



# High Performance Timber Window and Door Systems



## ARBOR Window Systems Limited

ARBOR is a UK based, customer focused manufacturer of high quality, high performance, timber window and door systems made to each customer's individual and unique specifications.

Our products are suitable for commercial and residential projects, new build and refurbishment.



**Our design philosophy** is to be innovative, to use durable, environmentally friendly materials from sustainable sources, to provide excellent functionality and to provide elegant yet solid looking products that will enhance any property, whilst conforming to the latest building regulations.

**We use fit for purpose** ironmongery manufactured from a range of high performance materials offering ease of use together with excellent security. All products can be factory finished as required, using either translucent or solid colour microporous water based coating systems or oil, which is particularly effective when used on European Oak.

**With over 100 man years** of door and window design and manufacturing experience, we are confident that we can provide viable solutions for most projects from individual doors or windows to complex glazed systems.





## External range

Arbor external sliding and folding doorsets are designed around 68mm thick engineered hardwood door sections, assembled using wedged mortise and tenon joints for maximum stability and strength.

The doors are top hung and bottom guided within a substantial timber framing system, providing easy operation, even with very large door leaves and multiple panel applications. The hinge, carrier and bolt system is manufactured from stainless steel, with a satin finish and multipoint locking is provided as standard, operated by high quality handles and high security locks.

Glazing beads are fitted to the inside of the doors, further increasing the security of the system and 28mm double glazed units are fitted as standard.

Doorsets can be outward or inward opening. Configurations can be specified up to 8 metres wide and 3 metres tall, with a minimum of 2 and a maximum of 8 panels. The maximum panel width is 1000mm.

Fixed sets can be manufactured to match the sliding and folding systems thereby creating the same look if installed adjacent to opening versions.

Corner units can also be designed, either with or without vertical corner posts.

A range of threshold options are available, all manufactured in matching hardwood with various projection cill lengths and drainage options. The usual detail involves the full or partial positioning of the threshold below the internal finished floor level to achieve a level access design.

A wheelchair friendly threshold can also be supplied.

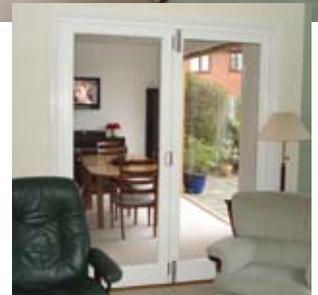


## Internal range

Internal doorsets also use a top hung and bottom guided system, which is a lighter duty version of the hardware used on the external systems.

Door leaves are 44mm thick and incorporate single glazing as standard. Opening and stacking options are the same as for the external range, which together with matching profiles, ensure a consistent look across all of our products.

The threshold is normally supplied as a 22mm high flat timber section incorporating the bottom guide channel.





## Hinged doorsets

Arbor hinged doorsets are designed to match the sliding and folding systems, thereby ensuring a consistent look across multi-product projects. Door leaves are 68 or 44mm thick and designed for double or single glazing, depending upon application.

For external applications, stainless steel hinges, adjustable vertically and laterally are used, combined with multipoint locking and internal beading for enhanced security.

Maximum door leaf size is 1 metre wide and 2.7 metres high.

Doorsets can be singles or pairs and a wide variety of door styles can be manufactured, with a combination of glazing, rails and panelling. Arched heads can be incorporated and fixed side and top lights can be built into the frames, along with linkage to other Arbor products such as windows, doors and glazed screens.



## Lift and slide doorsets

Some building designs are not suitable for hinged doors and we have therefore developed a range of in-line sliding doors, where the opening doors slide behind fixed side panels. One common problem with previous generations of this type of system is the development of flat spots on the wheels under the opening doors, due to the panel weight.

The Arbor range eliminates this problem by using a retractable undercarriage, which lifts into the underside of the doors when the system is "parked". Doors are opened by operating the handle, which lifts the door leaf, thereby allowing lateral movement.

As with our other ranges, the doors are 68mm thick, suitable for 28mm double glazed units and the design consistency is maintained across the detailing.



## Casement windows

Arbor casement windows combine the classic styling of a flush casement design with modern security and opening details. Windows are manufactured to customers' specific size and configuration requirements and are detailed to complement Arbor's other door and glazing systems.

Side hung, top hung and fixed casements as well as direct glazed options are all available and can be incorporated in various combinations to meet design and ventilation stipulations. Fire escape and French casement configurations can also be specified. Casements are 68mm thick, within 92mm deep framing sections and incorporate multipoint, two position locking, hinge side security claws, stainless steel friction hinges with easy-clean option and key lockable handles. Internal beading is standard (direct glazed lights are externally beaded) and we use our standard 28mm double glazed units, as fitted to doorsets.

## Sliding and folding windows

The sliding and folding window range is particularly suitable where large clear openings are required such as fire escape or scenic windows in houses, cafes and bars where full height doors are not appropriate.

The windows use the same top hung and bottom guided carrier system as the internal sliding and folding doorsets and section profiles are designed to match other window and door systems to give a consistent look.

All panels are weatherstripped and double glazed to comply with the latest building regulations. Multipoint locking is a standard feature.

## Glazed screens

Many projects often incorporate glazed screens above or to the sides of opening doors and windows. Arbor specialises in the design and manufacture of these screens, so that they complement and enhance the fenestration component of the building or extension.

Glazed gable screens are particularly effective in bringing extra light into a room and glass divisions can be designed to line through with doors and windows below. Multi-storey walling can also be manufactured.

Structural steelwork is often a requirement within buildings with open glazing aspects and we can design cloaking trims to cover these items and tie the door, window and screen framing together in a unified system.

## Roof glazing

Another way of bringing extra light into a room is to incorporate a glazed roof section. Arbor has designed a system of fixed roof glazing, using timber rafters which match the adjacent doors and windows, 28mm double glazing units and low maintenance, powder coated aluminium capping sections.

## Timber

External doors, windows and screens are manufactured from a range of four hardwoods, all of which are naturally durable and therefore do not require additional preservative treatment. All timber is obtained from sustainable sources and reputable suppliers. The European Oak and Red Grandis hardwoods are FSC certified stock.

**European Oak** is a temperate hardwood with a typical "honey" colour and beautiful grain pattern. It is normally supplied with a clear oiled finish.

**Iroko** is a tropical hardwood that weathers to a dark, chocolate brown colour. It is supplied with a clear oiled finish or a translucent microporous stain system in various colours.

**Sapele** is a red "mahogany" coloured tropical hardwood. It is supplied with a microporous paint or translucent stain system in various colours.

**Red Grandis** is a tropical hardwood from the Eucalyptus family and is straw/pink in colour. It is supplied with a microporous paint or translucent stain system in various colours.

Internal doors can be manufactured from the above hardwoods, as well as additional species (*please contact our technical services department for details of available timbers*). Recent commissions have included *Canadian Rock Maple* and *Steamed Beech*.



## Finishes

European Oak and Iroko doors and windows are normally supplied with a clear oil finish. We apply the oil in the factory prior to glazing and fitting of ironmongery. Items supplied in this way require a further treatment of oil within three months of supply (*inside and outside*) and then further external treatments as necessary (*normally annually depending upon exposure*).

Products that require a paint or stain finish are sprayed in the factory with a three coat microporous water based system, prior to the fitting of ironmongery and glazing. Solid colour paints can be specified to any colour and stains can be chosen from a range of 24 shades, with special colours available on request (*at extra cost*).

There may be situations where it is not appropriate or desirable to use the same colour or type of finish to the inside as well as to the outside faces of the doors and windows. In these situations, we can provide dual finishes. For example, Oak products may be specified with a clear oil finish internally and a painted or stained finish externally.

## Glazing

**External windows and doors** incorporate 28mm double glazing units.

**The standard specification** is two layers of 4mm toughened glass with a 20mm air filled cavity. The inner pane is low "E" glass. This configuration gives a typical system U value of 1.9 W/m<sup>2</sup>K.

**Enhanced specification** units, giving a typical system U value of 1.4 W/m<sup>2</sup>K, have argon filled cavities, "warm edge" spacers and "soft coat", high performance low "E" glass to the inner pane.

**Additional options** are available, including tinted and obscure glass, "Activ Clear" and "Activ Blue" self cleaning glass, laminated glass for enhanced security and acoustic units. We also offer Pellini venetian blinds, which are contained within the double glazed units.

**Internal doors** use 4mm toughened single glazing.





## Further Information

All products are manufactured to order to each customer's specification and we will be pleased to discuss your individual requirements. Please contact us for a free no obligation quotation.

The company's Technical Service Department is available to provide advice and assistance during the specification and procurement of your project.

Samples of window and door products are on permanent display at the company's showroom at Aztec West near Bristol and we welcome visitors during our normal office hours (8am-5pm, Monday to Friday). Weekend visits can also be arranged by prior appointment.

Hand samples showing different types of finishes can be provided on request.

All products are available on a supply only basis and we deliver nationwide. The company's conditions of sale are supplied with each quotation, or alternatively a copy of the conditions of sale can be supplied separately.

*The company maintains a policy of continuous product development and therefore reserves the right to alter or amend specifications without prior notice.*

**ARBOR**  
WINDOW  
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LIMITED

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