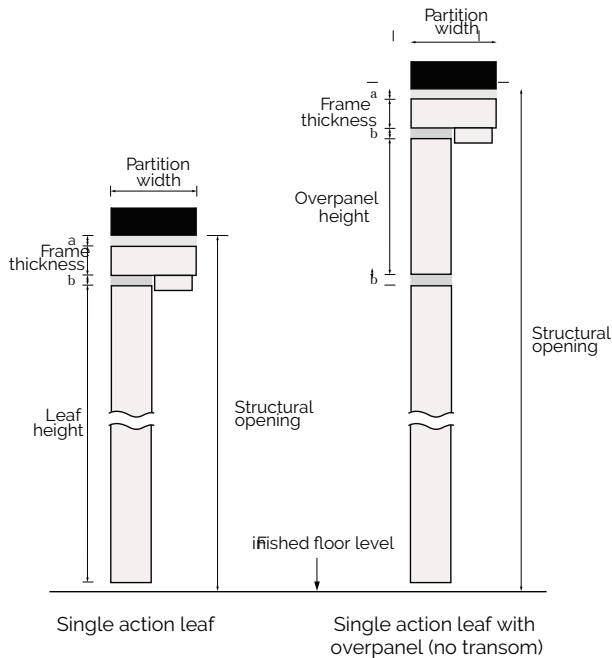
Configuration, size, construction and performance characteristics are all interrelated. *As a guide, individual doors with a maximum width of 1076mm or a maximum height of 2600mm are achievable for FD30 doors and 1019mm wide by 2540mm high for FD60's. Specific size ranges for particular products can be found in individual product data sheets. Longden manufactures all door leaf sizes to suit individual requirements.

* Note: All sizes mentioned are dependent upon the door style.

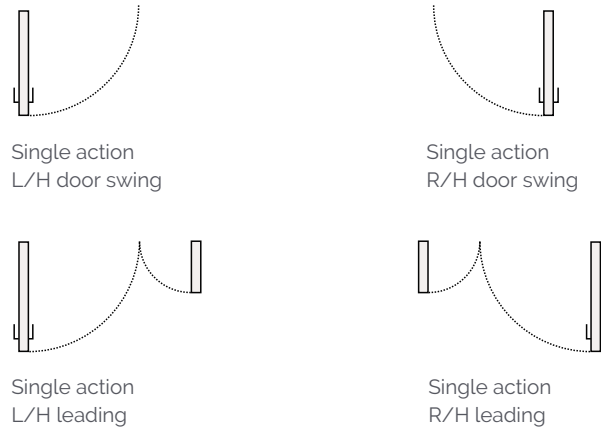


TOLERANCES AND DIMENSIONS

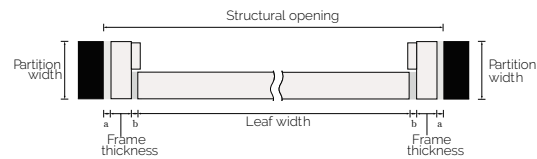
The drawings below set out the terminology and tolerances for dimensioning doorsets.



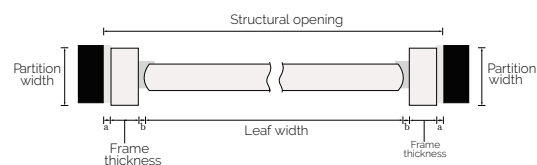
Handings



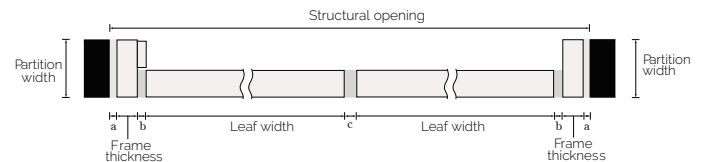
Single action single leaf



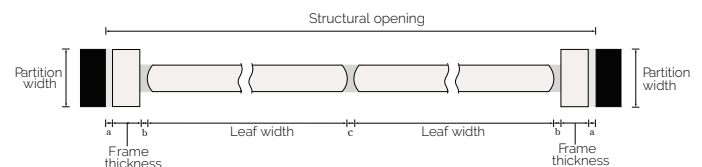
Double action single leaf



Single action pair of leaves



Double action pair of leaves



a = 7mm tolerance between structural opening and frame assembly

b = 3mm gap

c = 4mm at meeting stiles

* Note: Dependent on hinges or pivot set.

TIMBERS

All Longden doors are manufactured from correctly seasoned timber. The density of timbers varies depending on the species and moisture content.

The asterisk indicates that the density can vary more than 20%. For 640Kg/m³ for FD60s the density needs to be a minimum of 530kg/m³ excluding Ash and Iroko. Use of Beech is not recommended by Longden. Moisture content for internal doors and doorsets is recommended to be 10% + - 2% and for external doors and doorsets 16% + - 3%.

SPECIES	DENSITY (KG/M ³)	SUITABLE EXTERNAL	MAX. FD	FSC
ACCOYA	510	YES	NR	YES
ASH, AMERICAN*	670*	NO	FD30	YES
BEECH, EUROPEAN ^	720^	NO	FD60	YES
CHERRY, AMERICAN	580	NO	FD60	YES
CHESTNUT, SWEET	560*	NO	FD60	YES
DOUGLAS FIR	530	NO	FD30	NO
IDIGBO*	560*	YES	FD60	YES
IROKO	660	YES	NR	NO
KOTO	560	NO	FD30/FD60	YES
MAHOGANY, AFRICAN*	530*	NO	FD60	YES
MAHOGANY, BRAZILIAN*	560*	NO	FD60	YES
MAPLE, ROCK	740	NO	FD60	YES
MERANTI*	710*	YES	FD60	YES
MOVINGUE	680	YES	FD60	NO
OAK, EUROPEAN*	720*	YES	FD60	YES
OAK, AMERICAN RED	790	NO	FD60	YES
OAK, AMERICAN WHITE	770	YES	FD60	YES
SAPELE	640	YES	FD60	YES
SYCAMORE	630	NO	FD60	YES
TEAK	660	YES	FD60	YES
TULIPWOOD	510	NO	FD30	YES
UTILE	660	YES	FD60	YES
WALNUT, AMERICAN BLACK	660	YES	FD60	YES
WALNUT AFRICAN	560	YES	FD60	YES
WALNUT FRENCH	670	YES	FD60	YES
WENGE	880	YES	FD60	YES

PERFORMANCE CHARACTERISTICS

FIRE RESISTANCE

Building Regulations Approved Document Part B, 'Fire safety', identifies situations where fire resisting doors and doorsets – (described as 'fire doors') are needed, as well as the restriction of smoke leakage.

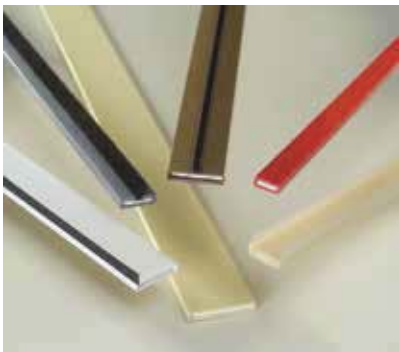
It also specifies the level of protection (30 or 60 minutes) and refers to appropriate test standards. Part B firmly recognises the relevance of UKAS accredited, independent product conformity certification schemes to ensure that fire resistance performance levels are actually achieved on-site. Independent initiatives are designed to ensure that installed fire doors perform as intended and members are subjected to rigorous and comprehensive appraisal. Audits are usually undertaken by the ISO 9000 Inspectorate during manufacture and only approved glazing and seals are used. Building Regulations concentrate on protecting occupants but there is also protection of the building itself to consider, particularly with historic properties. Fire doors offer the most effective means of containing fire and smoke, so protecting historic building fabric without the damaging effects of sprinklers. The Longden range can achieve up to FD60 (60 minutes) fire rating, with smoke control where needed, fully certified and supported by Longden.



FIRE & SOUND REDUCTION

		PANELLED						BOARDED		RIVELIN	
		SHERATON/HEPPLEWHITE			CHIPPENDALE/COPELAND						
Fire Performance to BS 476 Part 22		Non-Rated	FD30	FD60	Non-Rated	FD30	FD60	Non-Rated	FD30	Non-Rated	FD30
Suitable for internal use		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Suitable for external use		✓	✗	✗	✓	✓	✓	✓	✓	✓	✓
Thickness		45-58mm	45-58cm	58mm	45-58mm	45-58mm	58mm	45mm	45mm	45mm	45mm
Smoke Control		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sound reduction	Standard Seals	30RwdB	30RwdB	32RwdB	30RwdB	30RwdB	30RwdB	32RwdB	32RwdB	30RwdB*	30RwdB*
	Acoustic Seals	36RwdB^ 37RwdB~	36RwdB^ 37RwdB~	36RwdB^ 37RwdB~	36RwdB^ 37RwdB~	36RwdB^ 37RwdB~	36RwdB^ 37RwdB~	36RwdB^ 37RwdB~	36RwdB^ 37RwdB~	34RwdB^* 35RwdB~	34RwdB^* 35RwdB~

* Based on glass performance. ^ with a drop seal
Seal arrangements vary depending on the required acoustic requirement. ~ with a swipe seal



*This is for guide purposes only. Other factors need to be considered.

SOUND REDUCTION

Noise can be a major nuisance and achieving reasonable levels of acoustic control with sound reduction between different parts of a building or between outside and inside, may be essential to the usability and viability of historic properties.

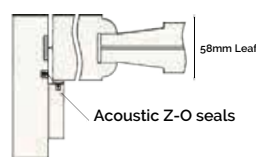
Original doors and frames are largely ineffective, particularly if they are in poor condition, as any gaps allowing leakage of air will substantially reduce sound reduction. Statutory control of sound reduction is currently limited, with Part E of the Building Regulations covering converted (as well as new-build) housing and other residential uses. Here, doors between communal corridors and rooms in flats should have good perimeter seals and achieve at least a sound reduction index of 29Rw dB or have a minimum mass per unit area of 25kg/m². Whilst there is some guidance on doors within a dwelling, no specific values are applied in the Regulations – as is the case for entrance doors to the outside. It could be argued that more needs to be done in a world of increasing housing densities and growing external noise. Longden doorsets can achieve a sound reduction value of 30Rw dB incorporating acoustic seals, while up to 37Rw dB is available with more specialised panelled door constructions whilst maintaining the original aesthetic appearances. Please refer to the table on page 56. The tested values shown in the table below relate to single leaf doors. Double leaf pairs are available, however a slight reduction in performance can be expected from the single leaf value.

The following provides general guidance on acoustic privacy in relation to sound reduction:

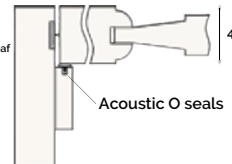
25R wdB	Normal speech easily overheard
30R wdB	Loud speech clearly overheard
35R wdB	Loud speech can be distinguished
40R wdB	Loud speech heard but not intelligible
45R wdB	Loud speech heard faintly
50R wdB	Loud and shouting speech can be heard with difficulty



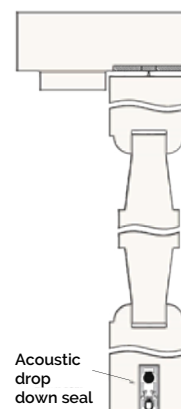
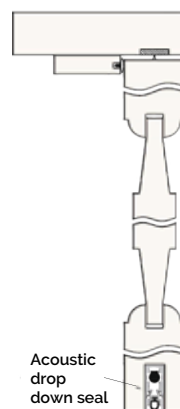
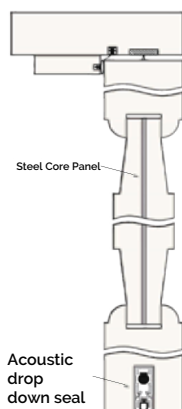
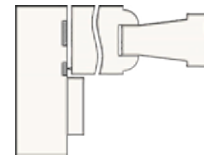
FD30 - 36Rw dB



FD30 - 32Rw dB



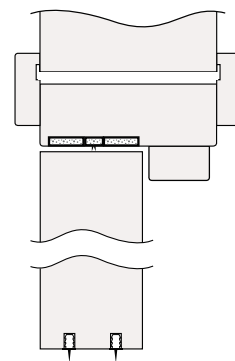
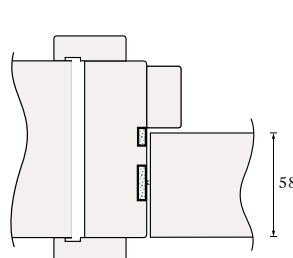
FD60 - 28Rw dB



Self levelling drop seal

Please note: The use of drop seals will lower the acoustic performance for both single leaves and pairs

FD60 - 28Rw dB



*This is for guide purposes only. Other factors need to be considered.

CARE FOR TIMBER DOORS

Introduction

All Longden doors and doorsets are manufactured from carefully selected timbers. Timber being a natural product will vary in colour and grain, unique to the particular species selected. Care must be taken not to cause physical damage during unloading, storage and installation.

Delivery and Storage

Longden strongly recommend that the "client" should only have Longden products delivered to site once all "wet-trades" (such as plastering and painting) have been completed and when the air-conditioning/central heating/comfort cooling, etc., has been commissioned and operational for one month at 20° C.

The appropriate moisture content (which will be the same as when it was manufactured) must be maintained during storage, construction and installation. Deliveries should be scheduled so that doorsets are left unfixed on-site for the least possible period of time. Exposure to the above recommended moisture levels will cause irreversible damage to the door with regards to bow, twist and the integrity of joints being compromised.

Physical damage to doors and doorsets can best be avoided by careful handling and keeping protective packaging in place for as long as possible. Doorsets should not be stored or fitted in the building until the wet trades have completed their work and the building has dried out.

Doorsets should not be stored on their edge or end. Store them flat on a level surface with at least three level bearers to keep them at least 90mm above the floor – the bearers should be longer than the width of the doors. Doorsets which have projecting sills or have the hardware fitted must have spacers between them in the stack to avoid damage.

Protect doorsets from extreme heat, dryness, humidity and sudden changes of temperature. Avoid double handling by storing doorsets in the order that they will be required and take care not to drag them across each other when they are removed. If doors need to be separated from doorsets for any reason, identify the door with its frame so that the correct door is returned to the correct frame.

Care should be taken not to store naturally finished doors where they may be exposed to daylight and opaque packaging should be kept in place until the time of installation.

Finishing

Primed doors should be denibbed and have the undercoat and top coat applied, ready for on-site painting. In the event of the finish being removed on-site, it is imperative that the finish is re-applied to re-seal the door. Primed doors should be denibbed before the undercoat is applied. Subsequent undercoats and topcoats should also be denibbed between coats. Longden strongly recommend that

primed products receive subsequent coats of undercoats and/or topcoats not less than 2 weeks from when delivered to site, as this will allow the products to "settle" in their new environment.

Longden does not recommend that product is left clean for on-site finishing. However, if so required, the responsibility of the finish passes on to the finishing contractor and Longden will no longer be held liable.

Installation.

Care must be taken to ensure that the gap between the door and frame does not exceed 3mm. Fire rated doorsets should not be altered on-site as this will affect the fire resisting properties of the doorset. To avoid compromising the integrity of the door construction, the mortice and tenon joint should not be cut into when recessing lock cases on-site.

The size of the lock case will determine the size of the middle rail e.g. an 80mm lock case will require a 216mm middle rail, whereas a 108mm lock case will require a 244mm middle rail or lock case height + 136mm.



" Experience is the child of Thought, and Thought is the child of Action. We cannot learn men from books" Benjamin Disraeli (1804 -1881).



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Visit our website for further details including more examples of completed projects across a variety of sectors, as well as further information on our ironmongery options and thermal door range.

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in the UK 

Longden Doors UK Ltd
January 2026