



GT ACCESS



TECHNICAL DATA SHEETS



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GT ACCESS CLEANROOM DOORS



Guardtech offer a range of cleanroom grade door solutions to best suit the needs of your application. Whether it's budget, lead time or performance that matters most, Guardtech provide a comprehensive choice of single and double doors to ensure your process requirements are achieved.

From robust, high-performance fully flush solutions to more economical service door options, the Guardtech Group's Directors, Design Engineers and Installation team have worked together to carefully select four industry-leading door options for your consideration.

Read on to discover the benefits and compromises of the different choices we have, then use this guide to make the most informed choice possible.

Let Guardtech take your operation to the next level.



ACCESS MAX

GT Access Max is a range of pneumatic seal doors that provide the highest possible airtight containment for facilities with the most stringent demands for tight control – such as GMP cleanrooms and biosafety labs.



ACCESS PRO

Fully flush powder-coated steel cleanroom grade door leaf and frame solution – combining stunning aesthetics with elite performance to deliver the best results for the most demanding critical environments.



ACCESS PLUS

GT Access Plus are semi-flush and nearly flush powder-coated steel cleanroom grade door solutions – featuring a QuadCore or MF (mineral fibre) Core, available in single and double door configurations.



ACCESS LITE

GT Access Lite is Guardtech's entry-level door option – a powder-coated steel door with a standard anodised aluminium frame, featuring PIR insulation core and a clear opening width of 650 – 3140mm.



ACCESS FIRE

GT Access Fire is Guardtech's fire-rated cleanroom door solution – an advanced-hinged door range that offers an unparalleled combination of insulation, fire rating, acoustic ratings and smoke sealing.





GT ACCESS MAX

GT Access Max is a range of pneumatic seal doors that provide the highest possible airtight containment for facilities with the most stringent demands for tight control – such as GMP cleanrooms and biosafety labs.

GT Access Max is a range of pneumatic seal doors that provide the highest possible airtight containment for applications with the most stringent demands for tight control – often those that require GMP grade facilities or level 3 and 4 biosafety laboratories.

This includes environments with levels of high traffic and persistent transfer of wheeled equipment.

The GT Access Max

doorframe is flush with the floor, eliminating any trip hazard or trolley interference.

Compressed air inflates the seal around the door perimeter, creating an effective barrier against leakage up to pressure differences of 2000Pa (8" w.g.).

The door leaf is available in polished stainless steel, powder-coated low-carbon steel, aluminium or as a solid core phenolic resin construction.



TECHNICAL FEATURES



- High leakage resistance across the complete door set
- Monitoring of seal pressure
- Monitoring of supply pressure from building
- Unique GT Access Max cast stainless-steel hinge assembly
- Stand-alone PLC controls available
- True Flush threshold option
- Door leaf construction options
- Available in either single or double seal
- Silicone or EPDM inflatable seal
- Hydraulic or Automatic Door Closers
- Configurable button sets and LED indicators
- Flush glazed vision panels – toughened or laminated glass



The inflatable seal is created by joining a hollow extruded profile to form an airtight seal that can be inflated to seal two surfaces. Providing a clean, time-saving sealing solution to hermetic sealing against powders, gases, liquids, and dust.

TECHNICAL DATA



The seal on GT Access Max doors conforms to the curved doorframe, ensuring a secure fit for ultimate peace of mind.

This also enables the use of reliable software during the FAT, ultimately reducing on-site time and risk. Designed to install into a range of wall types such as

cast concrete, block, stud and partition systems.

The door has been engineered with a unique cast stainless-steel hinge assembly and includes a strong tempered or laminated glass flush-glazed vision panel that fits seamlessly within the stainless-steel door frame.

BENEFITS

- Hermetically sealed for ultimate performance when dealing with powders and gases
- Ideal for implementation in GMP environments and biosafety laboratories
- Interlocking systems available
- Safety features included to account for facility power loss

PRODUCT OPTIONS

INTERLOCK SYSTEMS

FRAME DESIGN

Seals to almost all wall types – with no visible fixings to the wall.

DOUBLE SEALS

UPS TO PLCs

POWER LOSS UPGRADE SYSTEM

Keeps compressed air supply to the seal in power failure.

LOW-LEVEL SAMPLING PORT

PNEUMATIC OVERRIDE BUTTON

To release the seal in the event of power failure.

VISION PANEL COVER

AUTOMATIC CLOSER

LARGE DOOR DESIGNS

Up to 4m H and 2.5m W.

COMPROMISES

- The most expensive option in the range of GT Access doors
- Longer lead times than the other GT Access options
- More complex servicing requirements
- Require a more concerted effort in terms of maintenance than other options in the range

APPLICATIONS



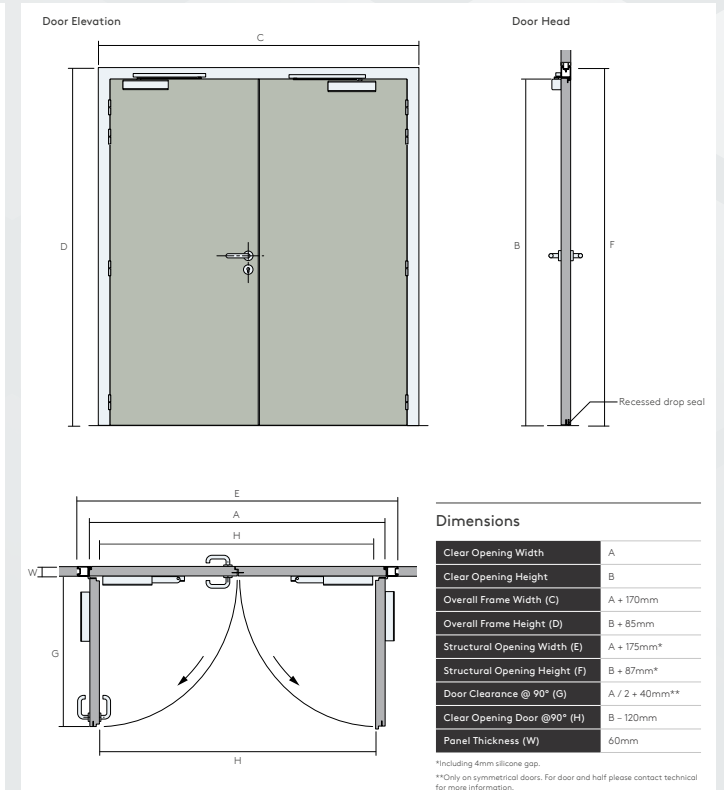
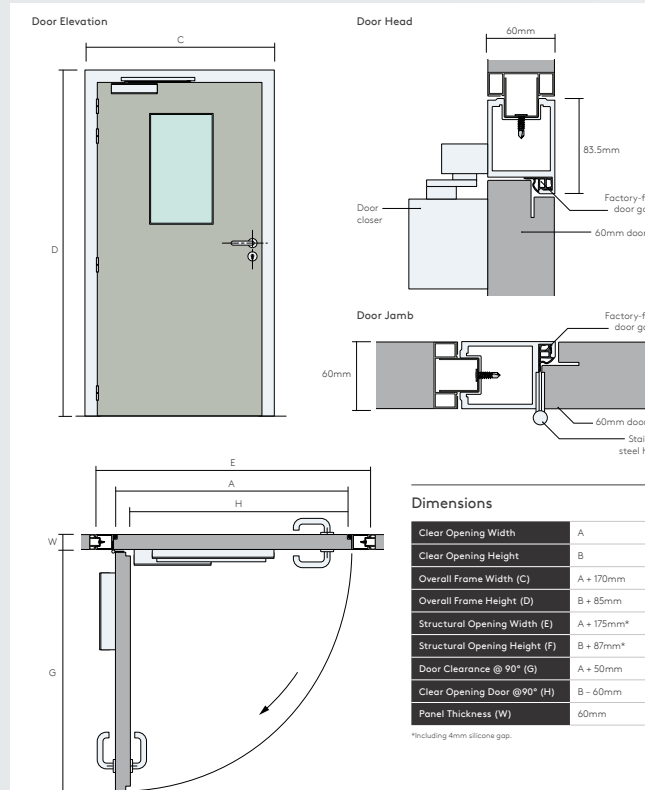
GT Access Max suits the most demanding of applications, typically where particulate needs to be controlled to extremely tight tolerances. This often includes cleanrooms with an ISO5 or 6 classification, as well as those required to comply with cGMP conditions outlined in EU GMP Annex 1, ISO 14644-1 and US FS209E.

A dark grey door with a square glass window in the upper center. The window shows a reflection of the interior. A silver handle is mounted on the left side of the door. The door is set in a light-colored wall.



TECHNICAL FEATURES

DOUBLE DOOR 60MM



BENEFITS

- ## COMPROMISES

- Higher price point
- Potentially longer lead times
- Limited choice of colour options

APPLICATIONS



Medical Device



Healthcare



Oil & Gas



Cell & Gene



Battery



Laser & Optical

GT Access Max suits the most demanding of applications, typically where particulate needs to be controlled to extremely tight tolerances. This often includes cleanrooms with an ISO5 or 6 classification, as well as those required to comply with cGMP conditions outlined in EU GMP Annex 1, ISO 14644-1 and US FS209E.

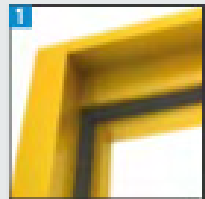
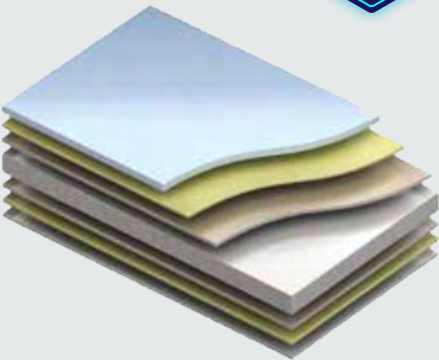


GT ACCESS PRO

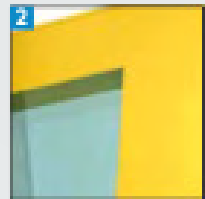


A range of finishes are available to compliment a variety of internal clean controlled environments.

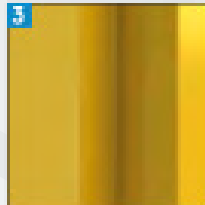
Depending on the door type, cleaning regime and internal environment there are a variety of options to choose from such as powder coating and the CLEANsafe range of coated steel finishes.



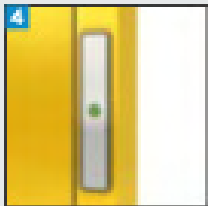
Powder coated to precisely match the door leaf, panels and accessories.



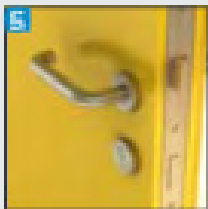
Fully flush window using state-of-the-art-folding equipment to ensure clean and smooth integration.



Easy to clean smooth, sealed construction does not harbour dirt or bacteria, for the highest GMP applications.



Intergrated push buttons in the door frame with maglock at the head.



Various stainless steel handles and lock cases available.

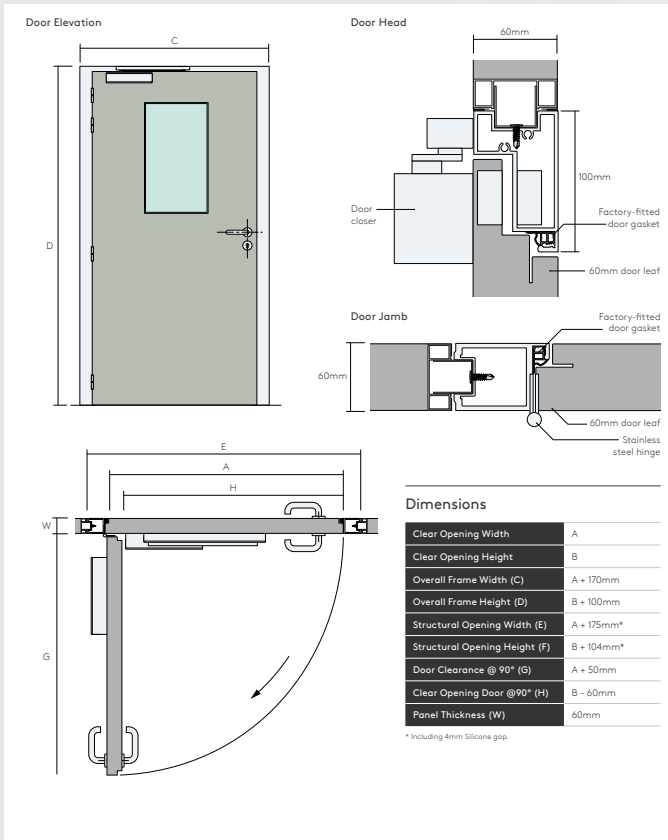


Fully enclosed, recessed threshold drop seal and perimeter gaskets to ensure best in class air leakage performance.

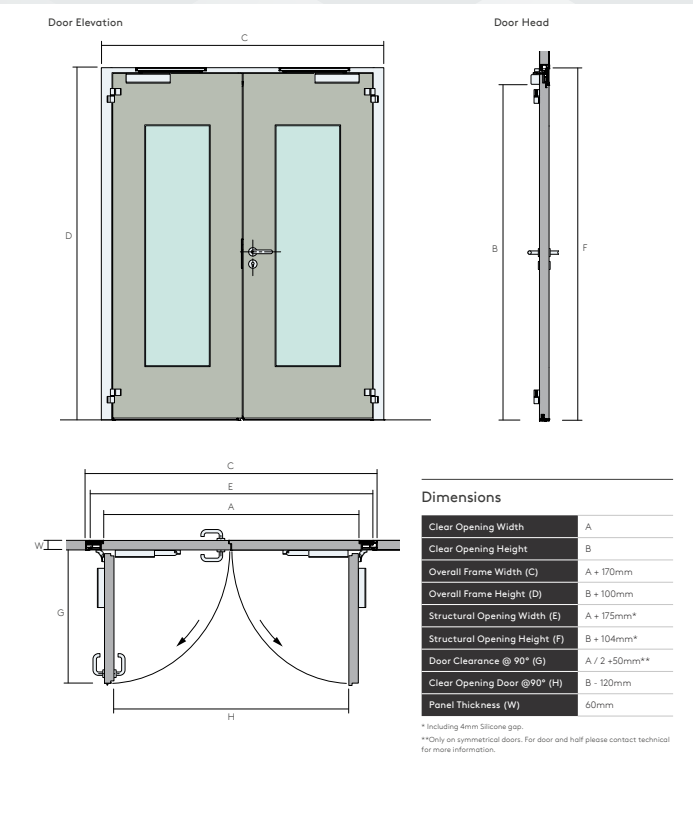


TECHNICAL DRAWINGS

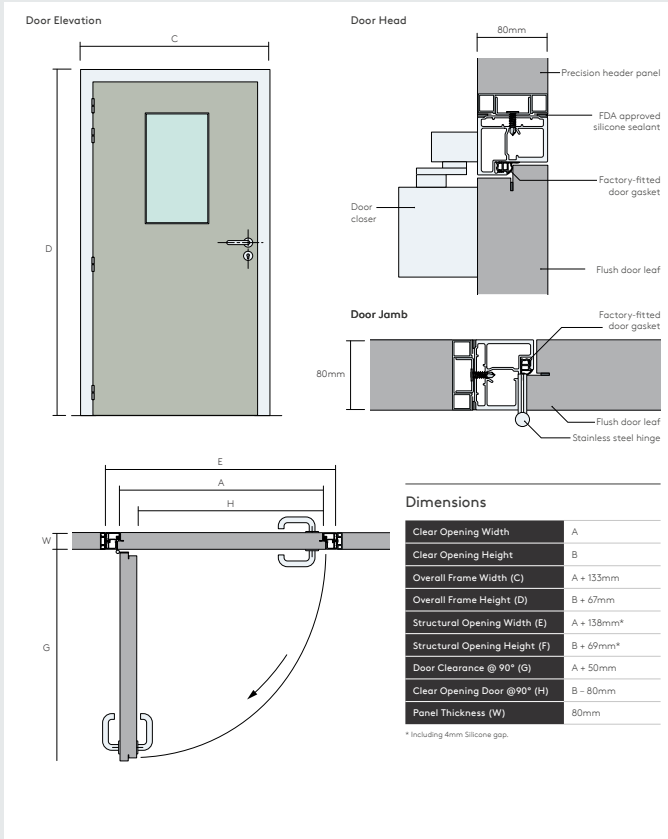
SINGLE DOOR 60MM



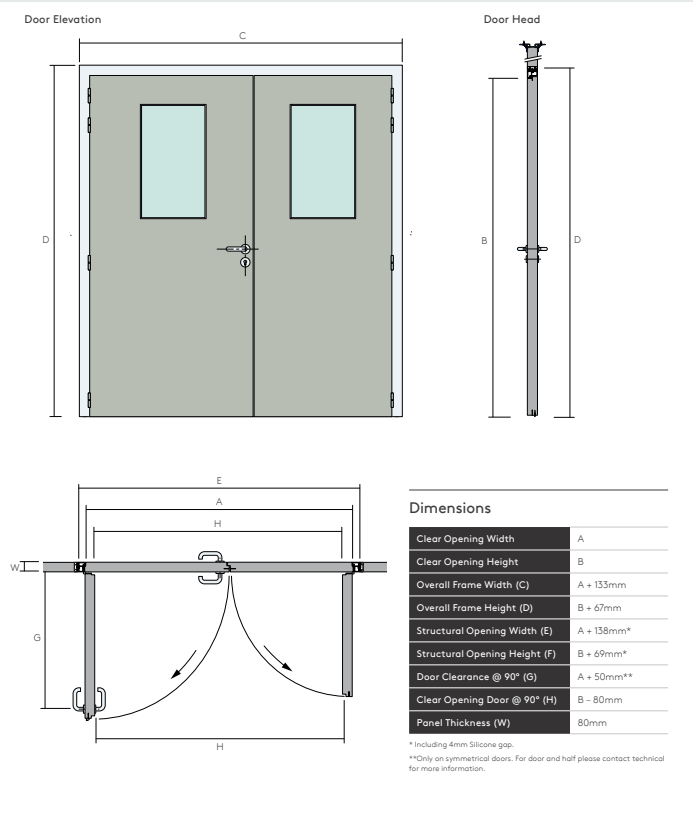
DOUBLE DOOR 60MM



SINGLE DOOR 80MM



DOUBLE DOOR 80MM





GT ACCESS PLUS

GT Access Plus are semi-flush and nearly flush powder-coated steel cleanroom grade door solutions – featuring a QuadCore or MF (mineral fibre) Core, available in single and double door configurations.

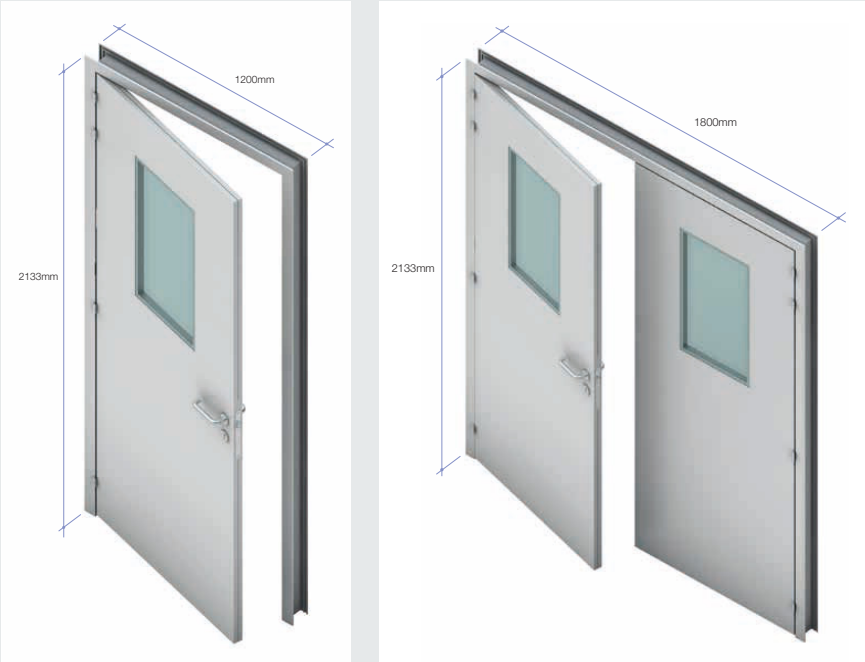


GT Access Plus offers the choice of either a semi-flush or nearly flush powder-coated steel cleanroom grade door solution.

Featuring a QuadCore or Mineral Fibre Core, the doorleaf is available in thicknesses of 40, 60 and 80mm.

GT Access Plus doors come with a recessed drop seal and a stainless steel level handle as standard, with a range of lock and latch options.

Stainless steel pull handles and push plates are also standard fitting options, as well as stainless steel fixed hinge or adjustable hinges. Ask a Guardtech rep for more information on the various up-grades available.



TECHNICAL FEATURES

TECHNICAL DATA	
DOOR LEAF	QuadCore® insulation core. Optional Mineral Fibre core available. 40mm, 60mm, 80mm thickness available depending on door type
DOOR COATINGS	CLEANSafe coating range Powder coated galv
DOOR FRAME	Aluminium 6063 alloy – polyester powder-coated (colour matching available) Frame suitable for 60mm – 150mm wall thickness
CLEAR OPENING WIDTH	Single – 1,050mm (max.)** Double – 2,100mm (Max.)**
CLEAR OPENING HEIGHT	Single – 2,400mm (max.) Double – 2,400mm (max.)

*Values stated are for standard single door with drop seal. For other information please contact the tech exchange.

**For larger sizes please contact tech exchange team for information.

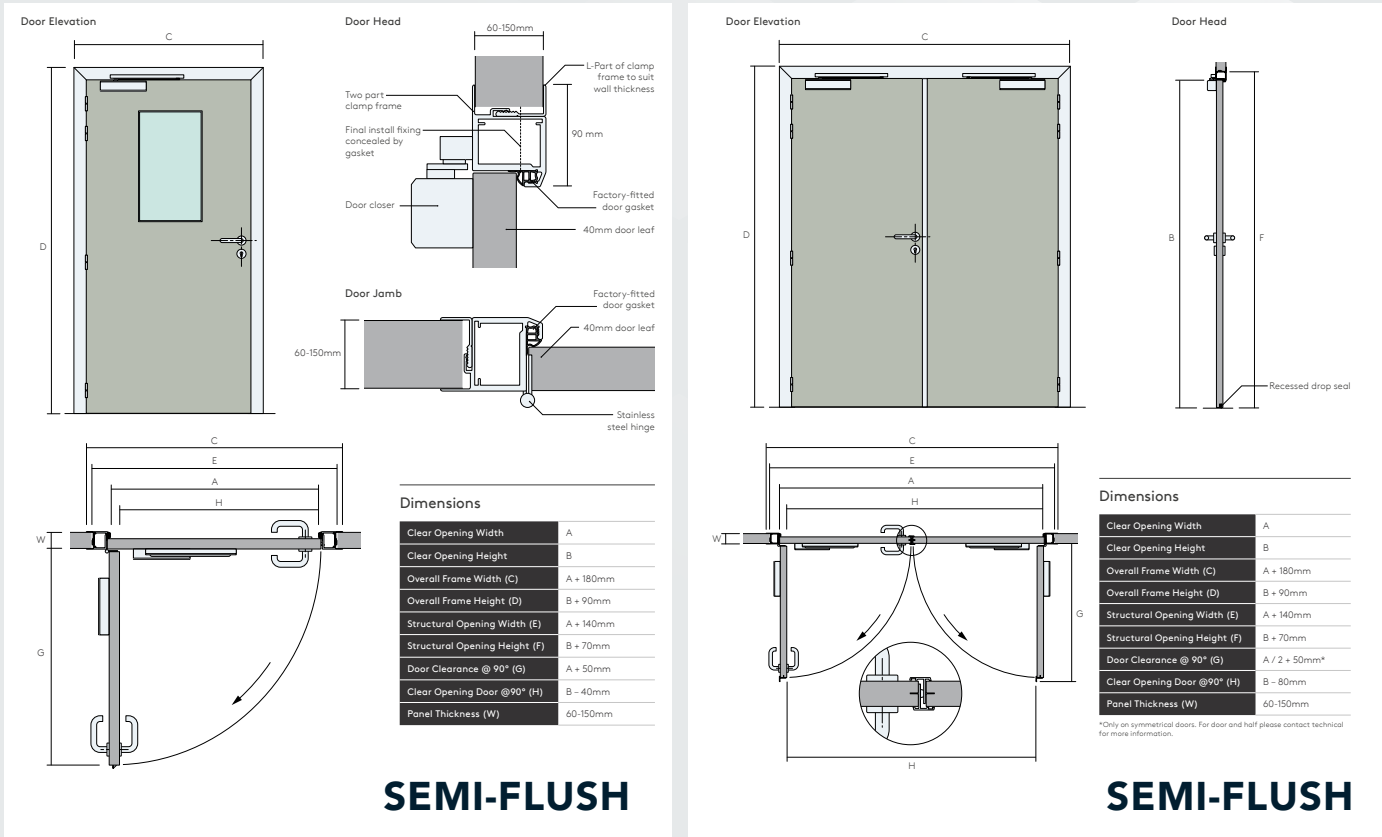
TECHNICAL DATA	
STANDARD FITTING OPTIONS	Recessed drop seal Stainless steel level handle with range of lock and latch options Stainless steel pull handles and push plates Stainless steel fixed hinge or adjustable hinge
ADDITIONAL FITTINGS AVAILABLE	Vision panels – two 6mm laminated glass panels with flush intergration to door leaf Interlocking system Emergency panic bar Stainless steel kickplates Door closer
NON-STANDARD OPTION	Four-sided frame



TECHNICAL DRAWINGS

SINGLE DOOR 40MM

DOUBLE DOOR 40MM



BENEFITS

- Various chemically inert, anti-bacterial coatings available
- QuadCore or MF (mineral fibre) core
- Variety of options available to upgrade the door's functionality
- More competitive price point than GT Max or GT Pro options

COMPROMISES

- Not available as a fully flush solution
- Not as suitable for the more stringent controlled environments



APPLICATIONS



Cosmetics Automotive Horticulture Digital Printing Aerospace Manufacturing

GT Access Plus is a versatile cleanroom door solution suitable for a significant number of different industries using controlled environments as part of their process. However, because this solution is semi-flush, GT Access Plus is not appropriate for applications where ledges can compromise standards.



GT ACCESS PLUS



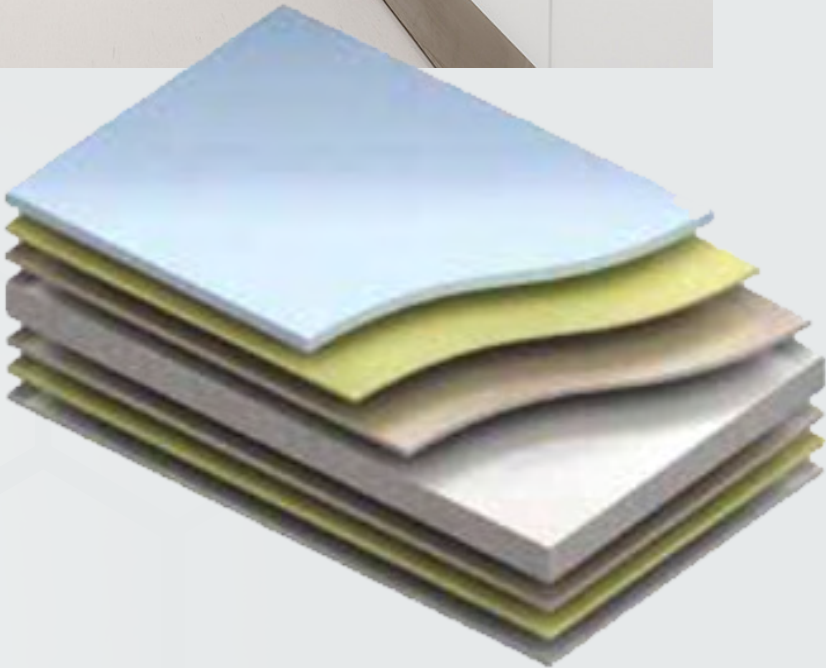
HIGH PERFORMANCE

Featuring high-performance QuadCore insulation technology, GT Access Pro and Plus doors deliver a high level of environmental and thermal performance in addition to their high air permeability performance.

This door range is designed to be as installation-friendly and cleanable as possible. Mineral Fibre core also available on request.

AIR PERMEABILITY PERFORMANCE

- Air permeability according to EN 12426: 2000 Class 4.
- Leakage at +50Pa positive pressure 1.9m3/h.m2.
- Leakage at -50Pa positive pressure 2.98m3/h.m2.
- Resistance to water penetration according to EN 12425: 2000 Class 2.
- Resistance to windload according to EN 12424: 2000 Class 3.

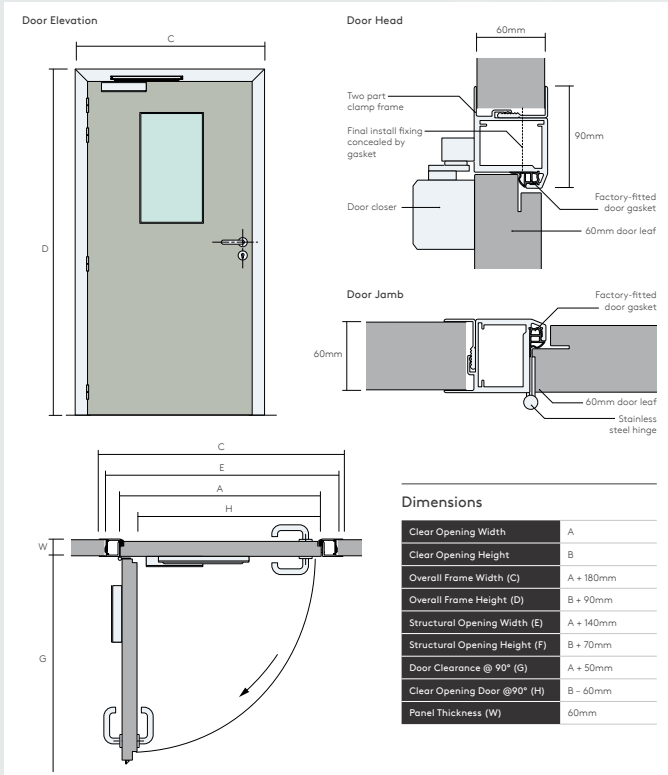


A range of finishes are available to compliment a variety of internal clean controlled environments.

Depending on the door type, cleaning regime and internal environment there are a variety of options to choose from such as powder coating and the CLEANsafe range of coated steel finishes.

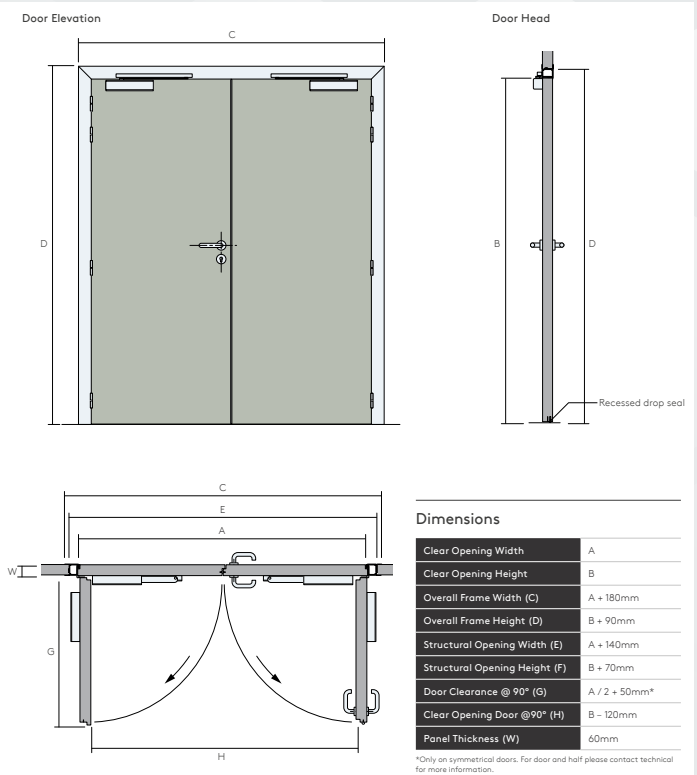
TECHNICAL DRAWINGS

SINGLE DOOR 60MM



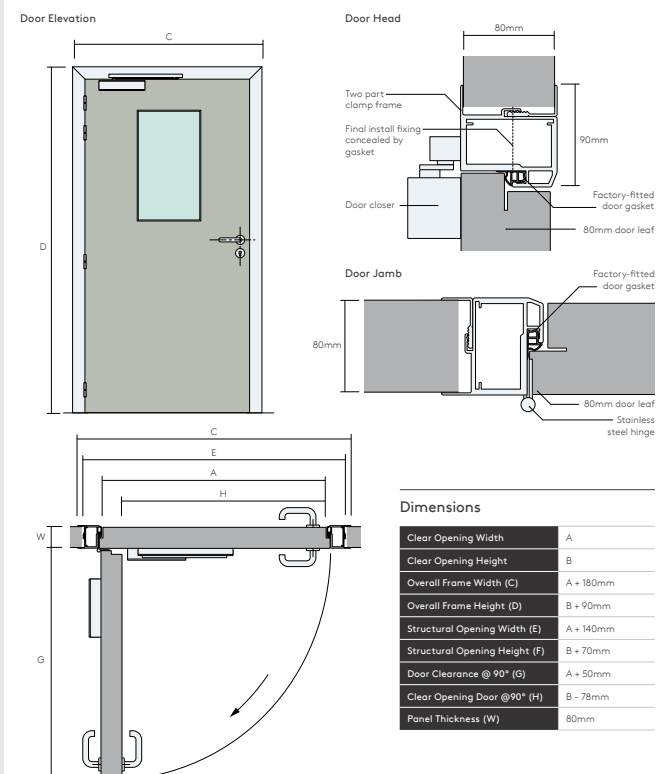
NEARLY FLUSH

DOUBLE DOOR 60MM



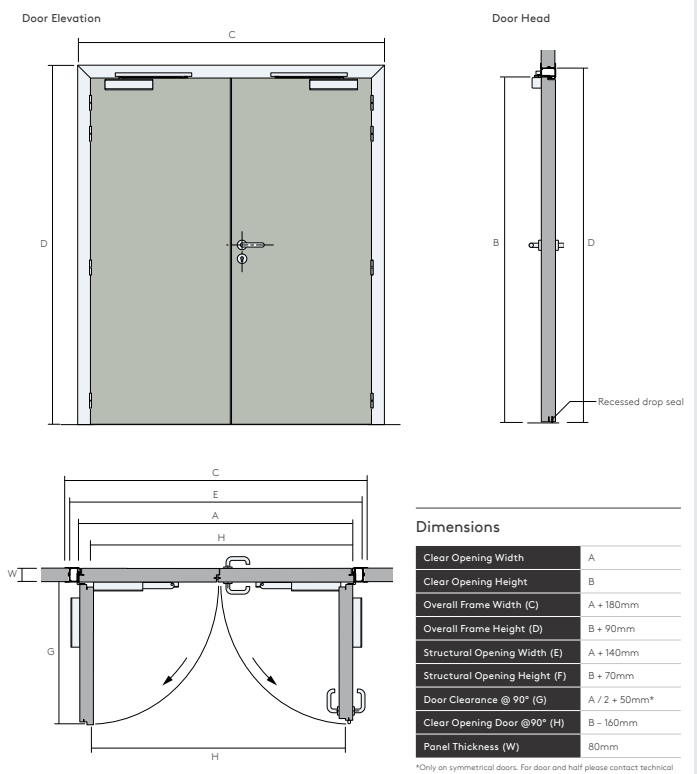
NEARLY FLUSH

SINGLE DOOR 80MM



NEARLY FLUSH

DOUBLE DOOR 80MM



NEARLY FLUSH



GT ACCESS LITE



GT Access Lite is Guardtech’s entry-level door option – a powder-coated steel door with a standard anodised aluminium frame, featuring PIR insulation core and a clear opening width of 650 – 3140mm.

GT Access Lite is Guardtech’s entry-level service door solution, designed for use in a variety of different controlled environment settings where the level of control is far less critical than at the higher end of ISO classification.

These robust, reliable powder-coated steel doors feature standard anodised aluminium frames and an ECOSafe PIR insulation core, with a clear opening width of 650 to 3140mm.



PRODUCT FEATURES

For use in industries and applications with less demand on the level of control required.

COATINGS

External coatings available in XL forté and Spectrum

Internal coatings available in CLEANsafe 25, CLEANsafe 55, CLEANsafe 120, CLEANsafe 304

OPENINGS

Clear opening width 1100 mm (single), 2200 mm (double)

Clear opening height 2500 mm (single), 2500 mm (double)

FRAME

Door frame available in standard anodised aluminium

OPTIONAL EXTRAS

Vision panel, CLEANsafe 316 kick-plate, aluminium kick plate

Thickness of door leaf: 40mm (t°+)

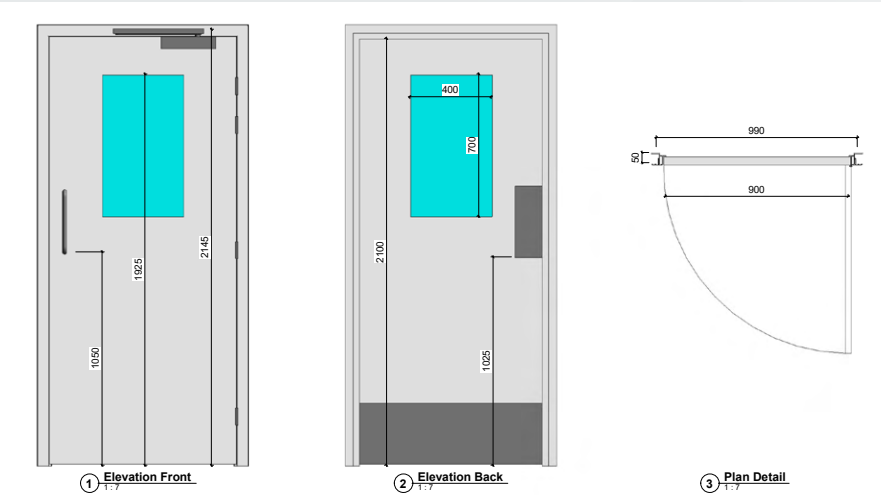
Internal door face stainless steel option is CLEANsafe 316, Kick Plates are stainless steel CLEANsafe 316



TECHNICAL DRAWINGS



The Guardtech Group successfully utilise GT Access Lite in their award-winning CleanCube Mobile Cleanrooms. The images below show the product in use.



This drawing shows a typical example of the dimensions for a Guardtech GT Access Lite service door, but other sizes can be requested.



BENEFITS

- ECOSafe PIR insulation core
- Shorter lead times
- Highly competitive price point

COMPROMISES

- Not available as a fully flush solution
- Only suitable for applications where minimal levels of control are required

APPLICATIONS



GT Access Lite suits the least demanding of applications – most commonly laboratories or non-classified controlled environments where considerations on the movement of air and type of airflow is of far less significance.



GT ACCESS FIRE



GT Access Fire is Guardtech’s fire-rated cleanroom door solution – an advanced-hinged door range that offers an unparalleled combination of insulation, fire rating, acoustic ratings and smoke sealing.

GT Access Fire is an advanced-hinged door range that offers an unparalleled combination of features for a wide range of applications.

These include air-tightness, water-tightness, insulation, fire rating, acoustic ratings, security ratings and smoke sealing.

Available in galvanized steel, grade 304 or grade 316 stainless steel, the GT Access Fire range provides a durable construction that requires minimal maintenance.

Specialist corrosion grade constructions are also available up to C5 grade.

GT Access Fire has a wide range of ironmongery and vision windows available to suit all applications, offering flexibility in design and has been tested for durability of up to a million cycles.



TECHNICAL DATA

FUNCTION	STANDARD	OPTIONAL
WIDTH	Single door: 580mm - 1430mm Double door: 780mm - 2980mm	Single door: 580mm - 1350mm Double door: 1040mm - 2392mm
HEIGHT	Single & double doors: 1590mm - 3990mm	Single door: 1592mm - 2737mm Double door: 1642mm - 2518mm
LEAF CONSTRUCTION	62mm thick reinforced monobloc door leaf constructed	98mm thick reinforced monobloc door leaf constructed
CORE MATERIAL	Solid core formed from specialist insulating materials	
FRAME	100mm rebated frame	Wrap-around frame
FINISH	Powder-coated finish in any standard RAL colour	Grade 304 or 316 Stainless steel in a brushed or smooth finish
VISION PANELS	Wide range of bespoke vision panel sizes available up to 1500mm x 800mm for fire rated vision panels	
FIRE RATING	EI30, EI60	EI120
FIRE TESTED SUPPORTING STRUCTURES	Rigid or flexible structure	Mineral wool core sandwich panels 120mm thick
AIR PERMEABILITY	Class 4	
ACOUSTIC PERFORMANCE	Up to 45 dB	
SECURITY RATING	Up to RC3	Up to RC4
SMOKE CONTROL	Optionally Sa and S200 Smoke seal	



GT ACCESS FIRE FEATURES

ULTIMATE HYGIENE
Monobloc fully-sealed leaf for ultimate hygiene.

120 MINUTE FIRE RATING
Up to 120-minute fire rating available.

IRONMONGERY
Wide range of options available.

HIGHLY INSULATED
Highly insulated and durable construction.

PRODUCT OPTIONS

The door offers excellent insulation due to its highly insulated core, making it an energy-efficient choice.

Available finishes include: smooth or brushed stainless steel and powdercoating to any standard RAL colour.

Optional fire protection is available, with fire sealing strips mounted on the doorleaf and an EPDM smoke seal mounted on the frame.

The door is fire-rated for internal and external doorways and certified according to EN-16034-1.

The range of GT Access Fire doors have been fire-tested for installation into mineral wool sandwich panel walls in addition to more standard rigid and flexible fire-wall types.

BENEFITS

- Up to 120-minute fire rated
- Highly insulated
- Optional smoke sealing available
- Strong acoustic performance
- Comparatively avourable lead times for a fire rated door solution

COMPROMISES

- Longer lead times than the likes of GT Access Lite and Plus
- Higher price point than GT Access Lite
- Not a fully flush solution – and so not suitable for GMP environments
- Doesn't boast intelligent interlocking envelope system capabilities with wall panels as per GT Access Plus and Pro doors

APPLICATIONS



GT Access Fire is a fire-rated cleanroom door solution that can be adopted throughout a number of different sectors where there is a concerted requirement for fire safety, either from a compliance perspective or as part of a business' wider policy and expectations.



GT ACCESS SLIDE



GT Access Slide is a semi-flush powder-coated sliding steel cleanroom grade door solution – featuring an ECOsafe PIR or MF (mineral fibre) Core, that is an industry-leading sliding door solution.

GT Access Slide is a sliding door version of GT Access Plus – a semi-flush powder-coated steel cleanroom grade door solution.

GT Access Slide doors feature an ECOsafe PIR or MF Core, the door has a thickness of 40mm (Tol. ± 1,0 mm).

Door openings:

Height: 2133mm (clear internal height) for frame height of 2200mm

Width: 1067mm (clear internal width) for a frame width of 1200mm

Other sizes available on request.

Door hardware: Stainless steel hinges; stainless steel door handle; stainless steel pull handle; door lock with keys; and recessed drop-seal.

FRAME SPECS

The GT Access Slide door frames are constructed from 3mm thick extruded 6063 aluminium alloy to form a wraparound frame.

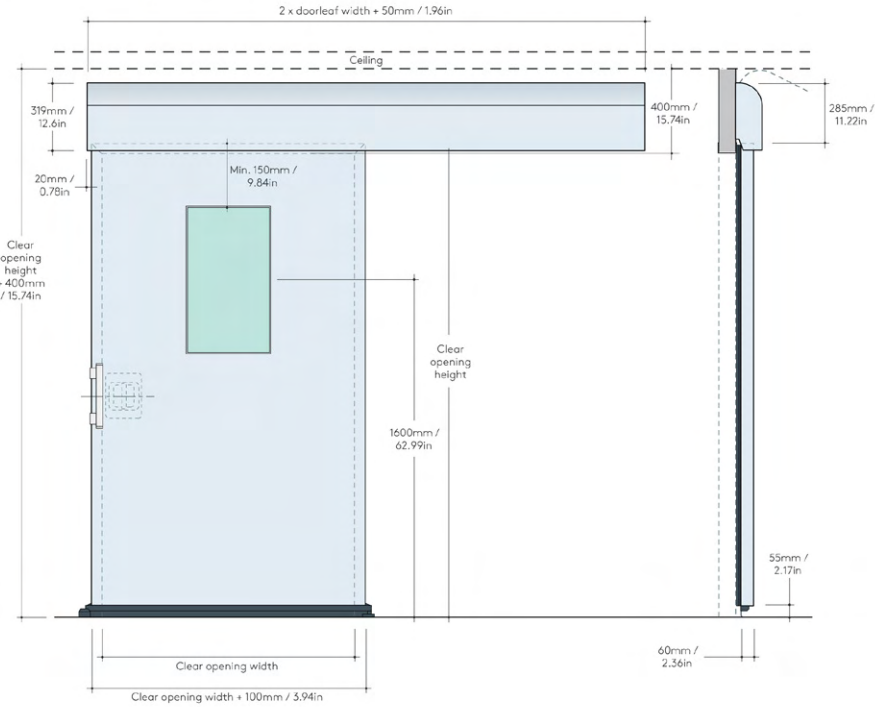
Each frame is cut to length using a computerized saw for a perfect mitred corner joint, to form a neat butt joint connection between jambs and heads.

The door frames are Polyester powder coated, colour to match face of door leaf unless stated otherwise.



TECHNICAL DATA	
TYPE	Airtight sliding door
CORE	PIR / MF
THICKNESS	60 mm / 2.36in (Tol. # 1,0 mm / 0.04in) doorleaf
DOOR OPENINGS	Height: 2000mm / 78.7in or 2200mm / 86.6in (clear internal height) for overall height of 2375mm / 93.5in or 2575mm / 101.3in Width: 900, 1200, 1500 or 1800mm / 35.4, 47.2, 59.0in (clear internal width) for an overall width of 1000, 1300, 1600 or 1900mm / 39.3, 51.2, 62.9, 74.8in Other sizes available on request.
DOOR HARDWARE	Stainless steel door handle
STANDARD COATINGS	Polyester coating RAL 1015, RAL 5008, RAL 5010, Standard coatings: RAL 6011, RAL 7032, RAL 9002 and RAL 9010. Anti-bacterial HYGIENEsafe coating RAL 9010 or RAL 9002 available on request

TECHNICAL DRAWINGS



The FERMOCLEAN 2920 rail system features aluminium cover for cleanroom applications, anti-derailment system, bot-

tom guide fixed to the underside of the doorleaf. The product is in compliance with European directives and standards.

AVAILABLE OPTIONS

- Double-glazed Flush vision panel 300mm wide x 600mm high 6mm laminated glass), other sizes available on request
- Built in electromagnetic lock (24V)
- Electrical lock (24V)
- Sash lock / latch / night latch / deadlock / escape sashlock / roller bolt
- Flush or semi-flush stainless steel kick-plates
- PVC semi-flush kick-plates
- Stainless steel push-plate and pull handle
- Emergency door with panic bar
- Door stop
- Interlocking system
- Door closer
- Recessed drop seal

BENEFITS

- Sliding functionality
- Various chemically inert, anti-bacterial coatings available
- ECOsafe PIR or MF (mineral fibre) core
- Variety of options available to upgrade the door's functionality
- More competitive price point than GT Max or GT Pro options

COMPROMISES

- Not available as a fully flush solution
- Not as suitable for the more stringent controlled environments

APPLICATIONS



Medical Device



Healthcare



Oil & Gas



Cell & Gene



Battery



Laser & Optical

GT Access Plus is a versatile cleanroom door solution suitable for a significant number of different industries using controlled environments as part of their process. However, because this solution is semi-flush, GT Access Plus is not appropriate for applications where ledges can compromise standards.



GT ACCESS ESCAPE



GT Access Escape is a superior Emergency Breakout Panel solution used on the Guardtech Group's range of modular cleanrooms, portable CleanCube Mobile Cleanrooms and quick-assembly Isopod Rapid Cleanrooms.

GT Access Escape is a superior Emergency Breakout Panel system used on the Guardtech Group's range of cleanroom construction solutions.

The typical application of GT Access Escape is in cleanrooms with only one obvious exit door which flows into another room that could become blocked, therefore cutting off the means of exit.

The fitting of this type of Emergency Escape Panel in a wall shared with a different room provides an alternative means of exit.

Our two-part Telescopic-style Escape Panels are designed to provide a quick and accessible means of emergency escape when the normal route of exit from the cleanroom is unavailable.

As well as providing a means of escape, these Panels can also be removed to allow equipment to be installed in the cleanroom that may otherwise cause a problem in terms of positioning.

In situations as described, this type of Escape Panel will support mandatory requirements for Health & Safety.

NOTE: These Emergency Escape Panels are not suitable for installation in an external wall.



TYPICAL GT ACCESS ESCAPE EXAMPLE			
INTERNAL FRAME SIZE WIDTH x HEIGHT x DEPTH	STRUCTURAL OPENING WIDTH x HEIGHT	ESCAPE APERTURE WIDTH x HEIGHT	OVER FLANGE WIDTH x HEIGHT
890 1790 96-126*	900 1850	760 1710	63 960 1910

*Standard for typical 100mm deep wall (other depths can be accommodated)



PRODUCT FEATURES



GT Access Escape features an easy re-release system that provides a swift means of escape. Tooling included with unit allows for refitting of the acrylic panel and therefore enables the Escape Panel to be re-used.

The Telescopic design allows for variations in wall thickness (-4, +26mm) and makes installation a fast and efficient operation.

The 'clean' side flange is smooth with no fixings, ensuring optimal cleanability. The outer flange (dirty side) is screw fixed to allow installation.

These 'standard' style Escape Panels are glazed with a lightweight acrylic panel, with framework in polished 304/316 grade stainless steel.

When fitted, the installed panels provide a sealed aperture, therefore ensuring the integrity of the rooms on either side of the wall. Can be manufactured to suit any size of structural opening.



Frames manufactured from 1.5mm thick 304/316 grade stainless steel, with flanges cut from 2mm thick 304/316 grade stainless steel. Two-part black rubber glazing extrusion is fitted to edge of aperture on 'clean' side flange to retain 6mm thick clear acrylic panel which in turn is fitted with 2 x 'D' handles.

BENEFITS

- Compliant with Health & Safety standards
- Robust and reliable construction
- Easy release system
- Rapid exit deployment
- Simple refitting post-use
- Manufactured to suit any size of structural opening

COMPROMISES

- Suitable space will need to be factored into the Design process to ensure appropriate installation is successful
- Additional cost consideration for overall cleanroom construction project
- Added lead time for bespoke solutions



APPLICATIONS



Universities



R&D



Packaging



Injection Moulding



Food



Medical Device

GT Access Escape can be utilised in a wide range of applications, from more heavy-duty manufacturing facilities where fire risk is high to University R&D laboratories, Medical Device manufacturing suites to biological safety labs conducting potential dangerous work with harmful pathogens.



QUICK-LOOK COMPARISON GUIDE

FEATURES				
Fully flush				
Semi-flush				
Vision panel option				
QuadCore option				
Mineral Fibre core option				
Sliding option				
Hermetically sealed				
Integrated interlock option				
Superior chemical resistance				
Anti-bacterial coating option				
Superior leakage resistance				

