

Solidus Doorset Solutions



Why Foris Solutions

Since our inception in 2003 Foris Solutions has evolved to continually meet Construction Industry dynamics, providing Architects, Contractors and Building Owners with fully co-coordinated door opening solutions from a single source.

We assist designers and contractors in all aspects of integrating doorsets with relevant ironmongery. Our core business is the specification of ironmongery and we understand how electronic technologies, ironmongery and the doorset itself are combined to deliver robust and reliable functions at each opening.

Constantly evolving Foris Solutions offer Doorsets, Architectural Ironmongery, Access Control and Washroom solutions. Such products allow us to provide a seamless link through the construction process to ensure the end result complies with the clients requirement.

Each and every piece of the jigsaw!



Doorsets



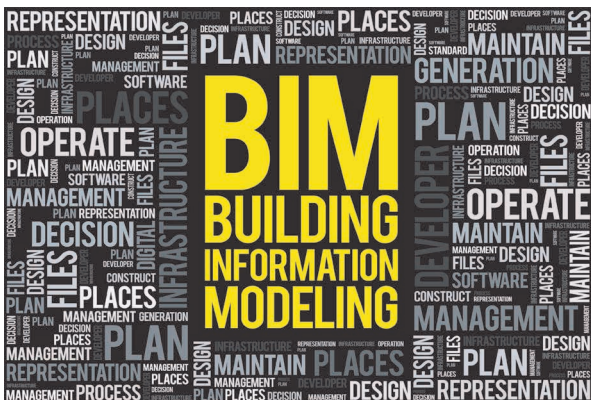
Architectural Ironmongery



Access Control



Cubicles + Washroom Accessories



'mIspec' BIM level 2 models available via our website
www.foris-solutions.co.uk

Intelligent parametrically connected BIM level 2 models with detailed COBie output. Confirming the doorset construction and relevant ironmongery.

PROJECT SPECIFIC BIM MODELS

If required we can produce bespoke project specific BIM models.

Foris Solutions created our Solidus range with Design in Mental Health being key to our product selection. We appreciate that correct specification is key to enhancing the lives of mental health inpatients, dementia and autism sufferers.

We therefore continue to work with leading product manufacturers within this demanding sector and look to include the very best product solutions, whilst understanding these solutions are being improved as such our Solidus range is constantly evolving.

Whilst there are no formal standards for Anti-Ligature products in the UK, the Door and Hardware Federation has drawn up a method of classifying both fixed and load Release devices. The resulting specification, TS001:2013 has also been adopted by the Guild of Architectural Ironmongers.

SOLIDUS doorsets are manufactured in a continually third party monitored/assessed single source factory environment ISO9001/14001 and BM Trada Q Mark accredited.

Our Solidus doorset solutions for Mental Health ensure such standards are met.

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Secure Cross Corridor

Corridors are the veins and arteries of buildings. Traffic must flow in both directions and be controlled. Authorised access and safe egress is a conflict in terms of how doorsets in corridors must operate. The challenge in mental health environments is to manage and balance the functionality at each opening to maintain an effective level of security and egress in an emergency situation.

There is no single 'one fit' solution because clients manage movement and evacuation of people in an emergency in various ways.

Our SOLIDUS solution designed for mental health environments includes continuous hinges, concealed door controls and concealed locking integrated within solid laminated timber cvm thick door leafs in solid hardwood frames.



- SOLIDUS doorset with modified head detail
- Concealed floor fixed door controls – 180 degree swing
- SOLIDUS concealed access controlled locking – 180 degree swing compatible
- Anti-ligature pinch grip handles
- Security glazing installation



Riser/Services

We provide single or double leaf solutions utilising SOLIDUS quality doorsets to withstand possible abuse and anti-ligature designed locking components providing slam lock function when the door leaf is closed or staff managed deadbolt locking.



- SOLIDUS doorset
- Anti-ligature hinges
- Slam lock with anti-ligature pinch grip handle
- High security master keyed lock system TRADEMARK lifetime protection

Anti-barricade bedroom entrance

In mental health environments the bedroom entrance is probably the most challenging doorset for service providers to deliver and achieve the right level of privacy, safety and security for the service users.

Within our SOLIDUS range we can provide various solutions, most common is for the door to open inwards into the room with the option for staff to manage an emergency release to open the leaf out into the corridor in a barricade situation.

Although generally fire rated it's not unusual for the doorset to be installed without a door closing device but advice should be ascertained from local fire officers first.



- SOLIDUS anti-barricade doorset
- Anti-ligature continuous 180degree swing hinge system
- Emergency quick release door frame stop
- Anti-ligature locking mechanisms enabling 180 degree swing
- Privacy vision panel

Bedroom Entrance – opening out

Anti-barricade function is not required if the door leaf opens out.

A high security solution from our SOLIDUS range is to provide steel doorset manufactured in 2mm thick steel with a solid timber core and with a wood effect applied finish to the door facings. Locking is SOLIDUS access controlled concealed in the locking jamb. Locking is SOLIDUS access controlled concealed in the locking jamb.



- SOLIDUS steel doorset with wood effect facings
- 2mm Thick steel door leaf facings with solid timber core
- Continuous stainless steel anti-ligature hinge
- SOLIDUS access controlled locking concealed in the jamb available with key override
- Wood effect wrapped security glazed vision privacy



Bedroom ensuite with lockback

Primary function is to provide privacy but it's also a requirement to manage the locked position of the door leaf to reduce abuse.

We offer SOLIDUS LB90 and SOLIDUS LB180 solutions providing service user privacy and service provider locked open function at 90 or 180 degrees.

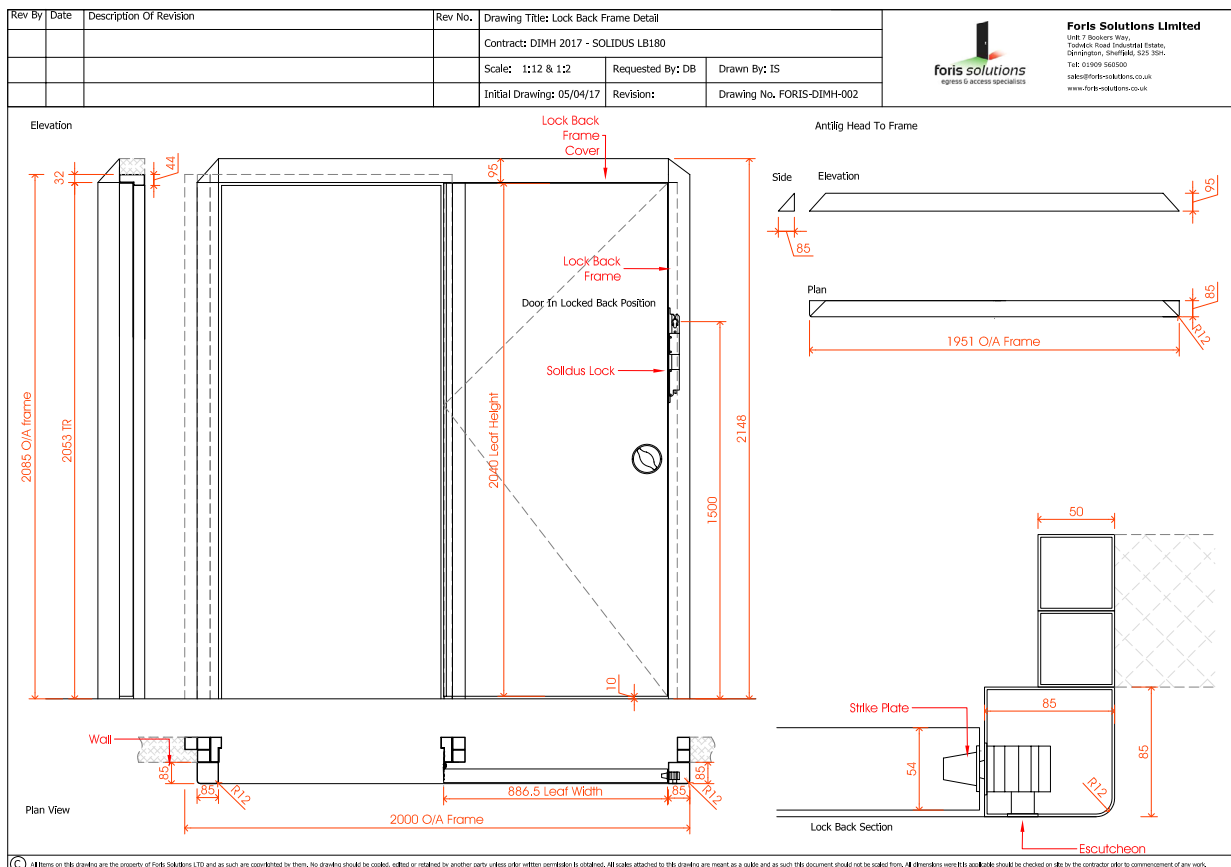
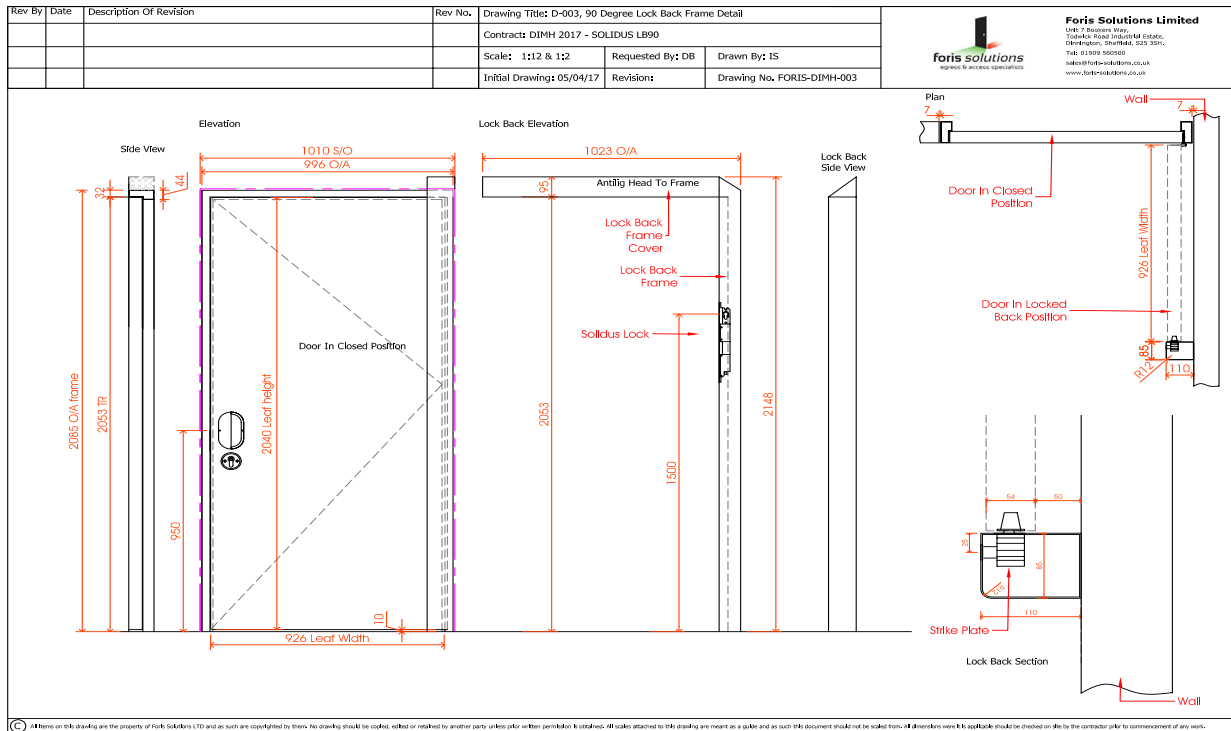


- SOLIDUS doorset – raked head
- SOLIDUS LB90 function
- Anti-ligature locking mechanisms
- Continuous stainless steel hinge

SOLIDUS LB90 and LB180

Frequently required to reduce the risk of abuse service providers require the ability to control the position of bedroom ensuite doors. When not in use the door leaf is locked open or 'locked back'.

SOLIDUS range includes for two options to lock a door leaf open at 90 degrees or 180 degrees.



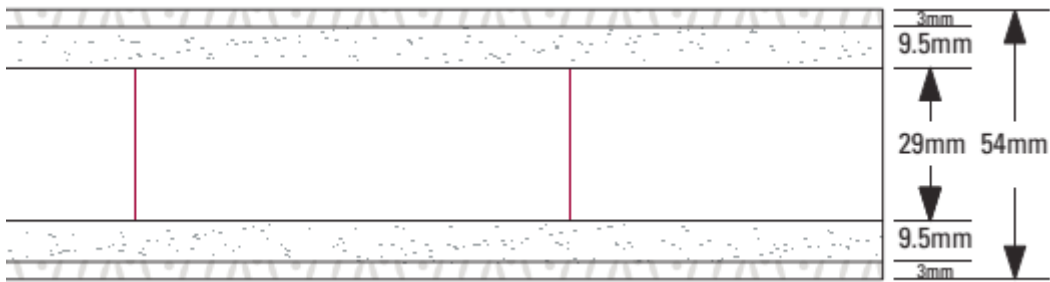
- SOLIDUS doorset
- Lockback frame detail bespoke to suit site requirement
- Anti-ligature locking mechanisms including SOLIDUS access controlled remote release option
- Raked head option

SOLIDUS DOORSETS

SOLIDUS doorsets are manufactured in a continually third party monitored/assessed single source factory environment ISO9001/14001 and BM Trada Q Mark accredited.

SOLIDUS bespoke engineered doorsets reduce site installation and errors ensuring that the door leaf is compatible with the frame and that the ironmongery is installed to template and compliant with manufactures product performance guarantees.

The construction of the SOLIDUS door leaf is a solid laminated timber core, with mendi/mdf facings to receive final finish. Door leaves are hardwood lipped to all 4 edges and door frames will be in hardwood with solid rebates where applicable.



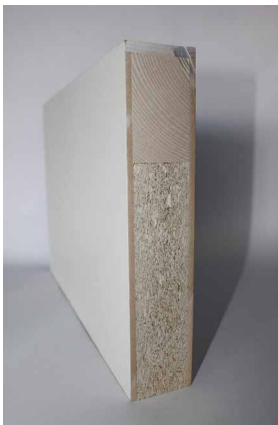
Not all solid core doorsets are equal



Not suitable for mental health

Poor ironmongery provision

Screw fix once



Suitable for staff areas in mental health

65mm deep horizontal and vertical rail frame

Excellent ironmongery provision



Severe duty core suitable for all areas in mental health

Outstanding ironmongery provision

High density core
44mm FD30 at 650kg/m3
54mm FD60 at 720kg/m3

(54mm standard supply in mental health)

SOLIDUS glazing options include fixed and privacy panels which can be installed with stainless steel frames, bolection beading installed with security screws or with flush beading.



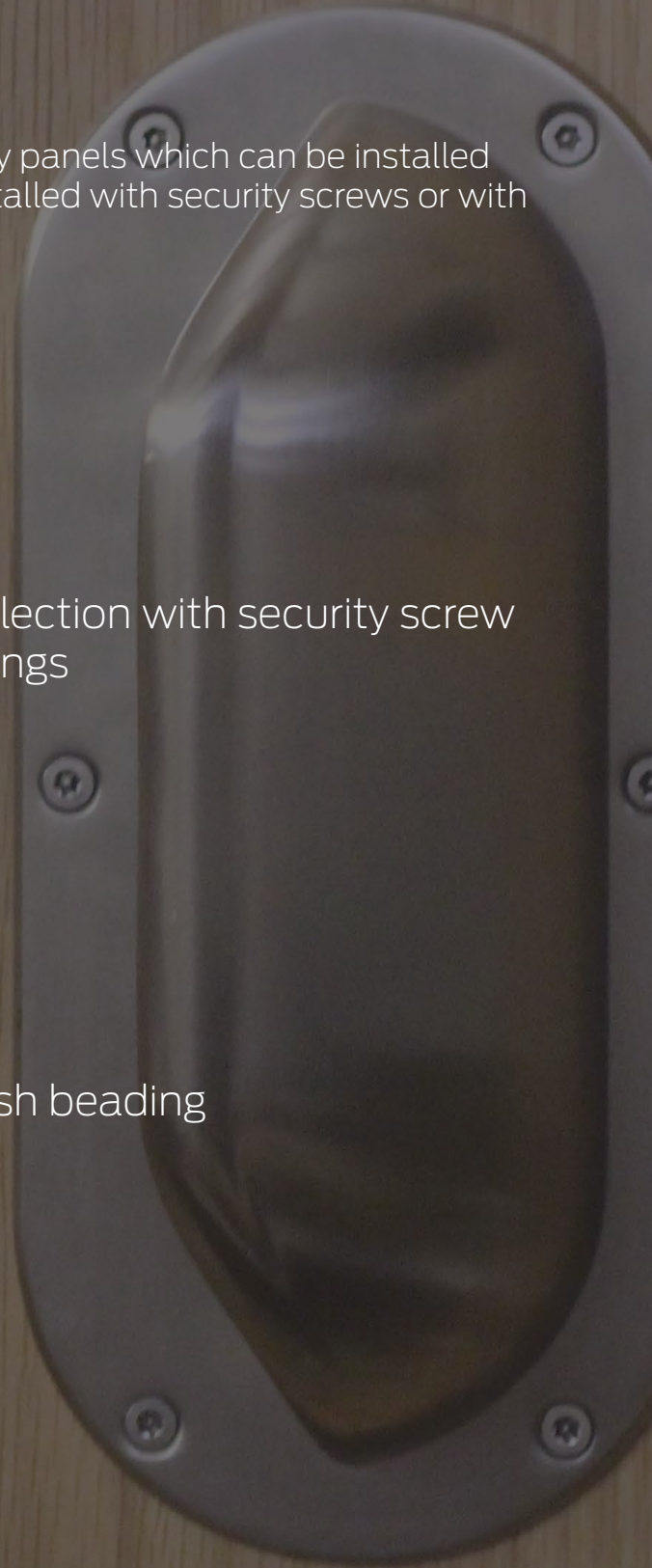
- Bolection with security screw fixings



- Flush beading



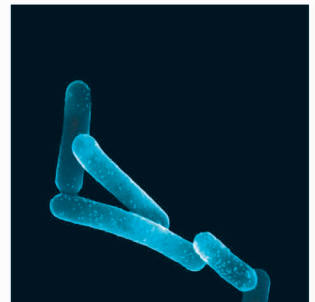
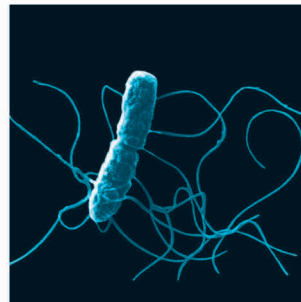
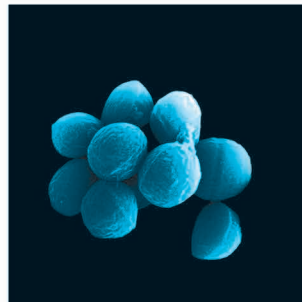
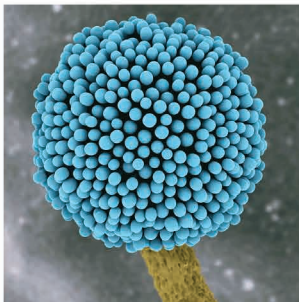
- Stainless steel frame – privacy panel



SOLIDUS doorsets are available in a range of finishes :-



- Paint grade with Hygienilac anti-bacterial protection
- Veneered finishes with Hygienilac anti-bacterial lacquer
- Formica laminates
- PVC impact resistant facings
- 100% Encapsulated doorsets using PVC impact resistant protection



Hygienilac is produced in the UK and has been independently tested at BIOCOTE LAWLABS to BS6250 and has a 99.9% kill rate over a 24hour period of various bacteria including MRSA/Listeria – Hygienilac does not contain silver so is UV stable and non-soluble, it prevents bacteria with access to nutrients and so they starve and die.

Laminate facings are durable and versatile providing finishes which are simple to clean and which can be easily used to harmonise colour schemes and potentially include for bespoke creative designs.



F0157
Tahiti



F3210
Levante



F7924
Lead



F1192
Porcelana



F7902
Iron



F7879
Dusty
Jade



F7851
Spectrum
Blue



F5349
Fossil



F5348
Energy



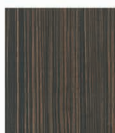
F7923
Surf



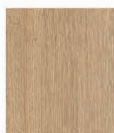
F2005
Paprika



F5127
Monaco



F9012
Ebony



F1062
Smoked
Oak



F1079
Natural
Oak



F3855
Clear
Maple



F5372
Vintage
Wood



F5884
Chestnut
Woodline



F5887
Millennium
Oak



F6052
Cottage
Oak



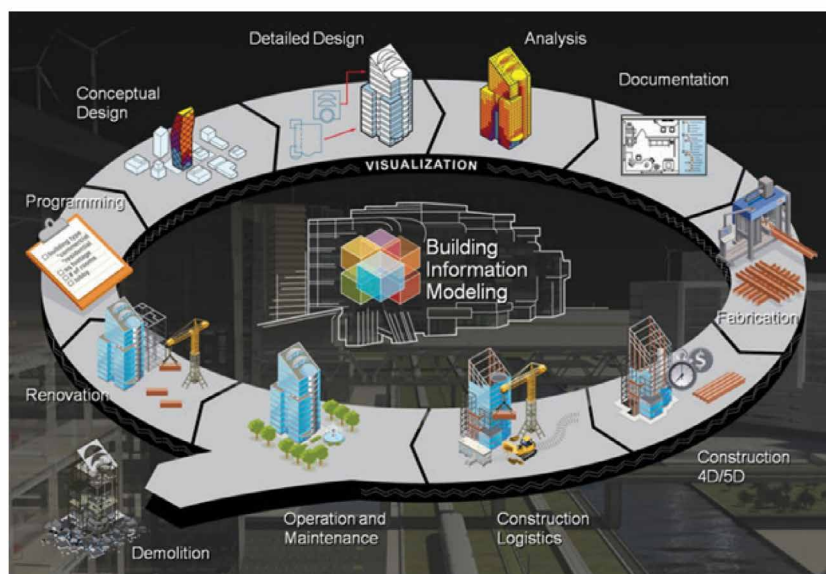
F6209
Prestige
Walnut




F8853
Rural
Oak

BIM Models

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.

Rev	By	Date	Description of Revision	Rev No.	Drawing Title: Equal 3 Hinge Door			<div>  Foris Solutions Limited Unit 7 Bookers Way, Tredwick Road Industrial Estate, Dronington, Sheffield, S23 3SH. Tel: 01909 560500 sales@foris-solutions.co.uk www.foris-solutions.co.uk </div>	
					Contract: TBC				
					Scale: NTS	Requested By:	Drawn By: IS		
					Initial Drawing:	Revision: 0	Drawing No. TBC		

01 3D External View

02 Pull Face
1: 25

03 Push Face
1: 25

04 Head Detail
1: 5

05 Undercut Detail
1: 5

06 Meeting Stile Detail
1: 5

07 Jamb Detail
1: 5

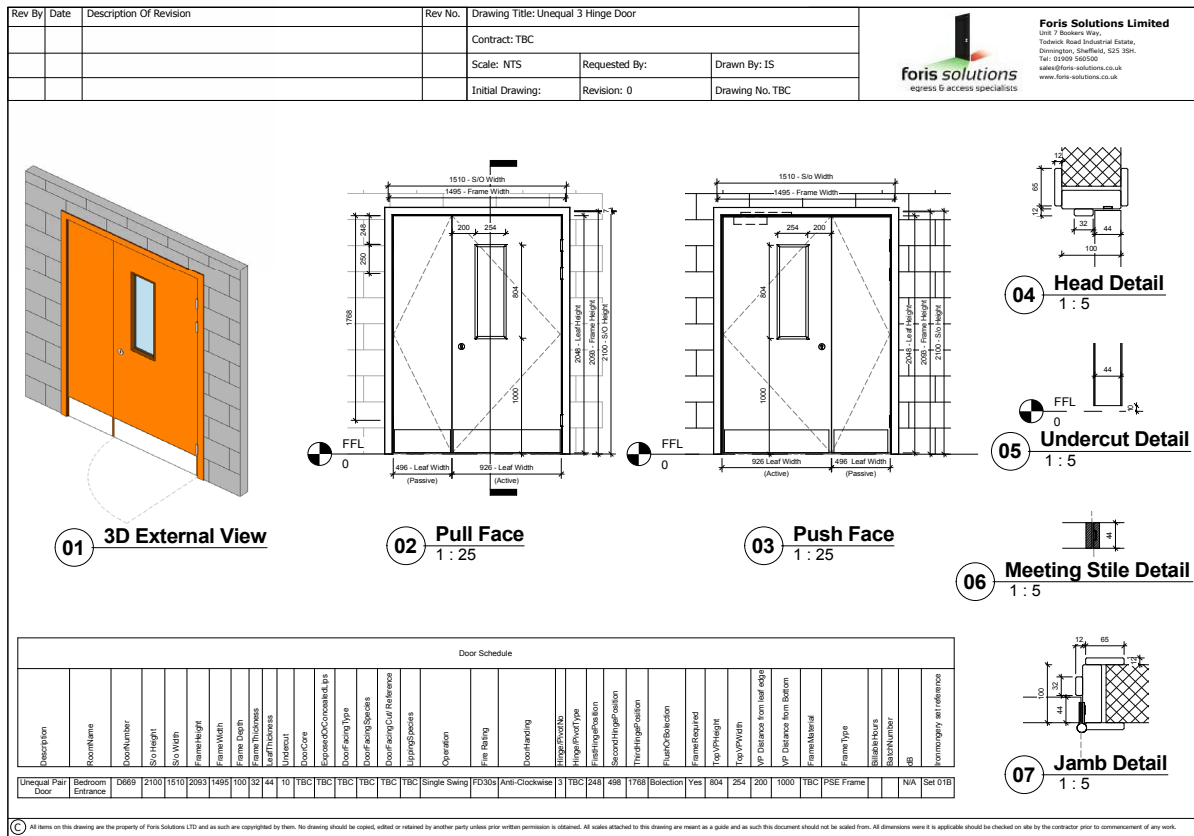
Door Schedule																																
Description	Room Name	Door Number	S/O Height	S/O Width	Frame Height	Frame Width	Frame Depth	Frame Thickness	Leaf Thickness	Undercut	Door Core	Exposed/Concealed Lp	Door Facing Type	Door Facing Species	Door Facing Cur Reference	Upping Species	Fire Rating	Operation	Door Landing	Hinge Position	Hinge Pivot Type	First Hinge Position	Second Hinge Position	Third Hinge Position	Lock Case	Frame Material	Frame Type	Blade Hours	Batch Number	Batch	Ironmongery set reference	
Equal Pair Door	TBC	D384	2100	1810	2093	1796	100	32	54	10	TBC	TBC	TBC	TBC	TBC	TBC	NFR	Single Swing	Equal Pair	3	TBC	248	498	1768	Solidus Lock in Head	TBC	PSE Frame			N/A	Set 13	

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BIM Models

Attached to each MODEL is a COBie output which is a detailed record (essentially an excel spreadsheet) of what was installed in a particular door opening.

This information will ensure any remedial repair in the future is completed using a like for like product to maintain the original design performance and certification.



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 'mIspec' BIM models for each door opening.

The designer merely populated the Revit model with the 'mIspec' BIM model for each relevant opening.



Foris 'mIspec' BIM Models
available through our website
[www.**foris-solutions**.co.uk](http://www.foris-solutions.co.uk)

Ironmongery Components



- Single swing hinge
- Opens to 180°
- Full height continuous leaves
- Geared hinge mechanism
- Electro transfer version available
- Carries door leaves up to 500 kilos



- Double swing hinge
- Open to 180° (90° in both directions)
- Carries door leaves up to 160 kilos
- Fire rated EN1634 30 minute rated



- Full height continuous hinge
- Suitable for retrofitting to existing door sets
- CE marked for use on fire doors
- EN1935 class 14
- 160kg leaf capacity



- EN 1935 Class 14
- Concealed bearings
- Low maintenance
- CE marked for use on fire doors
- Grade 304 (Grade 316 available)
- Anti-ligature tipped



- Jamb fixes
- Concealed closer
- CE marked for use on fire doors
- Can be integrated into continuous hinge
- 180° swing



- Transom concealed door closer
- CE marked for use on fire doors
- Inbuilt finger protection
- Electro magnetic hold open function available
- 180° swing

Amadeo - WI-FI Enabled Locksets



- WI-FI Enabled
- Blue tooth
- Real time access changes
- Audit trail
- Compatible with conventional access control products.
- Anti ligature design
- 24/7 Wireless 'online' control



Amadeo is a powerful combination of great hardware and practical software and is sure to make the management of mental healthcare facilities easier and safer.

Wireless access points are installed across the building to provide 24/7 connection of each lockset to the controlling software enabling service providers complete management of each door at all times.

AMADEO controls and records all movement through door openings, it's the WI-FI enabled system that's entirely safe for use in challenging environments.



16 Service Riser Lockset

- Service risers
- Cupboards
- Wardrobes
- Manual locking
- Key single side



46 Bedroom Lockset

- Bedrooms
- Offices/staff areas
- CTM's
- Therapy rooms
- Manual locking
- Key single side



56 Indicator Lockset

- En-suite/Bathrooms
- Assisted bathrooms
- Bedrooms
- Therapy rooms
- Manual locking
- Key single side



66 Nightlatch Lockset

- Offices
- Cupboards
- Kitchens
- Dispensaries
- Automatic locking
- Key single side



76 En-suite Lockset

- En-suite bedrooms
- Laundry rooms
- Service risers (1 pull only)
- Manual locking
- Shallow cupboards
- Key single side



86 Nightlatch Lockset

- Entrance doors
- Dispensary doors
- Corridor doors
- Automatic locking
- Link doors
- Key both sides



96 Communal Lockset

- Communal rooms
- En-suite
- Link doors
- Manual Locking
- Offices/CTM's
- Key both sides



96X Lock Back Lockset

- Lockback ensuite rooms
- Key both sides

Twin-Tech Locksets



A new solution to providing secondary anti-barricade, Concealed override system works in conjunction with the primary override system, to ensure clinical staff can unlock and open a door, even when the key won't work!

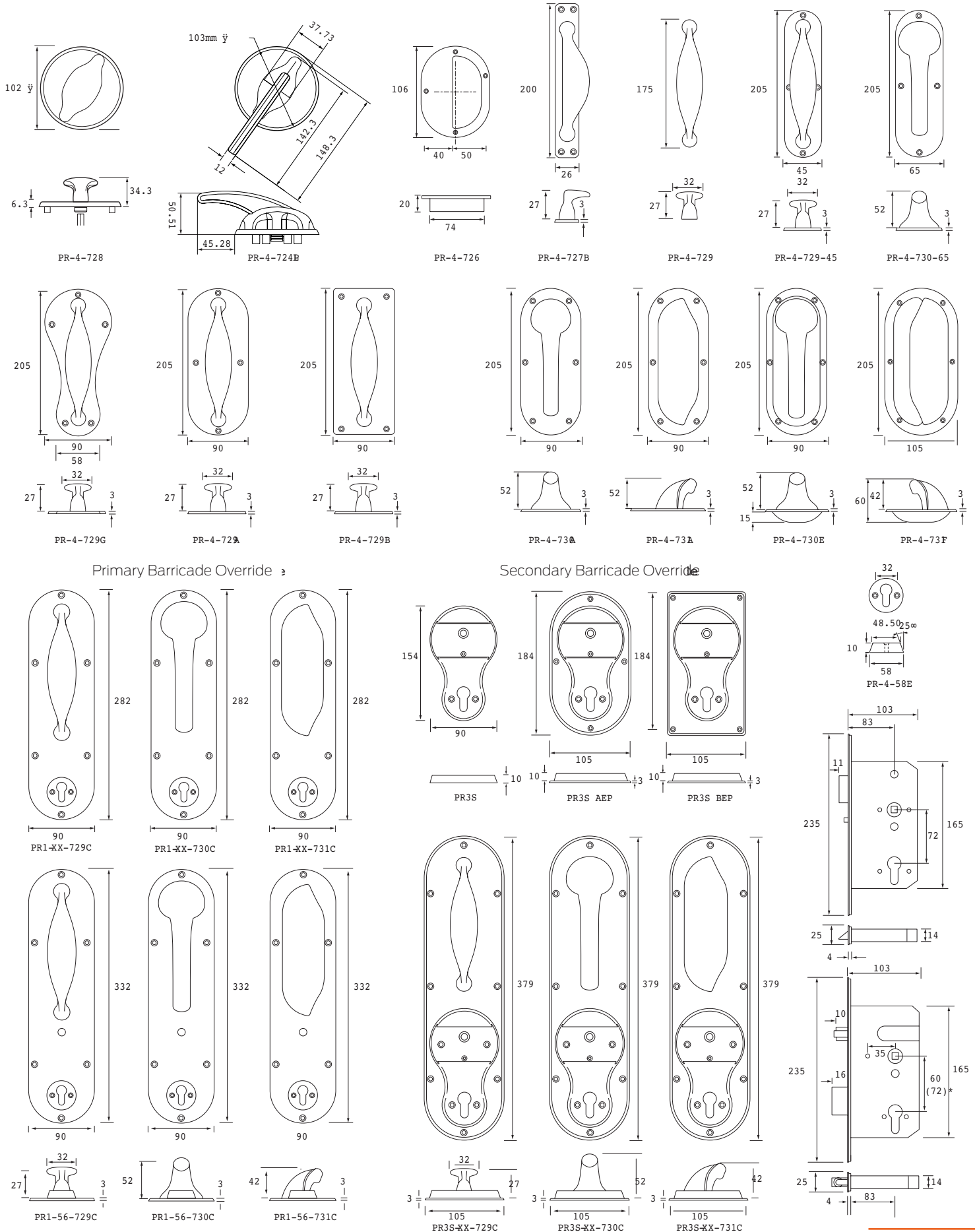


Life-Line Locksets



The life-line keyway reduces the potential of service users jamming keyways with foreign objects to prevent staff access.

Backplate Options



SOLIDUS Lock

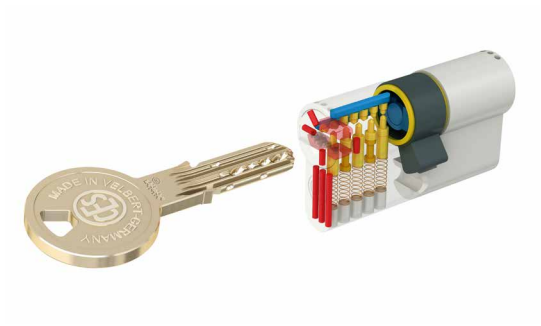


- Three option installation, door leaf, jamb or head
- 24V DC stabilized ($\pm 5\%$)
- 1M cycle testing
- EN1643-1 60min Rated
- Mechanical key override
- 2500kg Resistance to lateral pressure
- Suitable for single and double swing doorsets
- Adjustable strike plates available

SOLIDUS SL Lockset



- Slam lock function
- External fixed anti-ligature handle
- Internal anti-ligature handle to retract latch
- 5mm Thick stainless steel backplate bolt through fixed
- 72mm Centres standard (bespoke plates available)



- SOLIDUS key systems are trademark protected indefinitely providing lifetime protection against unauthorised duplication of keys and key blanks.



- Double Cylinder - Keyway both sides
- Trademark protected
- Offset cylinders available



- Single cylinder - Keyway one side
- Trademark protected



- Operable by standard lifeline key
- Double cylinder - Keyway both sides
- Single cylinder - Keyway one side
- Prevents keyway being jammed by foreign objects.



- Anti-ligature coat hook



- Anti-ligature door viewer



- Anti-ligature escutcheons



- SSS Bathroom privacy set with bolt through fixings
- Various key release options



- Anti-ligature pivot point protector



- Wall fixed door stop



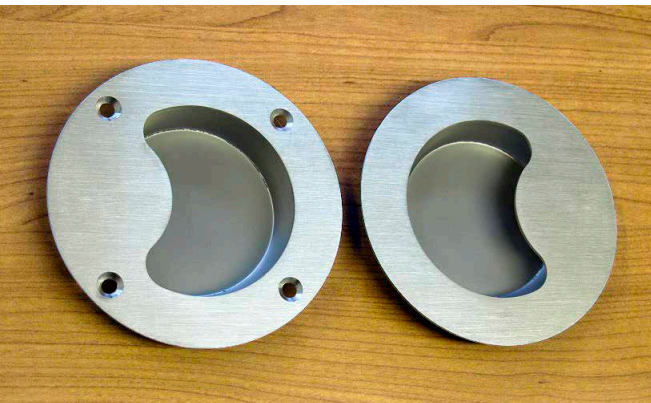
- Floor fixed door stop (staff areas)



- Heavy duty floor fixed door stop

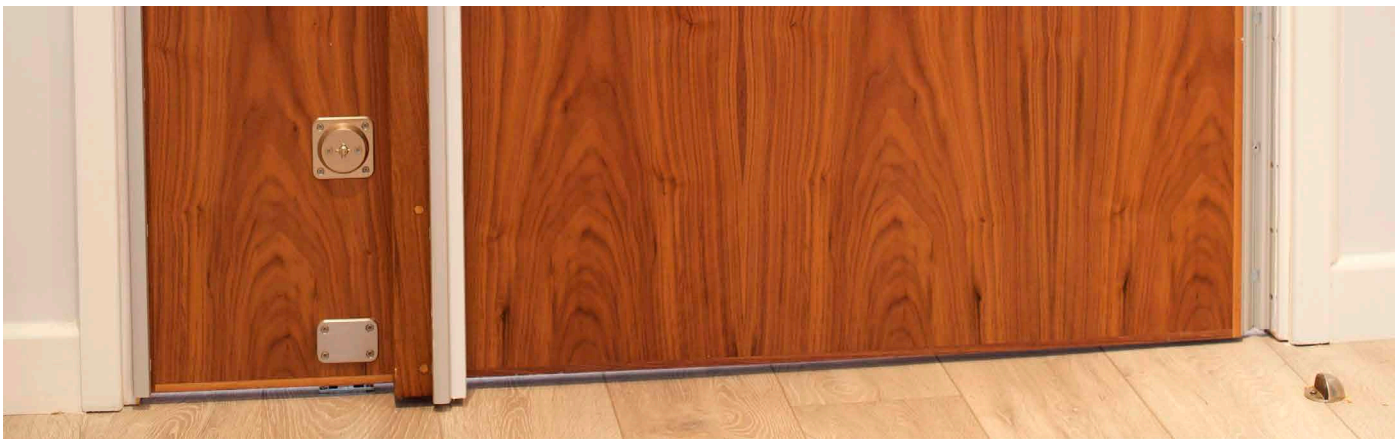


- Anti-ligature pull handle

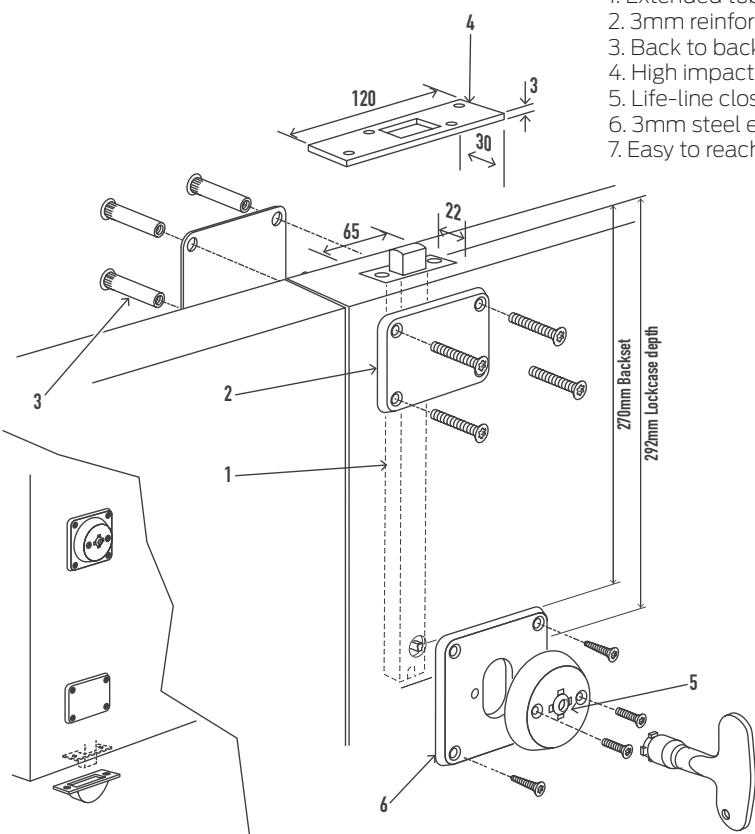


- Anti ligature flush pulls

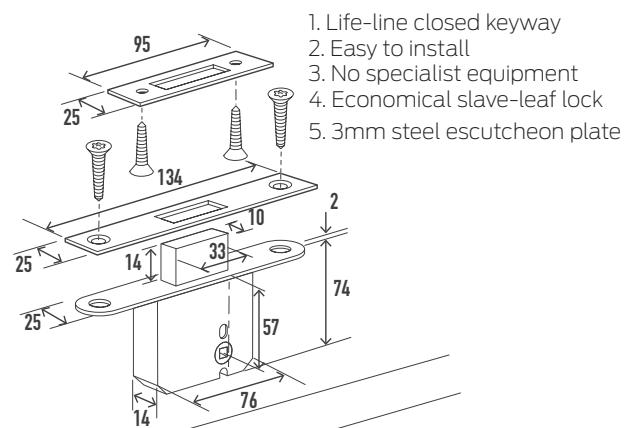
Rhino Bolts



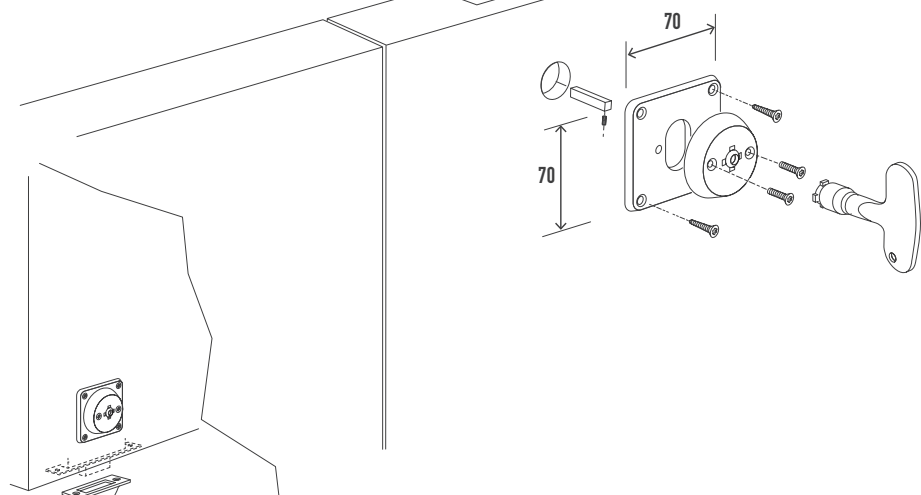
1. Extended tubular deadbolt
2. 3mm reinforcing plates
3. Back to back fixings
4. High impact strike plate
5. Life-line closed keyway
6. 3mm steel escutcheon plate
7. Easy to reach



Detail at the foot of the door

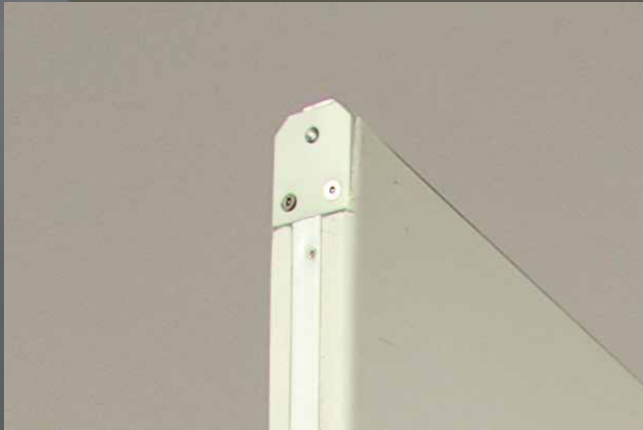


1. Life-line closed keyway
2. Easy to install
3. No specialist equipment
4. Economical slave-leaf lock
5. 3mm steel escutcheon plate



Detail at the foot of the door

Door Top Alarm - Ligature Detection



- Fire tested to BS476 part 20 + 22 for 30 minutes
- Suitable for 44 + 54mm door
- To be used in conjunction with modified transfer hinge
- Suitable for use with both single and double hinges
- Connects to existing staff attack system
- Tamper proof preventing false alarms



Privacy Panels



- Available in stainless steel and wood effect vinyl wrapped
- 45% visibility
- Fire rates to 60 mins



- Available in stainless steel and wood effect vinyl wrapped
- 92% visibility
- Fire rated to 60 mins



- Available in stainless steel and wood
- 100% visibility



- Fire rated to 60 mins
- IntaVision Privacy Panel**

SOLIDUS Washroom Accessories

Mental health approved
anti-ligature design hand dryer



Recessed toilet roll holder



Paper towel dispenser



Recessed shelf



Mirrors (various sizes)



Recessed soap dish



Recent Projects



Humber Centre

Main contractor - Simons Medicinq

Humber Centre

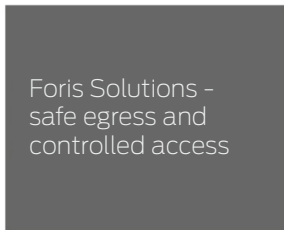


Northampton CAMHS Unit

Princess Marina Hospital

Main contractor - Simons Medicinq

Client = Northamptonshire Healthcare
NHS Foundation Trust



DSPDU Rampton

Main contractor - Costain

Client = Nottingham Healthcare NHS Trust

Architect - Swanke Hayden Connell



Townend Court

Main contractor - Simons Medicinq

Client = Humberside NHS Trust



(image provided by David Churchill)



Kingfisher Court

Main contractor - Osborne Medicinq

Client = Hertfordshire Partnership
NHS Foundation trust

Architect - P + HS

"the complete single
source solution"

Other projects completed include

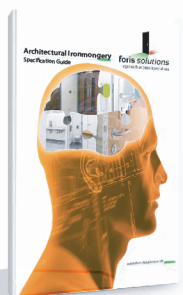
Little Plumstead, Norwich - Simons Medicinq for Hertfordshire Partnership NHS Foundation Trust
Northampton CAMHS, Princess Marina Hospital - Simons Medicinq for Northamptonshire Healthcare
Beighton Community Hospital, CAMHS Unit - Costain for Sheffield Childrens Hospital
Millview Unit, Castle Hill Hospital - Number NHS Trust for Humber NHS Trust
Newhaven 4, Newton Lodge Development, Fieldhead Hospital, Wakefield - Interserve for South West



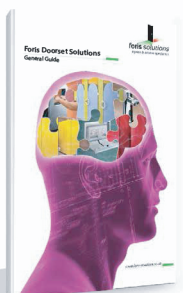
Core to our business is the specification and supply of door ironmongery, but we continue to evolve and develop complimentary skillsets and product solutions.

We now offer high performance pre-hung internal timber doorsets, external steel security doorsets, electronic security systems and washroom solutions including cubicles, lockers, hand driers and accessories.

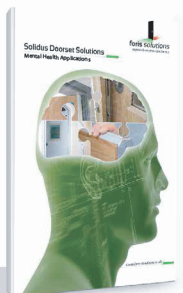
At every stage of the build process Foris Solutions can assist architects, contractors and building owners to deliver safe egress and controlled access through any door opening.



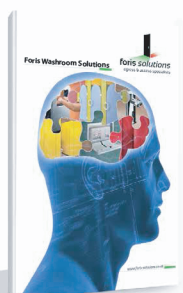
Architectural Ironmongery Specification Guide



Foris Doorset Solutions General Guide



Solidus Doorset Solutions Mental Health Applications



Foris Washroom Solutions

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