



GT RISE



TECHNICAL DATA SHEETS



www.guardtech.com



0330 113 0303



sales@guardtech.com



Guardtech House, Unit 1A Homefield Road, Haverhill, Suffolk, CB9 8QP



DIRECTORY



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GT RISE

RAPID RISE DOORS



Guardtech offer a range of rapid rise 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 rapid rise door options to ensure your process requirements are achieved.

Whether it's a more economical industrial stacking door all the way up to a supremely air-tight, high-specification GMP grade solution, the Guardtech Group's Directors, Design Engineers and Installation team have worked together to carefully select four industry-leading ceiling 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 rapid rise door choice possible.

Let Guardtech take your operation to the next level.



RISE MAX

GT Rise Max is Guardtech's elite-level rapid rise door solution – a top-of-the-range, high-specification roller door suitable for the demands of ISO5 applications that require the most stringent control and conditions.



RISE PRO

Designed for applications requiring a superior limitation of leak flow, GT Rise Pro is one of the slimmest high-speed doors on the market, offering smooth operation, pressure resistance and Low Friction Technology.



RISE PLUS

GT Rise Plus is Guardtech's mid-level rapid rise door solution – a lower-spec alternative to the GT Shell Pro option which provides favourable operating speed and high-level sealing properties.



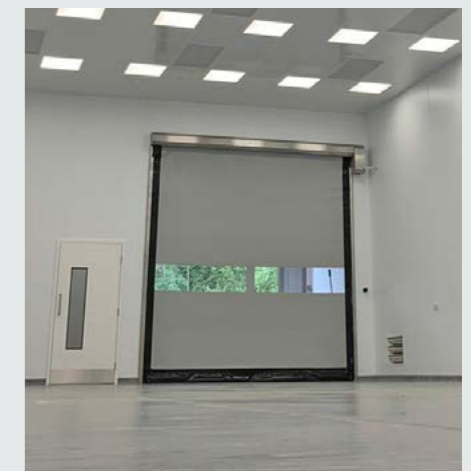
RISE LITE

GT Rise Lite is Guardtech's entry-level rapid rise door solution – a high-quality door offering all the economical benefits of a rapid roll while retaining a competitive price point against other models.



RISE FIRE

GT Rise Fire is Guardtech's fire-rated rapid rise door solution – one of the most robust, safety conscious options available, constructed from aluminium 40mm thick panels and filled with PS insulation foam.





GT RISE MAX

GT Rise Max is Guardtech's elite-level rapid rise door solution – a top-of-the-range, high-specification roller door suitable for the demands of ISO5 applications that require the most stringent control and conditions.



GT Rise Max is a high-specification rapid rise door well suited to cleanroom isolation in accordance with DIN EN ISO 14644-1 Class 5, providing high air-tightness which keeps the pressure drop through the closed door at a minimum.

Fast opening and closing ensures very low air loss and minimises air exchange, resulting in a low filter burden and increased cleanroom cost-effectiveness.

Optional contactless actuators enable fast, hygienic opening with a simple hand motion, while integrated traffic lights are also available as optional extras.

Designed in accordance with GMP Grade C Integrated cable guide for a smooth overall surface and easy cleaning.

The door is designed according to the Workplace Directive of the UVV regulations and the harmonized CE Guidelines including the EN 13241-1.



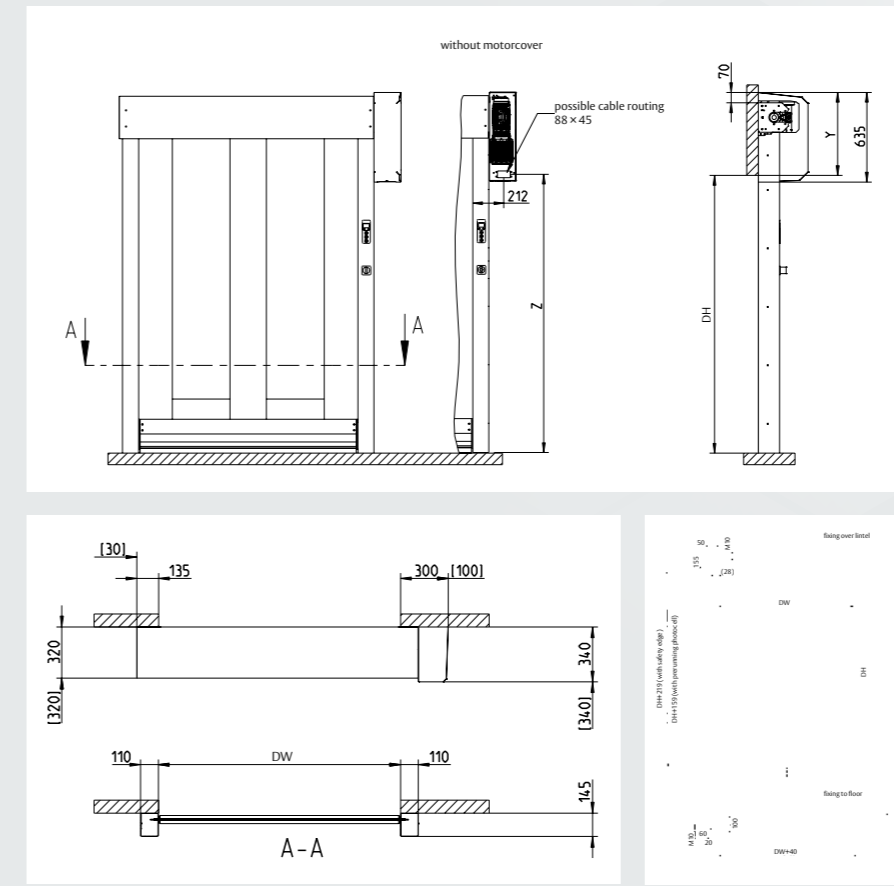
TECHNICAL FEATURES

TECHNICAL DATA	
Application	EN 12425
Door dimensions (mm)	EN 12425
Open/Close max. (m/s) 2]	EN 12424
Wind resistance (EN 12424)	EN 12426
Leakage (EN 12426)	EN 12453
Temperature range max. 3]	EN 12604
Motor power	GfA 0,75 KW
Manual activation	Crank handle
MCC: Open/Close max. (m/s) 2]	2,0 / 1,0
ACS 50: Open/Close max. (m/s) 2]	1,0 / 1,0

Separate display / control	Only with MCC
Fuse protection by site MCC	10 – 16 A [B- and C-characteristics]
Fuse protection by site ACS 50	16 A [C-characteristics]
Potential-free contacts	ACS50
UL-Version	Only with MCC
AC mains connection for MCC	3L/(N)PE/380/400/415/440/480V
AC mains connection for ACS 50	3L/(N)PE/230/380/400/415V
Control voltage	24 V DC
Protection	IP 55

- Electrical safety contact edge ● Diagnostic display
- Door line photocell in side frame ● Lintel seal
- Traffic light with & without direction detection

TECHNICAL DRAWINGS



TOP ROLL COVER / MOTOR COVER / DRIVE UNIT

The door comes standard with top roll and motor covers. The drive unit is a geared brake motor. It can be fitted on the right or left.



CONTACTLESS ACTUATOR

An optional contactless actuator (Magic-Switch) is available for fast, hygienic opening.



	Y	Z
with safety edge	470	DH - 93
with pre-running photocell	410	DH - 153

Available Sizes		
	DW	DH
min. (mm)	1000	1000
max. (mm)	3500	3500
min. (mm) with UPS and MCC extension	1500	1000
min. (mm) with USV without MCC extension	1350	1000

[] = Space needed for installation



BENEFITS

- Suitable for cGMP and ISO5 controlled environments
- Fast opening and closing ensures very low air loss and minimises air exchange, resulting in a low filter burden and increased cleanroom cost-effectiveness
- Optional contactless actuators – enabling fast, hygienic opening with a simple hand motion
- Integrated traffic light option
- Integrated cable guide for a smooth overall surface and easy cleaning

COMPROMISES

- Most expensive option in the GT Rise range
- Potentially longer lead times
- More complex maintenance requirements

APPLICATIONS



Pharmaceuticals

Semiconductor

Graphene

Cell & Gene

Battery

Laser & Optical

GT Rise 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 RISE PRO

Designed for applications requiring a superior limitation of leak flow, GT Rise Pro is one of the slimmest high-speed doors on the market, offering smooth operation, pressure resistance and Low Friction Technology.



GT Rise Pro is designed for applications requiring a superior limitation of leak flow and is ideal for interlocks.

This high-performance rapid rise door's perfect sealing properties provide environmental control and protect your installations against drafts, dust and dirt.

With its modern design, GT Rise Pro is the slimmest high-speed cleanroom door on the market. The patented "LF" (Low Friction) technology, combined with a frequency inverter driven motor, assures a smooth operation.

With a motor incorporated in the drum, this pressure-resistant door not only looks good but also offers exceptional control.



TECHNICAL FEATURES

EN13241-1 STANDARDS

STANDARD	STANDARD	TEST ACC.	RESULTS
Water permeability	EN 12425	EN 12489	Class 3
Wind load	EN 12424	EN 12444	Class 1*
Wind permeability	EN 12426	EN 12427	4 overpressure** 3 underpressure
Safe openings	EN 12453	EN 12445	Pass
Mechanical resistance	EN 12604	EN 12605	Pass
Unintended movements	EN 12604	EN 12605	Pass
Thermal transmittance	EN 12428	EN 12428	6,02 W/m2K
Performance (cycles)	EN 12604	EN 12605	1.000.000

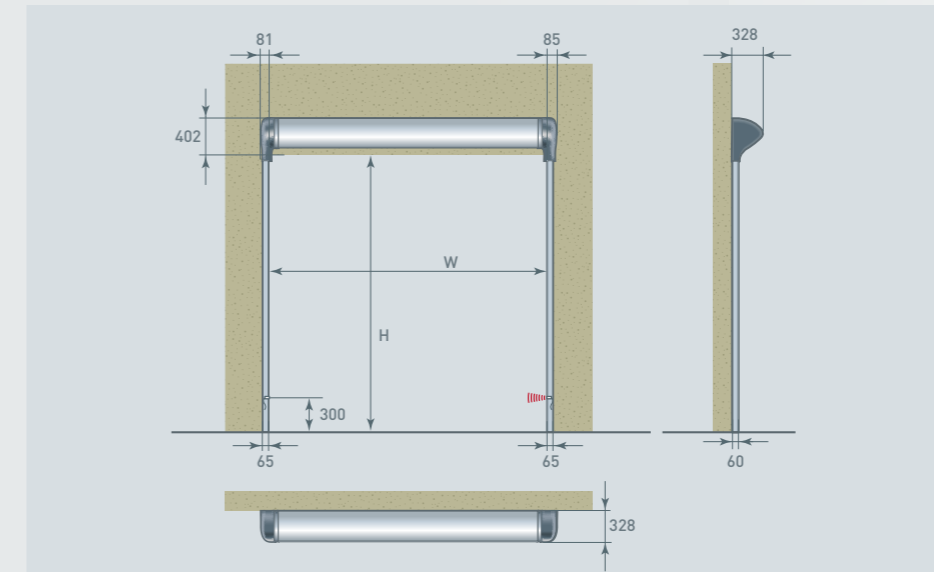
* Interior applications only ** Valid for a door of 3500 x 3500mm

CHARACTERISTICS

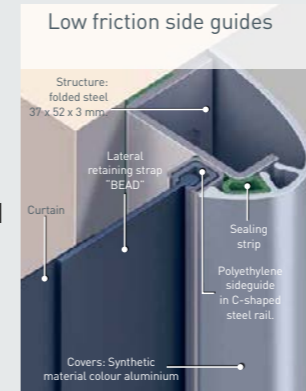
Max. dimension	W 4.000mm x H 4.000mm
Opening speed	Up to 2,7 m/s
Closing speed	0,5 m/s
Structure	Galvanised steel of 37 x 52 x 3 mm. Option: stainless steel.
Covers	Synthetic material, colour aluminium + black. Full covers standard.
Drum	PVC- Ø 200 x 3,9 mm.
Side guides	Reinforced polyethylene (PE-UHMW1000)
Motor	2 poles, with parking brake. Power 0,75 kW IP rating: IP 55
Control box	DYNALOGIC provided with: Circuit breaker, general divider, adjustable timer, push button for opening and reset and emergency stop.
Standard detectors	Infrared barrier: 300 mm from the floor. Wireless DYNACO detector (WDD) DBD: correct unwinding detector
Power supply	Single phase 230V - 16 A
Frequency	Frequency: 50-60 Hz



TECHNICAL DRAWINGS



Dimensions based on exact width and height dimensions only. The space necessary for mounting and maintenance has to be provided. Based on a risk analysis of the environment, extra push buttons, detectors and covers may be required.



PRODUCT FEATURES

PERFECT SEAL
Patented side guides and "BEAD" technology limit leak flow and allow energy savings.

MINIMAL SPACE
Motor installed inside the

drum (DVDMPT). Aesthetic design.

SELF-REINSERTING
Crash forgiving and self-reinserting without intervention. The curtain automatically reinserts itself when dislodged.

USER SAFETY
Flexible curtain without rigid elements.

COMFORT OF USE
Wireless detector at the bottom.

ADVANCED DRIVE
Frequency driven motor and encoder for smooth operation and reliability.

Wearable elements are reduced to a minimum.

CONTROL BOX
User-friendly control box with self-diagnosis.

SAFETY STANDARD
Conform to EN13241-1.

BENEFITS

- More cost-effective option than GT Rise Max
- Features unique BEAD technology for superior leak limiting performance
- Automatic self-reinserting functionality
- Low friction side guides
- User-friendly control box

COMPROMISES

- Far fewer additional upgrade options compared to GT Rise Max
- More expensive option than GT Rise Plus and Lite
- Potentially longer lead time than GT Rise Lite
- Inferior construction and quality level compared to GT Rise Max

APPLICATIONS



GT Rise Pro cleanroom doors suit a wide variety of applications in a diverse range of sectors. GT Rise Pro offers many of the same performance requirements as GT Rise Max, only with fewer high-end components, finishes and optional extras.



GT RISE PLUS

GT Rise Plus is Guardtech's mid-level rapid rise door solution – a lower-spec alternative to the GT Shell Pro option which provides favourable operating speed and high-level sealing properties.



GT Rise Plus is a robust and reliable rapid rise door designed for a wide range of cleanroom applications.

This solution requires little space and protects your environment against drafts, humidity, dust and dirt.

Operating speed and high-level sealing properties improve your traffic flows and provide employee comfort, environ-

mental control and savings on energy costs.

The patented «LF» (Low Friction) technology, combined with a frequency inverter driven motor, assures a smooth operation.

GT Rise Plus is also easy to clean – making it an ideal choice for rooms where ongoing decontamination is critical to your operation's adherence to standards.



TECHNICAL FEATURES

EN13241-1 STANDARDS

STANDARD	STANDARD	TEST ACC.	RESULTS
Water permeability	EN 12425	EN 12489	Class 2
Wind load	EN 12424	EN 12444	Class 1*
Wind permeability	EN 12426	EN 12427	Class 1**
Safe openings	EN 12453	EN 12445	Pass
Mechanical resistance	EN 12604	EN 12605	Pass
Unintended movements	EN 12604	EN 12605	Pass
Thermal transmittance	EN 12428	EN 12428	6,02 W/m ² K
Performance (cycles)	EN 12604	EN 12605	1.000.000

* Interior applications only

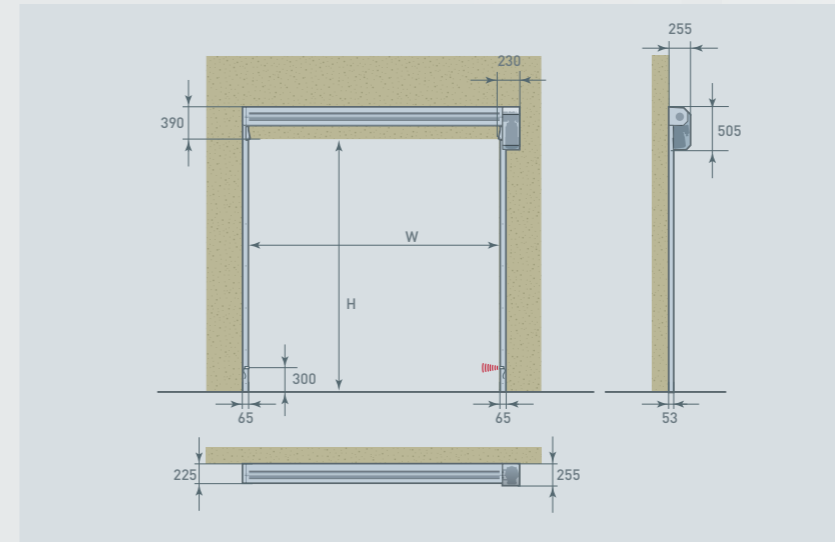
** Valid for a door of 3500 x 3500mm

CHARACTERISTICS

Max. dimension	W 4.000mm x H 4.000mm
Opening speed	up to 1,2 m/s (optional 2,0 m/s)
Closing speed	0,5 m/s
Structure	Folded steel 37 x 52 x 3 mm, galvanised before cutting and folding. Option: stainless steel
Drum	Steel - Ø 102 x 2 mm.
Side guides	Reinforced polyethylene (PE-UHMW1000)
Motor	2 poles, without brake. Power 0,75 kW. IP rating: IP 65
Control box	DYNALOGIC provided with: Circuit breaker, general divider, adjustable timer, push button for opening and reset and emergency stop.
Standard detectors	Infrared barrier: 300 mm from the floor. Wireless DYNA-CO detector (WDD) DBD: correct unwinding detector
Power supply	Single phase 230 V - 14 A.
Frequency	Frequency: 50-60 Hz

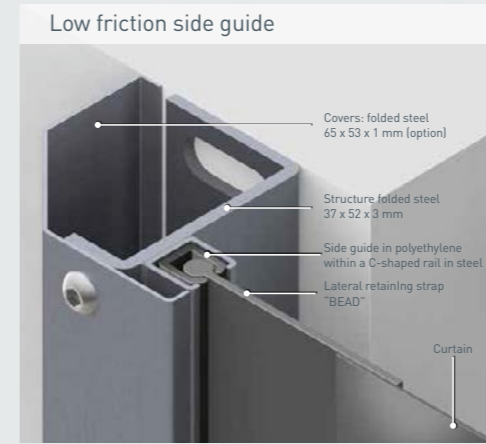


TECHNICAL DRAWINGS



Dimensions based on exact width and height dimensions only. The space necessary for mounting and maintenance has to be provided to the Guardtech team.

Based on the risk analysis of the environment, extra push buttons, detectors and covers may needed to be added to the spec.



PRODUCT FEATURES

OPENING SPEED

Up to 2,0 m/s.

SUPERIOR SEAL

Patented side guides and «BEAD» technology allow energy savings.

SELF-REINSERTING

Crash forgiving and self-reinserting without intervention.

USER SAFETY

Flexible curtain

without rigid elements.

COMFORT OF USE

Wireless detector at the bottom.

ADVANCED DRIVE

Frequency driven motor and encoder for smooth operation and reliability.

Wearable elements are reduced to a minimum.

CONTROL BOX

User-friendly control box with self-diagnosis.

SAFETY STANDARD

Conform to EN13241-1.

BENEFITS

- More cost-effective option than GT Rise Max and Pro
- Automatic self-reinserting functionality
- Low friction side guides
- User-friendly control box

COMPROMISES

- Far fewer additional upgrade options and more basic construction/functionality when compared to GT Rise Max and Pro
- More expensive option than GT Rise Lite
- Potentially longer lead time than GT Rise Lite
- Inferior quality level compared to GT Rise Max and Pro

APPLICATIONS



GT Rise Plus is a versatile cleanroom door solution suitable for a significant number of different industries using controlled environments as part of their process. Unlike GT Rise Max and Pro, this solution is not suitable for critical environments at the higher end of the classification spectrum.



GT RISE LITE



GT Rise Lite is Guardtech's entry-level rapid rise door solution – a high-quality door offering all the economical benefits of a rapid roll while retaining a competitive price point against other models.

GT Rise Lite is a unique space-saving industrial door which combines the insulation and airtightness of a sectional door with the headroom requirements of a roller door.

The doors stack at the head of the opening with smooth and quiet operation and can be specified for high-use openings.

This also helps to overcome common issues with rolling and sliding doors. GT Rise Lite doors offer a high level of insu-

lation performance and security as well as being relatively straightforward to install in a wide range of building designs with minimum steelwork or structural requirements.

GT Rise Lite doors are quiet to operate and require less maintenance than more complex models. The doors are electrically operated via high-performance industrial motors and have a range of safety features including fall-safe devices and manual overrides.



TECHNICAL FEATURES

FUNCTION	STANDARD	OPTIONAL
Maximum opening/closing speed	150mm to 200mm/second	Upgraded motor to provide speed of 310mm/second (maximum door weight of 240kg)
Maximum width	8000mm	
Maximum height	7750mm	
Curtain thickness/weight	40mm thick/4.5 kg/m ²	
Internal colour	RAL 9002	
External colours	RAL 3002; RAL 5010; RAL 5017; RAL 6005; RAL 7016; RAL 7032; RAL 9002; RAL 9006	Painted to any RAL colour
Motor	60% switch duration, 400V motor with 5 pin plug, side mounted, IP-54 rated	100% switch duration Top mounted Front mounted Upgrade to IP-65
Control panels	Wall-mounted control panel with protective plastic cabinet and digital limit switches	LCD monitor allowing greater configurability including traffic lights, auto-timed-close, etc Upgrade to IP-65
Guides	Galvanized steel	Powder coated
Power Supply	400V, 3-phase supply terminating in a 5-pin commando socket 16 amp	

Hood cover	Not included	Optional, maximum width 5000mm
Safety features	Cable tension detection and cables with safety factor 6 Fall-safe device Automatic locking system Rails with finger protection and warning stripes	Bottom safety edge Safety photocell Light curtain Warning flashing beacon
Vision windows	Not included	Rectangular (680x370mm) Oval (725x325mm) windows Full width vision
Construction of windows		Double-glazed acrylic or Lexan panels (17mm) 4mm single-glazed safety glass Aluminium sandwich panel Single-glazed acrylic or Lexan panels (4mm)
Emergency opening	Manual hand crank	Manual hand chain
Controls	Deadman control with push buttons	Remote control Key switch Pull switch Summer/winter switch Radar motion sensor Pin code unit
Insulation value	U-value 0.76 W/m ² K	Double-glazed windows 2.8 W/M ² K
Sound reduction	20 decibel (dB)	
Wind Resistance	Class 3 (up to 5000mm wide)	Class 2 (up to 6500mm wide)
Conformity	Water Penetration: Class 2 Air Permeability: Class 2	



TECHNICAL FEATURES



A wide range of control options can be specified to maximise the doors usability. The 40mm insulated panels offer a U-Value as low as 0.76 W/M²K and sound reduction of 20 dB as well as tested air permeability and water penetration of Class 2.

GT Rise Lite's security performance is excellent, with an automatic anti-lift locking device.

The composite insulated panels are available in eight standard colours or can be painted to a wider range of RAL colours to blend with the buildings architecture.

It is also possible to supply the doors with a range of vision panels including slim aluminium frames which provides an attractive choice for vehicle showrooms.

PRODUCT FEATURES

- INSULATED & AIRTIGHT
- SPACE-SAVING DESIGN
- QUIET & RELIABLE
- AESTHETICALLY PLEASING



BENEFITS

- Most cost-effective option in the GT Rise range
- Insulated and airtight
- Quite & reliable
- Remote control, key switch, pull switch, summer/winter switch, radar motion sensor and pin code unit all optional
- Automatic anti-lift locking device

COMPROMISES

- Only suitable for environments at the lower end of the classification spectrum
- Far more simplistic construction and functionality as standard compared to GT Rise Max and Pro

APPLICATIONS



GT Rise Lite is a rapid roll cleanroom door solution which suits the least demanding of applications – most commonly laboratories or non-classified controlled environments.



GT RISE FIRE

GT Rise Fire is Guardtech's fire-rated rapid rise door solution – one of the most robust, safety conscious options available, constructed from aluminium 40mm thick panels and filled with PS insulation foam.



GT Rise Fire doors are the Guardtech Group's fire-rated rapid rise solution – designed for both internal and external openings.

They are designed to be used in conjunction with any of the other doors in the GT Rise range.

GT Rise Fire doors are constructed with a spiral headplate design to reduce wear and tear, as it prevents the slats rubbing together, resulting in a quiet, secure and low-maintenance door.

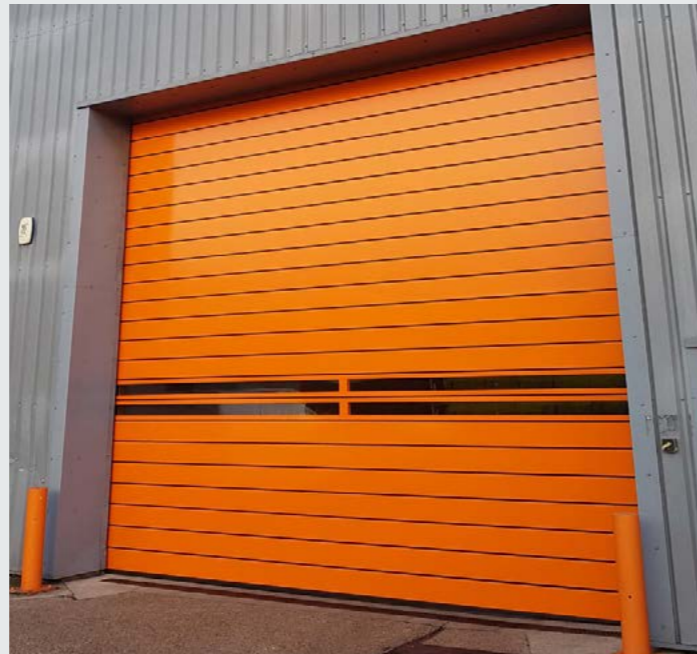
GT Rise Fire speed doors are constructed from aluminium 40mm thick pan-

els, filled with PS insulation foam to provide an excellent U-value.

The door has an opening speed of up to 2m/s, which makes it a great door for minimising energy loss from factories or warehouses.

The doors also provide excellent air-tightness, making them a good choice for cleanrooms.

GT Rise Fire rapid rise doors can also be constructed with 80mm thick panels and a heating kit to make it an extremely effective energy-saving door for a variety of applications.



TECHNICAL FEATURES

FUNCTION	STANDARD	OPTIONAL
Maximum width & height	6500mm (W)	6500mm (H)
Max Opening & Closing Speed	2.0 metres/second (D)	0.5 metres/second (C)
Spiral wrap and side guides	High density polyethylene PEHD 500	
Emergency Opening	Counterweight	Manual chain release / UPS battery
Curtain Construction	Pre-painted aluminium in standard RAL colours. 50mm thick	Outside: RAL pre-painted aluminium / steel
Curtain Colours	10 Standard Colours	
Vision Panels		Polycarbonate Windowed double walled, micro perforated
Motor / Power supply	Inverter 380 V with microprocessor -50/60Hz with Digital Encoder	
Control Panel	Inverter 380v / 400v 300 x 400 x 150 (mm)	Automatic operating logic and management of all the safeties in Low voltage. High capacity separate power supply 24v / Frequency 50 / 60 Hz
Door Frame	Galvanized Steel	Powder Coated Steel

Heating Kit	Airlock Heater: 3.7kW	Heat trace (guides and head section)
Vision panels	1 row, 850mm wide x 300mm high clear PVC windows	Extra rows Mesh windows (850x300mm)
Safety features	Light curtain 2000/2500mm (IP69) Emergency stop on control panel	Flashing warning light LED Traffic Light Anti-crushing sensor
Control Options	Push button	Heating system, magnetic detector, key switch, numeric keypad, pull chords
Other		Flexible bottom pocket Anti Rodent Barrier Sealing kit for guides
Safe Opening, Mechanical Resistance, Unintended Movements	Result: Pass	EN12453 EN12604 EN12604
Wind Resistance / Load	W x H 3000mm x 3000mm Class 4 W x H 5000mm x 5000mm Class 3 W x H 6000mm x 5000mm Class 3	DIN EN12424-44
Thermal Insulation	U = 1.5 W/m2K	EN12428
Operating temperature	-5 °C to 40 °C	
Wind & Water permeability	Class 3	
Acoustic value	22db	



TECHNICAL FEATURES



GT Rise Fire doors are operated by a three-phase motor with a multi-function control panel. This gives a wide choice of options for operating and controlling the door.

The door panels come as standard in anodised aluminium and the frame in galvanised steel – however both parts can also be supplied with powder coated to an RAL colour for improved aesthetics.

The door can also be supplied with clear vision panels for safety or, alternatively, with micro-perforated panels for ventilation.

GT Rise Fire is the ultimate speed door solution when insulation and security are required. Combining speeds normally associated with PVC fabric speed doors with insulated panels, they are the ultimate all-in-one door system.

PRODUCT FEATURES

- SPIRAL DESIGN REDUCES WEAR & TEAR
- MINIMISES TEMPERATURE LOSS
- PROVIDES INSULATION & SECURITY
- QUIET & RELIABLE OPERATION



BENEFITS

- PS insulation foam
- Robust, secure construction
- Spiral headplate design reduces wear and tear
- Quiet & reliable
- Heating system, magnetic detector, key switch, numeric keypad and pull chords all optional

COMPROMISES

- Only suitable for environments at the lower end of the classification spectrum
- Far more simplistic construction and functionality as standard compared to GT Rise Max and Pro

APPLICATIONS



GT Rise 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.



QUICK-LOOK COMPARISON GUIDE

FEATURES



FEATURES	MAX	PRO	PLUS	LITE
Ideal for ISO5 environments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ideal for GMP environments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contactless actuator/remote opening option	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrated traffic light option	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Quiet operation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Rapid opening and closing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Self-repair functionality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Superior air tightness	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Energy efficient	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
IP55 Protection as standard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic display	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





Guardtech

group

www.guardtech.com

Guardtech House,
Unit 1A Homefield Road,
Haverhill, Suffolk,
CB9 8QP