Foris Doorsets Solutions

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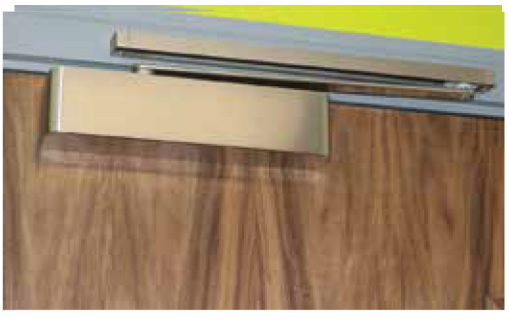

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Compliant Ironmongery

Certificated Doorsets

Guaranteed Solutions

mlspec - BIM Level 2

Why Foris Solutions?

Since 2003 Foris Solutions Ltd has evolved to meet industry dynamics providing architects, contractors and building owners with door openings solutions from a single source

Foris Solutions Ltd is the **LINK** between a client door requirement and the construction process.

We assist designers and contractors in all aspects of integrating a doorset and relevant ironmongery within a door opening ensuring the desired client functionality is installed compliant with building control.

Architectural Ironmongery

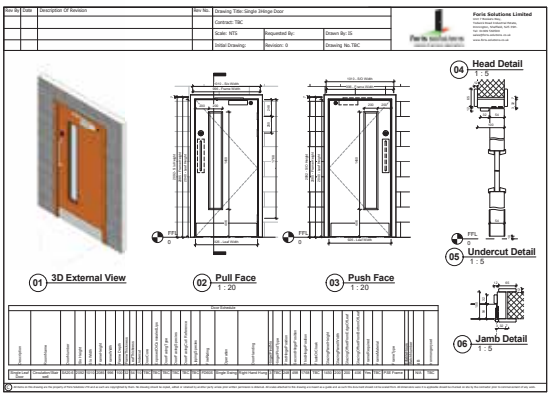
Engineered Doorsets

Electronic Access Control

BIM READY – 'stamp logo'

'mlspec' – intelligent parametrically connected data BIM level 2

We've developed a range of BIM level 2 models with COBIe output and 'mlspec' intelligent parametrically connected data.
This provides a user with the capacity to amend our standard models parameters to create bespoke project specific models.
For example – if a site structural opening is different from a standard model then the user can change the S/O size and any impact caused by the change to other connected components is automatically changed in the model – including the kick plate size!



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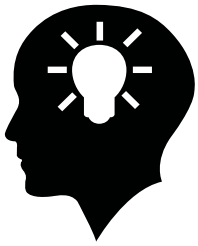


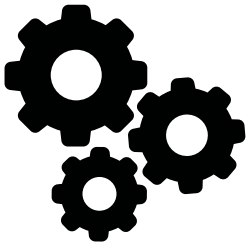
Advice - Assistance and service

- From project conception to post contract supply Foris Solutions will assist to deliver the desired function at any door opening.
- Globally sourced products bundled to develop bespoke solutions.
- Project managed delivery at every stage - on budget on time.
- **Compliance with legislation and building control – delivered and built in.**

Confirm - Design specification

BIM READY

- Foris specifications provide P21/L20 information to impose client design reducing the risk ***'similar'*** products being substituted.
- mIspec BIM models with COBie output provides detailed record of the specification – for the life of the building.
- **Physical samples provided for client approval**



Manufacture - Fully compliant and quality assured

- Specified ironmongery factory installed using CNC door leaf and frame preparation – highly accurate and consistent.
- Doorset function delivered compliant with building control and certified for fire and acoustic performance when applicable.
- **Pre-hung in the factory to ensure the leaf and frame are compatible.**

Deliver - Foris is route to market

- Foris Solutions is the link between the client, the construction process and manufacturers product solutions.
- Site ready doorset solutions delivered as planned.
- **Manufacturers make products – Foris delivers the solution.**

Solution - Design integrity and client expectation installed

- Certified doorsets providing the designed and specified function.
- No unplanned cost because of design error – if issues occur they are resolved in BIM and the factory.
- **Client function and expectation installed.**

Foris Solutions – safe egress and controlled access

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Door Assembly

Ironmongery sourced from various suppliers - delivered to site

Door frame and architrave sourced from various suppliers – delivered to joinery supplier

Door leaf sourced from various suppliers with various core designs – delivered to joinery supplier

A typical door and frame assembly is delivered to site in component form and so the quality of the installation is solely reliant on the skillset of the joiner on site. In practice the result is inconsistent installation, possible ineffective fire seals, significant site administration and 'dubious' performance certification.

Doors that fail to deliver the designed function are at least inconvenient to the end user, will incur additional unplanned costs to resolve the issue and at worst could be life threatening.

Poor Site Installation

- Bad fitting could render fire and smoke seals to be ineffective.
- Incorrect ironmongery installed will not deliver the designed function at the door opening.
- Ironmongery not installed to template will cancel any product guarantee and effect door performance.
- **Dubious certification submitted –if any provided.**

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Globally sourced ironmongery to develop bespoke solutions installed in the factory.

Consistent and controlled doorset design manufactured compliant with ISO9001 and ISO14001 processes using latest CNC equipment.

Ironmongery and joinery integrated in the factory.

Foris engineered doorset solutions delivered to site complete with the specified ironmongery installed to deliver the designed function at the door opening. Minimal on site administration required and significantly less joinery work necessary to install the doorset and integrate with the building.

- CNC engineered tolerances built in to ensure the door leaf is compatible with the frame before the doorset leaves the
- factory.

Ironmongery installed to the correct door in

- the factory.

Ironmongery installed to template 100% to ensure compliance with performance test

Genuine controlled certification for fire/durability/acoustic performance and provenance confirmed through FSC/PEFC chain of custody.

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single source door opening solutions

Foris Solutions provide engineered doorset solutions for all market sectors. Many doorset components are consistent and integral to the majority of doorset solutions but certain attributes specific to particular environments will be incorporated to maximise performance and functionality.

A Foris Solutions doorset is an engineered product that will deliver the planned function compliant with building regulations in new build and existing project refurbishments. We can also provide bespoke doorset solutions to suit existing openings or to complement specific project design requirements.

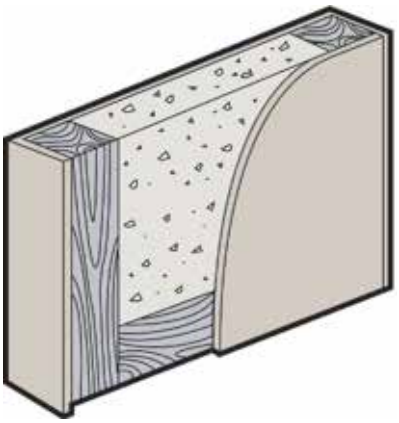
COMMUNIS is a range of general performance doorsets suitable for various applications and available in all finishes and configurations.

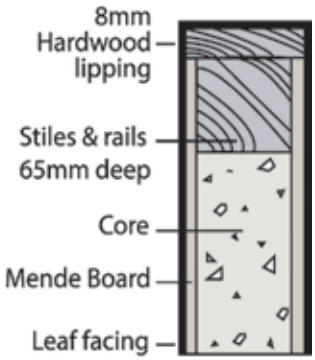
SCHOLA a range proposed for education environments where the emphasis is to deliver robust solutions where usage is envisaged to be heavy to possibly abusive.

SALUS doorsets are suitable for general health sector environments and will include for door leaf protection and possibly post formed fully encapsulated solutions to facilitate effective cleaning to help reduce the spread of infection.

SOLIDUS doorsets are designed to meet with the demands of mental health applications where anti-ligature design is essential and the doorset must be an effective and safe barrier.

the complete single source solution





We select the most suitable core to deliver the desired level of durability, fire protection and or acoustic performance and build a frame of 65mm deep softwood around the core.

The frame provides an effective base to install the ironmongery components such as the hinges, lock and door closer.

As standard we also include for a lipping to all 4 edges generally is exposed but can be concealed if preferred.

We offer a complete range of finishes to door leaf facings, frames and architraves from primed and Hygienilac lacqured for site decoration, veneers, laminates, split finishes and fully encapsulated post formed.

Veneers are available in quarter or crown cut dependent upon the wood species. If crown cut then we 'book match' the veneer to deliver a continuous matched pattern across the opening.

Crown Cut

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

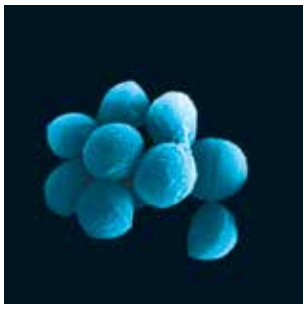
Quarter Cut

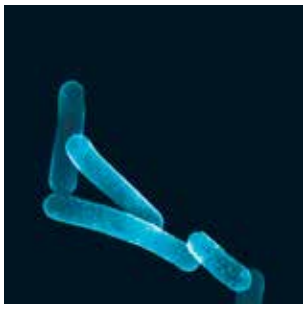
The log is cut into four separate quarters. These are then sliced across the growth rings to provide the veneers with a predominately straight grain producing a vertical striped pattern up the length of the door.

Hygienilac - anti bacterial protection

In the finishing process of veneered or paint grade doorsets Hygienilac is added to the lacquer or paint which provides anti-bacterial protection against antibiotic resistant bacteria such as MRSA.

Hygienilac is produced in the UK and independently tested at BIOCOTE LAWLABS Hygienilac does not contain silver so is UV stable and it is not soluble and will not migrate on contact and will be effective for the life of the lacquer – possibly for 10 years.



- Hygienilac prevents bacteria's access to nutrients and so they starve and die tested to BS6250 for severe usage Hygienilac has a 99.9% kill rate over a 24hr period and is non carcinogenic, non mutagenic and non skin sensitizing.

Laminate Options

Laminated facings provide robust protection to the door leaf which are simple to clean and stain resistant.

Laminates also enable designers and clients to create bespoke graphic designs across the opening.

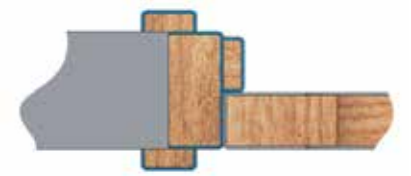
We generally use Formica laminates but others are available.

FORMICA®

Split finish door leafs provide integral door protection to the midrail height of the door using a laminate and the use of a veneer in the top half of the door leaf reduces the clinical appearance.

Post formed fully encapsulated doorsets provide an effective anti-bacterial solution using Hygienilac technology and robust protection of the door leaf, frame and architrave.

High impact protection sheets are used in vacuum formed or thermoformed processes to clad door leafs, frames and architraves.



The encapsulation process adds 5mm to the thickness of a door leaf.

The same anti bacterial impact sheet material can be integral with the door or applied to the face of a leaf to provide protection where impact is probable without the expense of a fully encapsulation solution.

The sheet material is 2mm thick exceptionally durable to resist impacts, non-porous and is available in a smooth or textured finish.

Protecting Doors - The colour range

Choice of smooth or textured finish available in a variety of colours to offer a wide range of contrasting, co-ordinating and harmonising solutions.

Textured finishes

PVC-u Door Edge Guards
Rigid Frame Guards Inserts
Antibacterial Impact Protection Sheet
Post-Formed Doors
PVC-u Clad Beading
Self Adhesive Corner Guards

Polar White RAL 9003*
Ivory RAL 1013* LRV 71.72
Light Beige LRV 37.25
Steel Grey RAL 7038* LRV 33
Snow White RAL 9001* LRV 89
Sand RAL 1014* LRV 56.38
Pale Grey RAL 7044*
Storm Grey RAL 7037*
Slate Grey RAL 7011*
Poseidon Blue RAL 5012* LRV 33
Pale Green RAL 6034* LRV 36.41
Burgundy RAL 3011*
Pale Blue RAL 5024* LRV 30.75
Twilight Blue RAL 5003* LRV 10
Olive Green

Smooth finishes

PVC-u Door Edge Guards
Rigid Frame Guard Inserts
Post-Formed Doors
Smooth Impact Protection Sheet
PVC-u Clad Beading

Clear
White RAL 9016*
Red Wine
Red
Medium Grey RAL 7043*
Ocean Blue
Deep Pink
Lime Green
Black RAL 9011*
Avocado
Orange

Special finishes

PVC-u Door Edge Guards
Rigid Frame Guard Inserts
Post-formed Doors
PVC-u Clad Beading

Light Beech
Cream Maple
Brushed Aluminium
Stanley Oak
Walnut

Both the smooth and textured sheets are available in a variety of colours to contrast, co-ordinate or harmonise with surrounding wall, floor and ceiling finishes.

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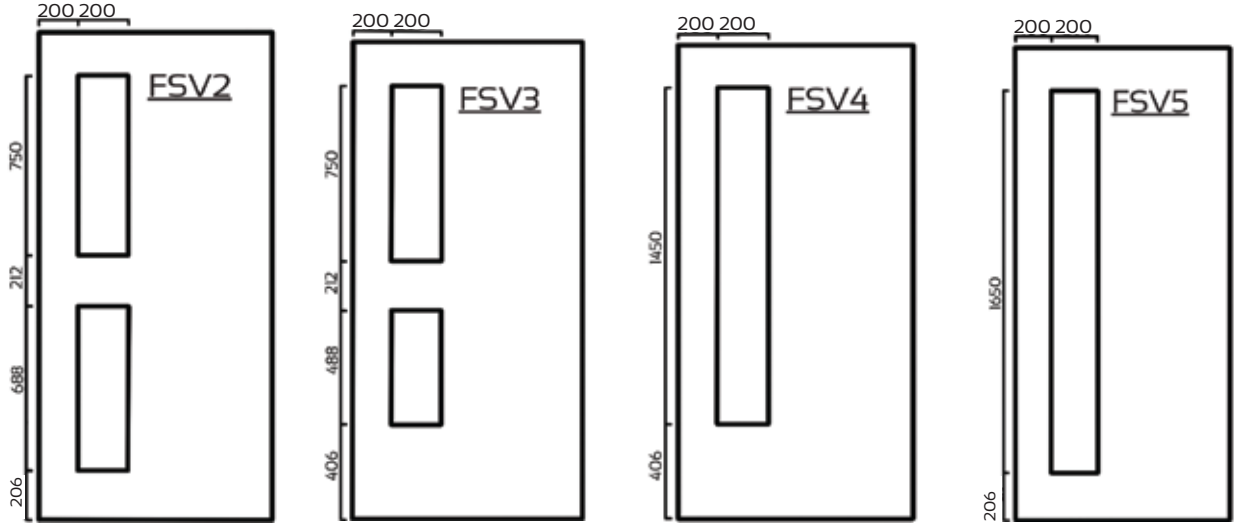
Vision Panels

Vision panels are an essential component in many door applications to provide visibility, privacy and managed observation where life safety is a consideration.

Installation is possible using standard bolection or flush beading.

Foris doorsets are available with various panel designs to comply with Approved Doc M and BS8300 in non-fire rated, FD30,FD60 and acoustic specifications.

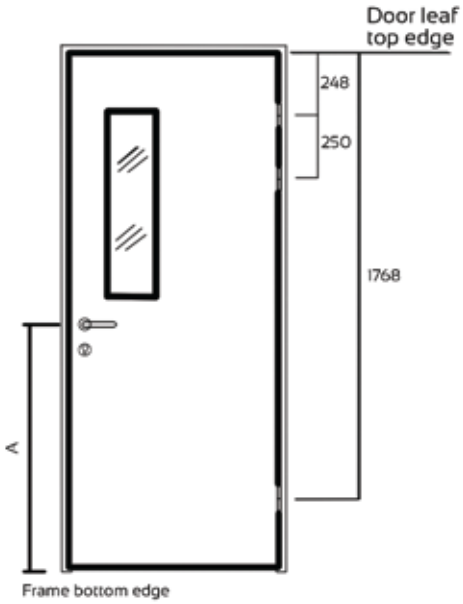


Privacy panels provide discreet managed operation to facilitate staff monitoring of vulnerable service users.

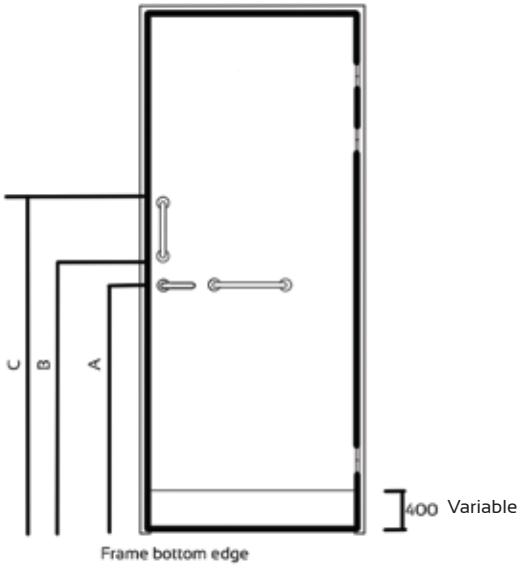
Typical Dimensions

Compliant with BS.8300 we recommend the following installation positions of ironmongery components.

Kick plates are supplied in various heights. Where practical we recommend plates are 400mm high and should be installed to both faces of the door leaf.



A = Lever handle installed between 900 and 1100mm above finished floor level – 1000mm preferred
B = Installation position of bottom of pull handle no lower than 700mm and no higher than 1000mm
C = Top of pull handle to be no less than 1300mm above finished floor level.



Foris doorsets are offered in standard metric configurations to maximise volume discounts and to simplify building design but bespoke doorsets are available to suit non-standard structural opening sizes.

The following confirms our preferred doorset dimensions where the structural opening height is 2092mm.

Type	Structural Opening Size		Frame Size (Overall)		Door Leaf Size		Clear Opening
	Height	Width	Height	Width	Height	Width	Width (approx.)
Single	2092	810	2085	796	2040	726	675
Single	2092	910	2085	896	2040	826	775
Single	2092	1010	2085	996	2040	926	875
Single	2092	1110	2085	1096	2040	1026	875
Double	2092	1740	2085	1725	2040	2 x 826	1570
Double	2092	1940	2085	1925	2040	2 x 926	1770
Leaf + Half Leaf	2092	1540	2085	1525	2040	1 x 926/1 x 526	1370

Clear opening assumed 44mm thick leaf if 54mm leaf clear opening width reduced by 10mm single leaf and 20mm by double or leaf and half leaf.

Clear opening does not include for any projecting door ironmongery.

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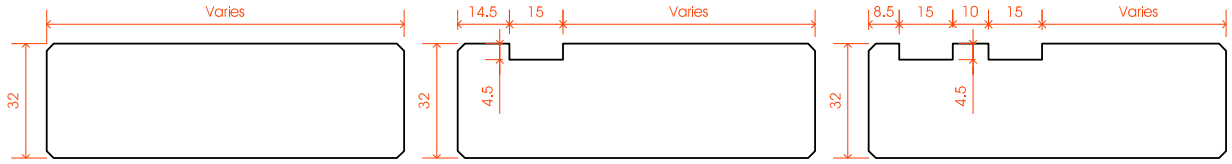
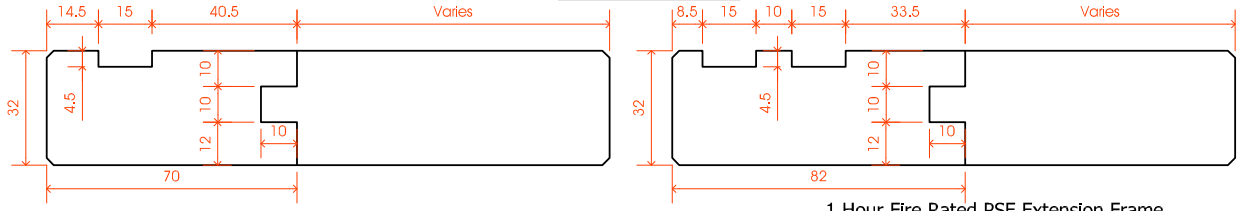
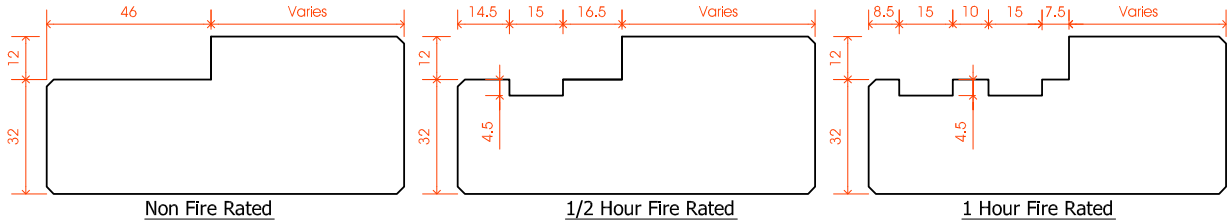
PSE Frames



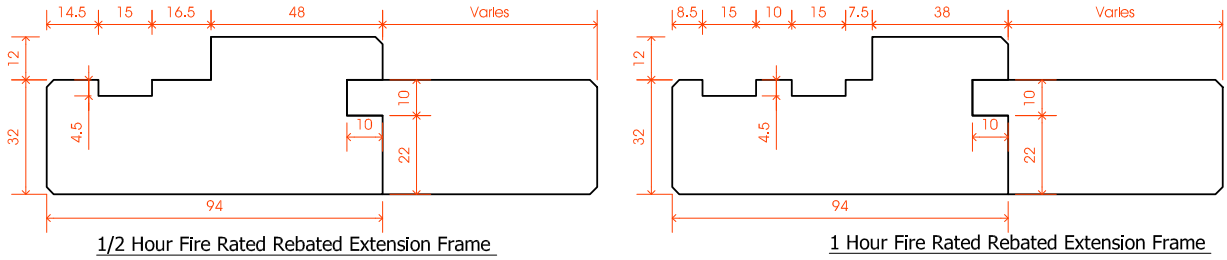
EXT PSE



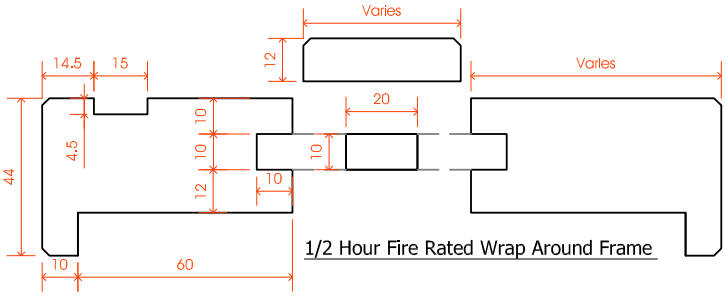
Rebated Frames



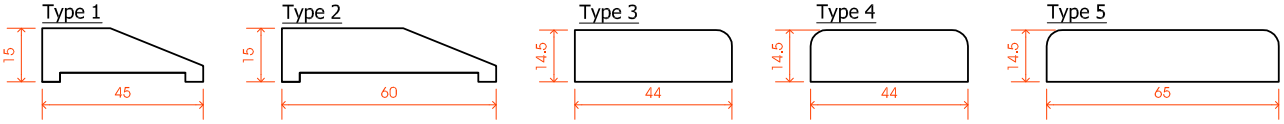
EXT Rebated Frames

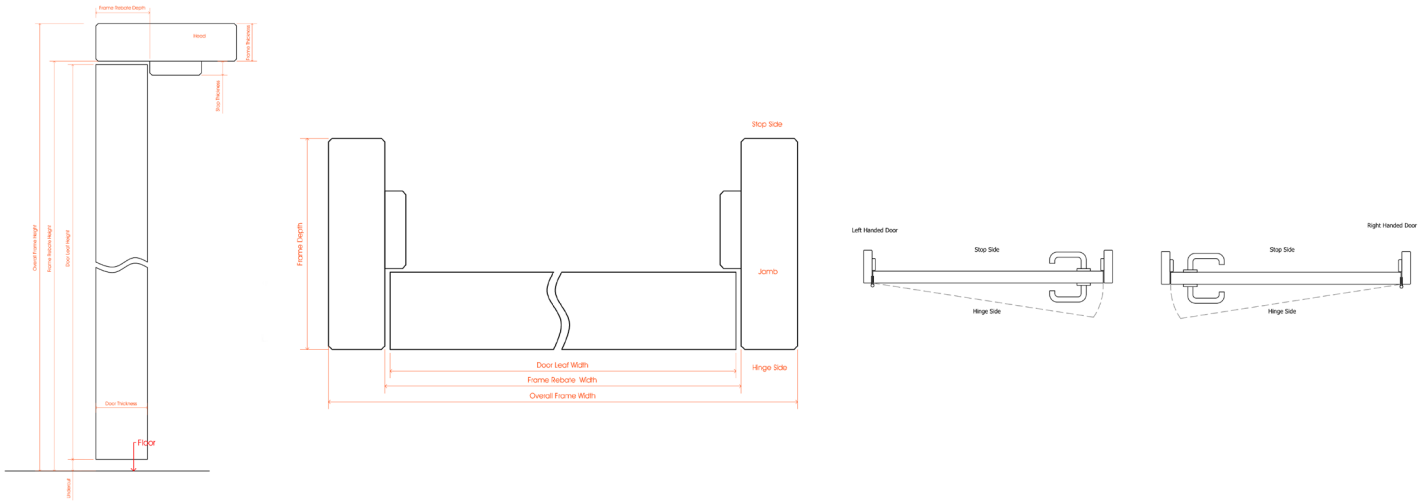


Wrap Around Frame



Standard Architraves Types





The following confirms our site storage requirements and method of installation of Foris prehung doorsets.

1. Installers should be a member of a recognized trade organistation such as BM Trada to ensure current industry best practice is used and controlled.

Fire door installation may be inspected and monitored by building control surveyors to ensure installation complies with relevant tested accreditations including:-

- Intumescent protection systems installed
- Glazing specification
- Operating gaps between frame and wall/leaf and frame
- Installation of ironmongery components
- Structural opening construction and suitability to receive the doorset
- Fire and smoke protection installed to any frame/wall voids

2. We recommend second-fix installation of doorsets to reduce the possibility of damage to the doorset caused by trades using/moving through the openings and when moisture levels are at a satisfactory level of 40-60 RH and when all forced-drying procedures have been completed.

3. Doorsets are an engineered product allowing openings to be planned and built with perimeter 7mm tolerances between frame and wall.
All openings must be plumb and square constructed to receive the doorset and fixings.
Doorsets should not be installed where the gap between frame and wall is in excess of 20mm and stud partitions should include for a full length single piece of timber filler.
Foris doorsets are prehung in the factory which confirms the door leaf is the correct size and fits the frame within specified tolerances of 3mm between leaf and frame

4. Storage on site should be planned and ready when doorsets are delivered. Doorsets are manufactured in a controlled environment with moisture of 10-12% for internal doorsets and 12-14% for external quality doorsets as required in BSEN942.
Site storage area should be clean and level and doorsets should be stacked flat and never vertically or leaning against a wall.
When stacking doorsets it is practical to stack the largest/most heavy doorset at the bottom and use packers that will not mark the doorset – 15 doorsets can be stacked and always cover with a dust sheet especially if veneered finishes are being stored because exposure to light can cause the finish to fade.

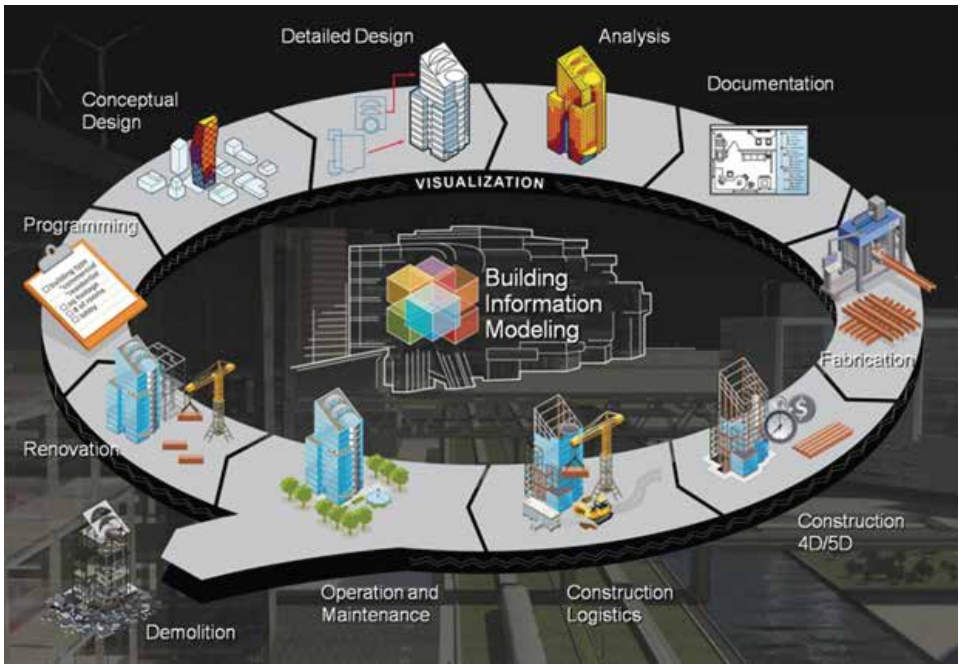
5. Installation of doorsets should be resisted until site conditions are suitable to avoid shrinkage, growth or defelection.

6. Installation of ironmongery components which are not installed in the manufacturing process must always be compliant with the product manufacturer's installation instructions.

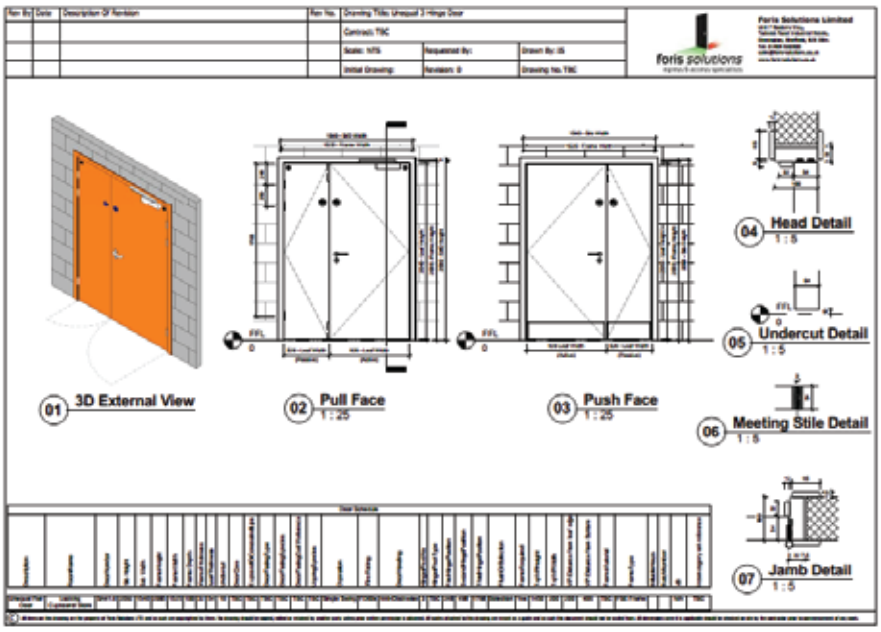
7. Frame to wall gaps/voids must be filled with relevant intumescent mastics or mineral wool to comply with the tested fire performance criteria of the doorset.

8. Exposed fixings to frames, planted stops and architraves should be dressed and sealed with timber/plastic pellets or pins should be punched and filled with hard beeswax coloured to match.
Note architraves should only be fitted when all adjustments to gaps and the door leaf operation is completed.

To compete for government centrally funded projects we've developed a range of BIM models for our prehung doorsets complete with ironmongery which can be edited in Revit by designers at any stage of the design and construction process.



'mlspec' parametrically connected data attached to each drawing can be edited in Revit – for example if a structural opening is changed then automatically the software will amend the frame and leaf size and even the kicking plate size.
Our drawings will detail the push and pull face of the doorset and also includes a 3D image that can be viewed in software.



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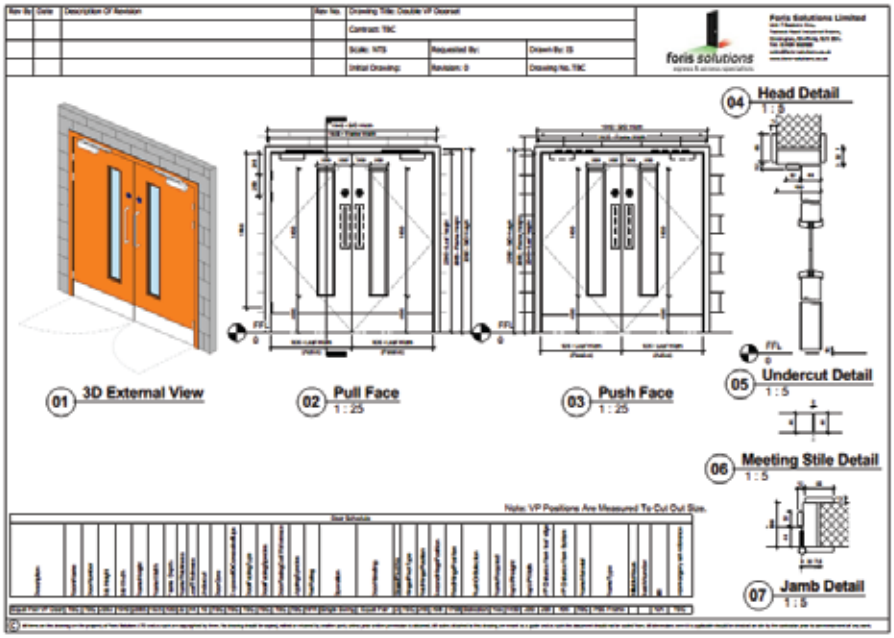

We are able to offer a PROJECT SPECIFIC service. From floor plans and a design briefing we will provide a detailed ironmongery specification, a door schedule, L20 and P21 information and 'mlspec' BIM models for each door opening.

The designer merely populates the Revit model with the 'mlspec' BIM model for each relevant opening.

Foris 'mlspec' BIM Models available through our website www.**foris-solutions**.co.uk

Foris Solutions doorsets are manufactured at a single source production facility that is EN ISO 9001:2008 and EN ISO 14001 accredited and is a member of BM Trada Q Mark which is a third party fire doorset accreditation scheme approved by UKAS.
All timber material is ethically sourced compliant with FSC/PEFC requirements of chain of custody.

Doorsets conform where applicable to:-

FD30s –FD120S fire rated doorsets to BS476 part 22/ EN1634-1

31dB – 41dB – Acoustic rated to EN ISO 140.3 / EN ISO 717.1

Mechanical Strength to DD171 and EN1192

Building Control Regulations

Several pieces of regulatory standards impact on the specification of doorsets and ironmongery that affect the doorset performance and function.
Approved Document M – requires buildings to be accessible for all regardless of disability, age or gender.
BS8300 – specifically focuses on design and good practice to meet the needs of those users with a disability.
The Equality Act 2010 – This piece of legislation incorporates the Disability Discrimination Act 1995 and the Act makes it a legal requirement that any service provider must not discriminate against any individual including those with a disability.

In addition to the doorset test evidence all ironmongery components we supply installed to doorsets or to site for site installation comply with all necessary standards including where tapplicable

CE Marking – Certifire -EN1634 fire test certification.
EN1935 – Single axis hinges
EN1154/1155/1158 – Door controls
EN12209 – Lock cases
EN1906 – Lever handles

EN179/EN1125 – Emergency and panic exit devices


MADE IN VELBERT-GERMANY























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Foris Solutions - safe egress and controlled access

Core to our business is the specification and supply of door ironmongery – but we've added to our skillset and we now offer a comprehensive range of engineered internal timber doorsets – delivered to site with ironmongery installed for immediate integration with the building.'

At every stage of the building process Foris Solutions will assist architects, contractors and building owners to deliver safe egress and controlled access solutions at any door opening.

ACCESS2 · Kingsway GROUP · Bridgman · ASSA ABLOY · Primera Life · Paxton · ROBUST · HOPPE Handle of excellence. · KARCHER DESIGN · SAFEHINGE SIMPLY DIFFERENT · DORMA · ALLEGION · CES · dortrend International Ltd · intastop SAFEGUARDING INTERIORS

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