



Timber Doorsets Technical Information

ASSA ABLOY

The global leader in
door opening solutions

Vision panels

We offer a range of aperture styles and designs to suit your desired applications, other sizes are available at an extra cost. Cut outs for classified products are subject to maximum allowances in fire / sound certification.

Typical configurations

There are a range of commonly used vision panel configurations. As glazing has a major impact on fire performance, all our standard glazing options provide up to 60 minute fire resistance. The configurations shown on the next page are a selection of a wider range of standard vision panels.

The glass retention systems available include hardwood bolection and flush beads or steel trims.

We also supply specialised glazing systems. For example, we have a special flush glazing solution for hygienic environments which minimises dust traps. To ensure maximum quality and specified performance, all doors must be factory glazed.

Hardwood beads can either be fully polished or painted to match the doorset. These are generally fixed with screws, although other fixing methods are available. Steel trim alternatives allow the designer to match vision panels with door furniture, protective plates or other accessories and are screw fixed into position.

Glazing for vision panels in fire rated doors can either be wired or unwired glass.

Non-typical configurations

For other shapes, sizes, positions and details of vision panels, the constraints set out in the ‘Specifying with Doors and Doorsets’ technical guide should be considered or discussions held with us at an early design stage.

Louvres and grilles

Ventilation grilles, air transfer grilles or louvres can be fitted into doorsets or the hole can be prepared for others to fit.

Visibility control

Vision panel systems are available allowing adjustment to the opacity of glazing for observation or privacy. Contact us for further details.

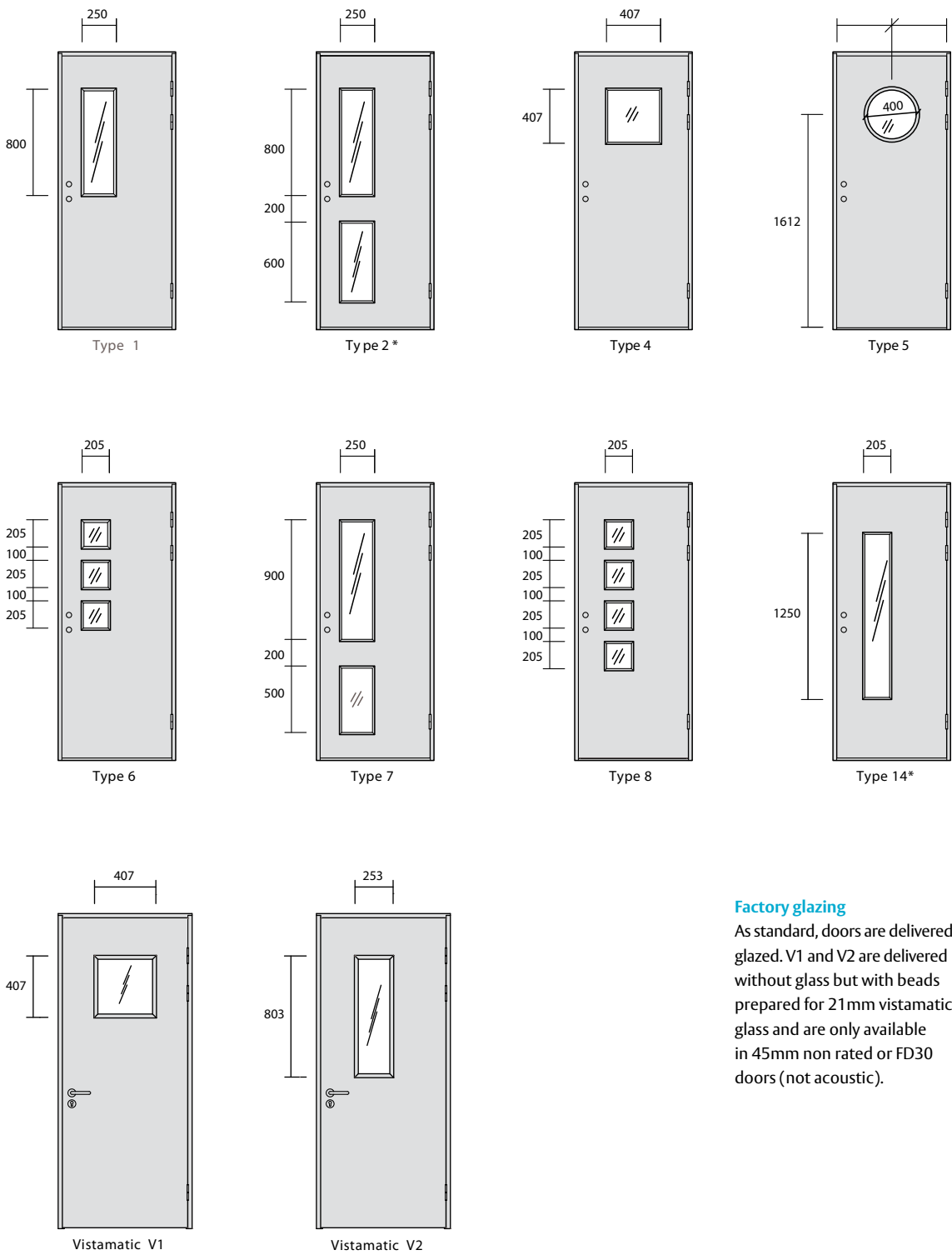
Vision options

Notes

Health sector legislation
HTM 58 offers four formats of door glazing without dimensions but refers to Approved Document Part M (which does stipulate minimum glazing sizes in certain situations).

Use of the lower panel of glazing is encouraged, as are panels in fire doors for early warning and assessment of any fire. HTM 58 points out the conflict between nursing staff’s need to supervise and the patient’s expectation of privacy.

We can incorporate controllable privacy glazing within vision panels.



Factory glazing
As standard, doors are delivered glazed. V1 and V2 are delivered without glass but with beads prepared for 21mm vistamatic glass and are only available in 45mm non rated or FD30 doors (not acoustic).

*This indicates that the vision panels are BS8300:2009 compliant, this requires a zone of visibility between 500mm and 1500mm if necessary interrupted between 800mm and 1150mm with a maximum 350mm interruption within the zone.





Product ranges

ASSA ABLOY offer a range of materials and finishes including veneers, paint and laminate, to meet your specific requirements.

Veneer doors

ASSA ABLOY offer a selection of veneered surfaces for doors and frames, and hardwood lippings to two or four edges.

Veneers

Veneers can be crown cut, or quarter cut, depending on species selected. Doors are fully factory finished, hardwood lippings and glazing beads are also supplied to complement or contrast.

Frames

Frames are available in softwood, softwood veneered or solid hardwood.

Crown cut veneers

Crown cut veneers are “book-matched” giving an attractive and continuous matched pattern across the width of the door. “Book-matching” takes each veneer slice and joins each edge to the corresponding edge of the next slice, making each group of assembled veneers one continuous attractive pattern.



Crown cut

The log is cut along its length, resulting in a figured appearance. This generally produces a veneer with a central area of a strong figured pattern.



Quarter cut

The log is cut into four separate quarters. These are then sliced across the growth rings to provide the veneers with a predominantly straight grain pattern up the length of the door.



Crown cut (book matched)

Crown cut oak veneer, typical of the patterns produced when crown cut.



Quarter cut (book matched)

Veneers giving a predominantly straight grain pattern.

Veneers available



Oak



Maple



Beech



Ash



Sapele (quarter cut only)



Koto (quarter cut only)

Ironmongery and accessories

ASSA ABLOY offers security solutions that draw on the world's largest selection of locking products for a diverse range of applications and environments.

We guarantee all our products. This includes hardware, stand-alone solutions, electronic products and components.

All ASSA ABLOY ironmongery offers strength and reliability, modular, interchangeable lock cases, a wide range of options to suit the specific requirements of schools, hospitals, offices and other public buildings. They are suitable for use on fire and security doorsets.

There is a choice of security levels and a full support and service network.

Hinges

ASSA Journal supported hinges are ideal for high-usage situations. Their special design gives maximum endurance with minimum maintenance requirements. The small bearing surface makes the door easy to open, even by elderly or disabled people and the hinges are ideal for both site and factory installation.

Tested to BS EN 1935:2002 and CE marked, UNION Powerload hinges have been developed for heavy duty applications and have been assessed for use on timber fire doors to BS EN 1634-1. These hinges are ideal for the specification market where durability, reliability and outstanding performance are paramount.

Mechanical locks

Door locks, padlocks and exit devices are a few examples of our traditional mechanical products and they still account for over 50% of ASSA ABLOY world sales. They provide the basic functions of any security device: identification – the key and cylinder and mechanical strength – the lock itself.

Electro mechanical and electronic locks

More versatile electro mechanical and electronic products provide higher security and greater convenience than traditional mechanical products. These devices are not only more secure but simplify locking and unlocking. Electro mechanical locks offer added value to hotel guests and staff – they are easy to administrate, offer better

security and convenience and you don't have to replace them if a guest leaves with the key!

New technology locking solutions

ASSA CLIQ is a technology that brings together and integrates the very best of electronics and mechanics. Combining proven mechanical ABLOY PROTEC locking solutions with low-power electronics, the mechanical lock guarantees physical security, while the micro-electronics provide flexibility and a unique electronic key code for every lock.

ASSA Smartair is an electronic handle set or escutcheon that provides a completely standalone single door control operating as an electronic masterkeying system. Smartair's special design and technology allows the creation of a powerful and sophisticated proximity access control system using attractive wire-free door units.

UNION Codehandle provides simple, effective keyless locking/unlocking of interior doors in all light commercial and residential environments where the convenience of access control is the main priority. In aesthetic environments Codehandle is a more attractive, compact option to bulky keypads. Further, it is so easy to fit - no wires, cables, drilling or special fitting is required.

Door furniture

ASSA ABLOY offers several ranges of high-quality stainless steel door furniture to complement its traditional products. A wide range of patterns and designs is available to suit the look and feel of any application.

CE marking

As CE marking is required, we are ensuring that our products are tested and comply with the relevant standard. BS EN 14351 is the first step towards doorset compliance as opposed to product compliance. We are ensuring that we keep abreast of any such standards.

Top left
UNION Powerload hinges

Top right
ASSA 131E electric strike

Bottom left
ASSA Euro Profile lock cases

Bottom right
ASSA Rukoline lever handles



Top left
ASSA ABLOY CAM-motion
door closer



Top right
Cliq programme device
with control keys



Bottom left
ASSA 4815 high security
panic bolt



Bottom right
Vanguard card reader



Ironmongery and accessories

Door closers

ASSA ABLOY'S door closers have been designed and tested to meet the requirements of BS EN 1154 at a range of power levels, and include optional features such as backcheck, delayed closing, adjustable closing force and easy-action sliding arms. Several products in the range have been certified approved for use on fire doors. The newly expanded ASSA ABLOY Cam Motion series has been specially designed to retain its strength and high efficiency while still ensuring that the door is light to open, making it ideal for use by children, the elderly and disabled people.

Emergency exits

It is important to understand the difference in application between panic exit devices and emergency exit devices. Both need to ensure that they maintain the security of the building and don't compromise the fire integrity of the door. Panic exit devices that comply with BS EN 1125 can be used in public areas and places where a panic situation could arise, while exit devices that comply with BS EN 179 are suitable for use in areas where occupants are likely to be familiar with the use of the exit device.

Automation

Automatic doors are in demand because they offer a simple and convenient security solution to entrances and exits. Through its broad product range, ASSA ABLOY has the unique ability to integrate automatic door operation with locking and access control.

Access control/access permission

Products based on RFID (Radio-Frequency Identification) technology are some of the fastest growing in the industry. The benefit of RFID is that it enables security monitoring and access control without physical contact.

Other ASSA ABLOY door furniture which may be required:

- Lever handles (available in a wide range of finishes)
- Flush bolts
- Kick plates and push plates (coloured plastic laminate or 1mm stainless steel)
- Finger pulls for sliding doors (can be supplied as standard)
- Air grilles
- Escape fittings
- Pull handles
- Door closers
- Fittings for disabled people
- Signage

All products are supplied from ASSA ABLOY in one complete doorset solution

All ASSA ABLOY products fully comply with relevant building standards and far exceed British Standards.



Performance

Sound insulation

ASSA ABLOY can advise on appropriate sound reduction levels and offer acoustic doorsets achieving up to 43 RwdB, including a lighter weight option offering 40 RwdB.

Our automatic sealing threshold can be used for fire, smoke and sound insulation in timber doors where a regular threshold cannot be mounted.

Hygrothermal

There are situations where legislation dictates that doorsets must withstand areas of normal and high humidity without loss of performance or appearance. ASSA ABLOY's high humidity and encapsulated doorsets are particularly suited to environments where water resistance and protection against high humidity is important.

Security

ASSA ABLOY offers a complete range of lockcases that meet all requirements for security, convenience and emergency escape. The lockcases are constructed to meet the high requirements set by authorities regarding forced entry and fire-rating.

ASSA ABLOY lockcases are available for all types of doors. They are available in different dimensions – for example, for narrow stile doors – and for use with different types of electric strike. The majority of ASSA ABLOY lockcases can be equipped with a microswitch for electric monitoring of doors and access control solutions. The product range includes patented hookbolt lockcases. The hookbolt interlocks door and frame and creates a strong unit. Our high-security door incorporates steel within the leaf and frame and can be face fixed to provide a more obvious deterrent.

Accessibility

Issues of accessibility are covered by BS8300:2009 and relevant building regulations in Scotland, Northern Ireland, England and Wales. Operating forces of door closers is a major issue where interpretation of the regulations is currently being revised and hold-open devices or automatic door operation are becoming common in public buildings. ASSA ABLOY can advise on these latest changes. We offer a range of accessible doorset solutions, fully complying with all the recommendations.

Emergency access

Emergency access to WCs and other sanitary accommodation can be achieved with a number of techniques depending on whether the door is outward or inward opening. ASSA ABLOY doorsets can incorporate removable stops on outward opening doors. Alternatively emergency release door stops can be used. ASSA ABLOY accessory sets have been designed for use with bathroom lockcases. Supplied with all necessary screws and fittings, which include red/white indicator and emergency release mechanism.

Vision panels

To ensure quality and specified performance all doors must be factory glazed. Glazing for vision panels in fire-rated doors can either be wired or unwired glass.

There are certain situations where it is desirable for vision panels in doors to be semi-opaque. For example, in environments such as hospitals, consulting rooms, banks, therapy rooms and schools.

There are a number of methods by which this can be achieved, from simple controllable blinds and slide-plate shutters to Intelliglass vision panels, which use liquid crystal glass technology. Each system has its benefits and these need to be aligned with the client's performance brief and budget, if they are to provide the most appropriate solution.

Security glass

Small observation windows glazed with laminated anti-bandit or ballistic resistant glass are available as standard. The glass is normally retained by high-security steel beads, with no fixings exposed on the attack face. The standard bead finish is black stove enamelling, with powder coated or stainless steel finishes also available. Alternative glazing materials include toughened polycarbonate and 19mm Pyrosec glass – the latter is particularly suitable for secure accommodation such as seclusion rooms.

The standard vision panel size is 300mm square, giving a clear viewing size of 230mm x 230mm. We suggest that security vision panels are kept as small as possible, with maximum clear viewing width of 250mm. Fire-resisting security glazing is available on request.