



Automatic Doors for the Pharmaceutical Sector

manusa 
intelligent access

Why Manusa?

Manusa has a complete range of automatic doors, with solutions specially designed for projects in the pharmaceutical sector, offering the most complete product catalogue on the market.

- We advise you throughout and coordinate all phases within the project.
- We design customised solutions.
- We incorporate the latest technology, adapted to each user.
- We accompany you and ensure that you receive top-quality technical assistance from our own personnel.

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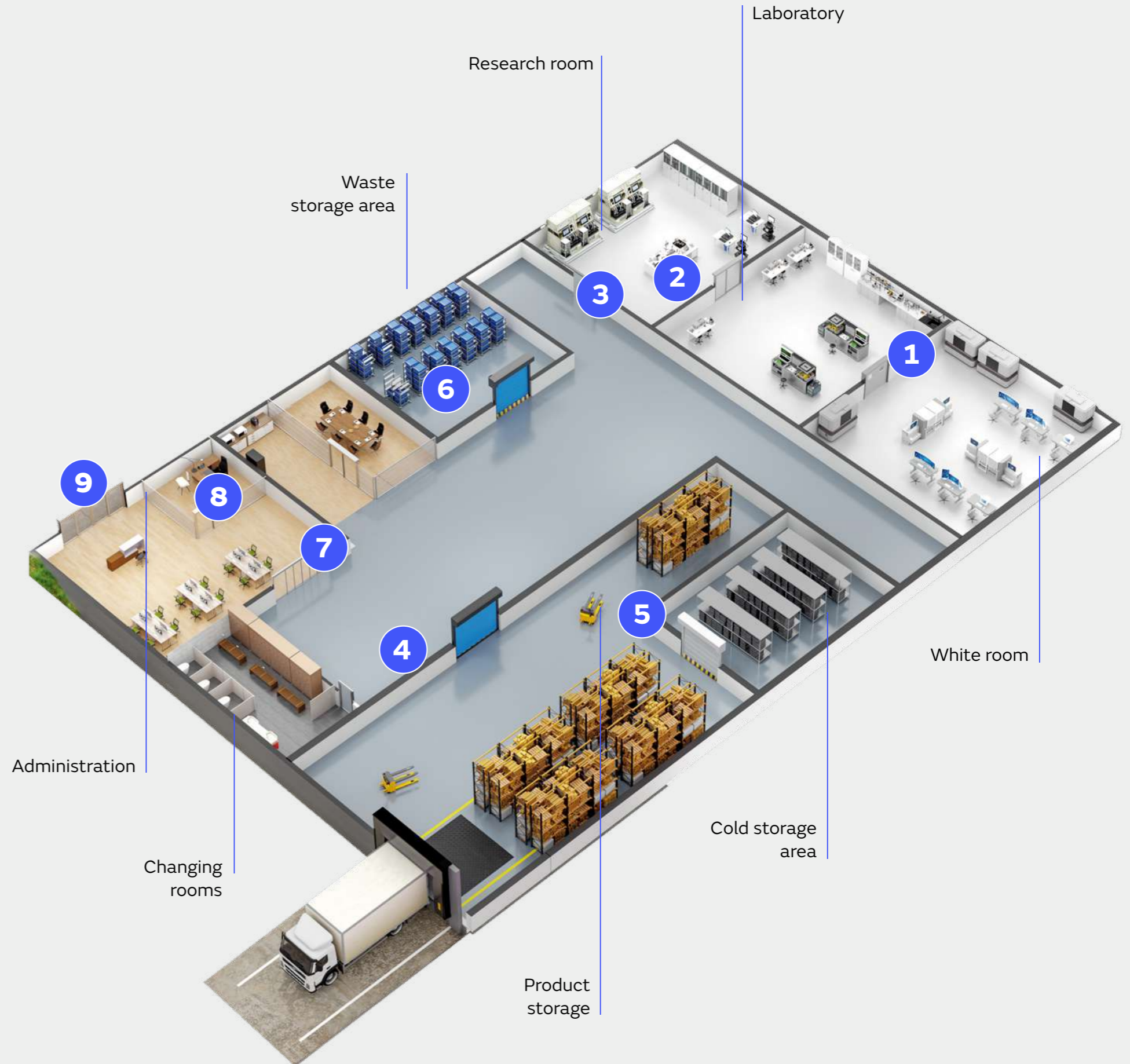
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Specialised Solutions for the Pharmaceutical Sector

Manusa offers a comprehensive service with effective solutions for all areas in a hospital complex.

All of these contribute to maintaining hygiene, safety and comfort for workers, as well as also in production processes.

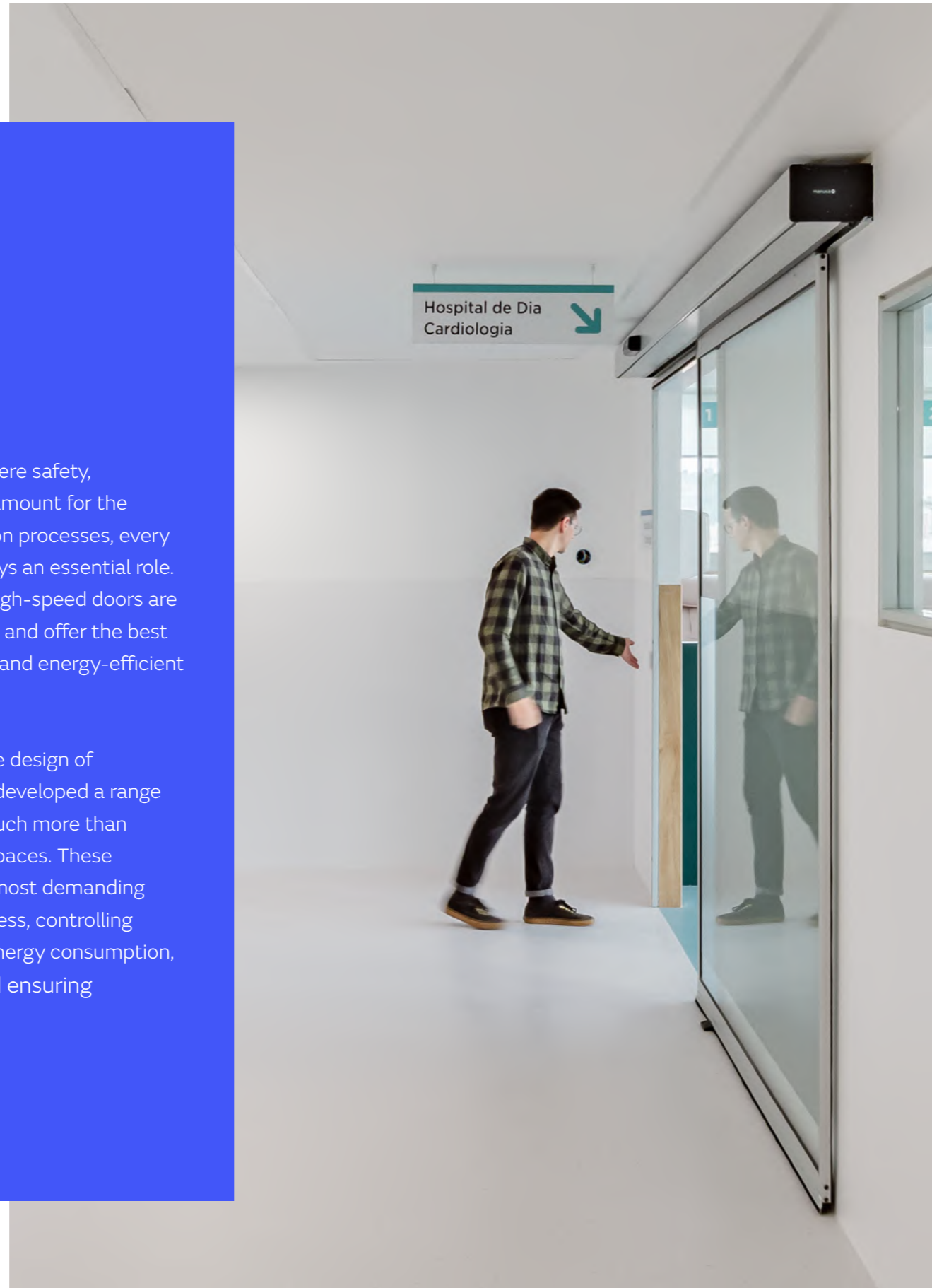
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Access solutions

In the pharmaceutical sector, where safety, efficiency and hygiene are paramount for the proper development of production processes, every element of the infrastructure plays an essential role. Manusa's automatic doors and high-speed doors are specially designed for this sector, and offer the best solutions for controlled, hygienic and energy-efficient environments.

Manusa, with a long history in the design of intelligent-access solutions, has developed a range of specialised doors that offer much more than just a simple passage between spaces. These doors are designed to meet the most demanding challenges: maintaining airtightness, controlling cross-contamination, reducing energy consumption, facilitating daily operations and ensuring personnel safety.



Benefits



Airtightness: minimises air leaks and prevents the entry of contaminants.



Hygiene: integrates components and a clean design, reducing dirt and the risk of contamination.



Safety: incorporates sensors and mechanisms that protect personnel and facilities.



Energy efficiency: optimises consumption in pressurisation and air conditioning (HVAC), and reduces operating costs.



Thermal and acoustic insulation: maintains stable conditions for sensitive processes, and improves staff comfort.



IoT connectivity: enables monitoring and remote operation of the system.

Innovation and Technology

Designed with precision, manufactured with specific materials, and engineered for easy integration into regulated environments, these doors represent an investment in quality, productivity, and sustainability. For companies in the pharmaceutical sector, having intelligent, secure, airtight, and customizable doors is not just an operational necessity, but also a competitive advantage. Manusa offers this comprehensive solution, backed by a leading brand and a forward-looking vision based on technological excellence and commitment to global health.

We are the first manufacturer to incorporate IoT technology as standard in its operators, to control and manage all automatic doors remotely, either through the Doorwifi app or via other communication platforms. Connection with building automation, building control, and people counting systems is also possible.



Door for laboratories and clean rooms

Ideal for safe, airtight and clean work environments

This new door is designed for installation in environments that require the highest levels of safety, airtightness and cleanliness.

This door has been especially designed for laboratories and clean rooms that require **Class 5 certification for air permeability**, as well as for facilities that, although not requiring Class 5 certification, want to ensure both safe processes and optimisation of ventilation and cleaning systems (HVAC).

Its design is optimised to maximise the hygiene required in this type of environment and provide maximum airtightness, working with pressure differences of up to 50 Pascals, preventing the entry of contaminants.

The door is unique as both the motor and the electronics are integrated within the same head, improving aesthetics as well as cleanliness. In addition, the new motor design reduces the door's operating noise to a minimum.

Standard equipment

Our high-speed door incorporates Plug & Play technology, a system designed to minimise installation and commissioning times. All mechanical and electronic assemblies, as well as software configuration, are carried out in advance at the factory.

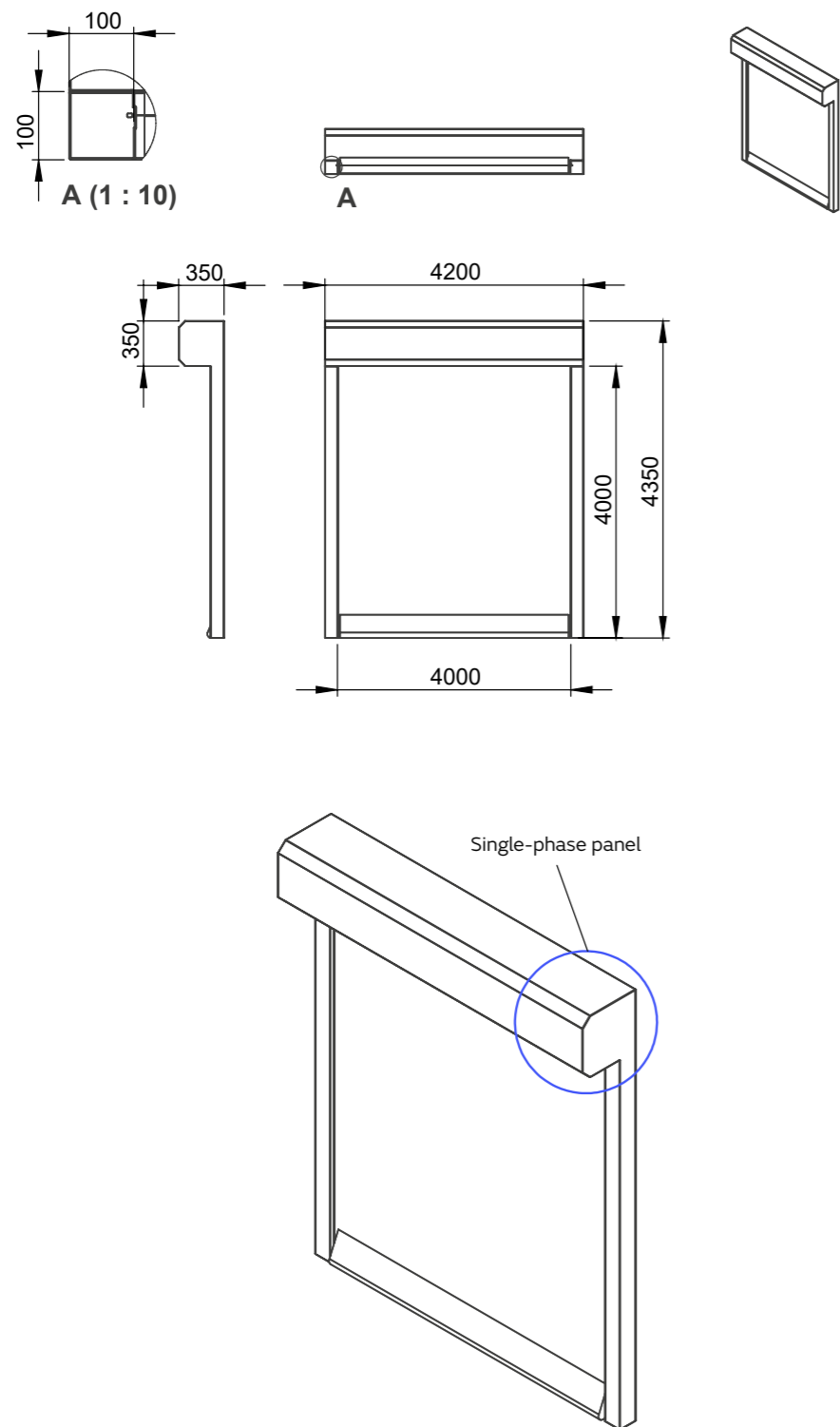
MAIN FEATURES

Opening	Vertical
Maximum Dimensions	2500 x 3000 mm
Use	Indoors and outdoors
Wind load resistance	Class 2
Structure	Zinc-plated steel, anodised aluminium and technical plastics
Adjustable opening and closing speeds	Adjustable from 0.8 m/s to 2 m/s
Safety	Photocells

FABRIC SPECIFICATIONS

Material	AT 1100 dtex polyester
Covering	PVC 2 sides
Weight	900 g/m ²
Finish	Lacquered 2 sides
Tensile strength	4000N/5cm UNE EN ISO 1421
Tear resistance	800N/5cm EN ISO 13937-2
Adherence	100 N/5 cm
Operating temperature	-30° + 70°
Burning behaviour	ISO 3795-89
Light fastness	6 - 8
Surface electrical resistance	<5x10e90 OHMs
Noise reduction	12%
Zip	Self-lubricating POM 230V III ±10% 50Hz

Drawings



Optional equipment

High-speed roll-up door for laboratories and clean rooms

FEATURES


- Inductive raising push buttons
- External push button
- Motion sensor
- Ceiling handle
- Uninterrupted Power Supply - UPS (Optional)
- Airlock System
- Communications system - Manusa Intelligence
- Sub-frame
- Illuminated or illuminated and acoustic indicators with LED flashing light



FABRIC COLOURS

RAL 9016		RAL5005	
RAL 1014		RAL7038	
RAL 5002		RAL9005	
RAL 7037		RAL2004	
RAL 8014		RAL6026	
RAL 1003		RAL 5010	
RAL 3002		RAL7016	

* Illustrative measurements in drawings. Manusa reserves the right to make changes or modifications to the design.



EI 90 fire rated hermetic door

With side-opening and without a fixed leaf, this is the essential fire-protection component in buildings and healthcare environments to safeguard against fire hazards.

The EI 90 (Fireproof with Structural Integrity) fire rated hermetic door is essential in environments where fire resistance and airtightness are a priority, such as hospitals or laboratories.

For the safety of both people and buildings, the doors are equipped with an automatic door lock that activates in the event of a fire.

It has received the UNE-EN 1634-1 standard certification against fire in joint tests on the leaf and operator, as well as the highest standard classification on air permeability.

It has also successfully passed smoke tests, both hot and cold, since preventing the passage of smoke is paramount to maintaining visibility and air quality in escape routes and other safe areas in the building.

Technical Specifications

EI 90 fire rated hermetic doors ensure optimum performance in critical situations by combining durability, fire resistance and structural integrity, thus meeting the demanding safety standards required in healthcare environments.

MOTOR GROUP ELECTRICAL SPECIFICATIONS

Standard power supply	220-240V ± 6% 50-60 Hz
Power source option	100-120V ± 6% 50-60 Hz
Motor	2 x Three-phase AC
Nominal Power	250 W
Inverter Technology (exclusive to Manusa)	VV-VF
Protection fuse	3.15 A (220V) / 5A (110 V)
Operating temperature	-15°C to 50°C
Transport and storage temperature	-15°C to 50°C
Rechargeable fail-safe batteries	1 x 12 V DC 700 mAh

KINEMATIC SPECIFICATIONS OF THE MOTOR GROUP

Adjustable leaf opening speed	≤ 1 m/s
Adjustable leaf closing speed	0.15 to 0.6 m/s
Maximum acceleration	2 m/s ²
Maximum leaf weight	1x200 Kg

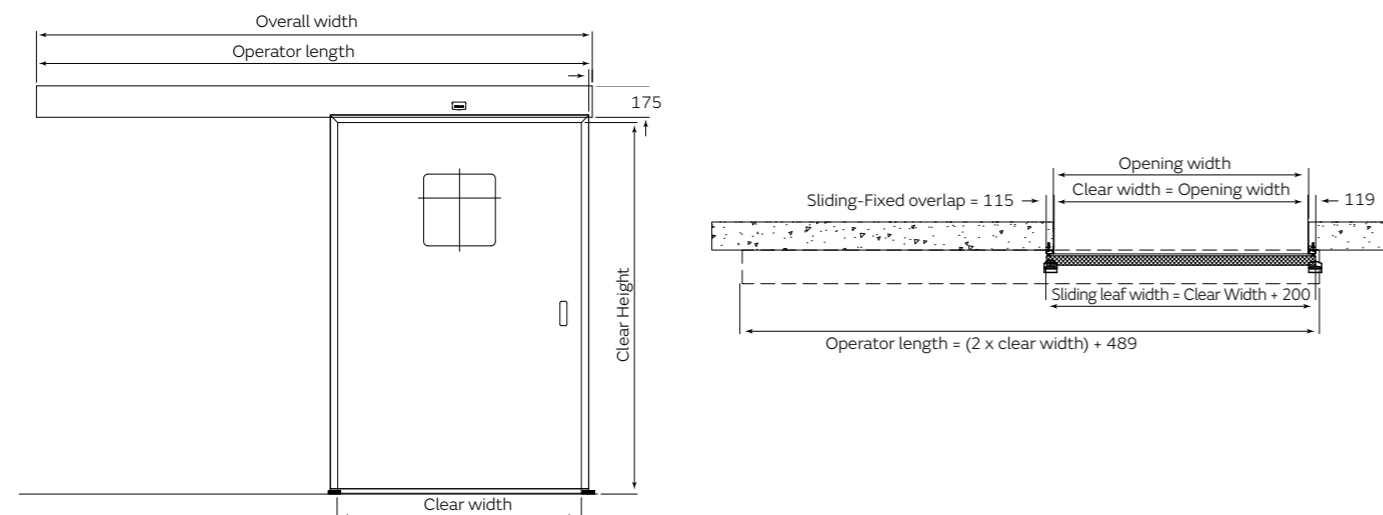
OPERATOR CHASSIS TECHNICAL SPECIFICATIONS

Operator dimensions (height x depth)	175 x 238 mm
Maximum operator length	5900 mm
Side clear width (min./max.)	600 / 1600 mm
Recommended maximum clear height	2400 mm

REGULATIONS AND TESTING

Fire resistance according to UNE EN 1634-1:2016+A1:2018 (*)	<ul style="list-style-type: none"> Operator opposite side to fire (not exposed): EI₁ 60 cat.B / EI₂ 90 cat. A Operator fire side (exposed): EI₁ 45 cat. A / EI₂ 60 cat. B
Fire resistance according to BS 476-22:1987 (*)	<ul style="list-style-type: none"> Operator opposite side to fire (not exposed): Integrity: 93 min. / Insulation: 93 min. Operator fire side (exposed): Integrity 72 min / Insulation: 54 min.
Smoke control according to UNE EN 13501-2:2023 (*)	<ul style="list-style-type: none"> Extraction and impulsion (sample outside the smoke chamber) at ambient temperature: Sa3 Sa4. Impulsion (sample outside the smoke chamber) at 200 °C: Sa4 S200
Air permeability according to UNE EN 85170:2016 (*)	<ul style="list-style-type: none"> Positive pressures: Class 4 Negative pressures: Class 4
Air permeability UNE EN 12207: 2017 (*)	Class D

Drawings



Designed to withstand high temperatures



Smoke control to maintain visibility in escape routes



Highest air permeability rating



Integration of safety systems for people and the building

Technical information and finishes

EI 90 Hermetic Sliding Fire Door

The EI hermetic leaf and the frame form together an effective solution, offering not only all the guarantees of a hermetic door, but also guaranteeing resistance to the spread of fire and smoke, while protecting the building structure.

The EI hermetic leaf is coated with a high-pressure laminate (HPL) for durability, fire resistance and aesthetic appeal. Its perimeter, made of a combination of aluminium and stainless steel, offers high structural strength and contributes to the integrity of the system. In addition, a vision panel can be incorporated into the leaf, allowing direct observation of the surroundings without compromising fire resistance or structural integrity. This design not only complies with safety standards, but also integrates harmoniously into the architectural environment, adapting to various aesthetics and design requirements. The EI hermetic door is essential in applications where being fireproof is critical, such as in hospitals, laboratories or industrial facilities.

The frame, on the other hand, is composed of stainless steel tubes filled with silicate, creating a strong and durable barrier. Its design allows it to be easily fixed to walls by means of plugs and screws, ensuring a robust and reliable installation. Including intumescent material in the frame provides an additional layer of protection. In the event of a fire, this material expands in a controlled manner, effectively sealing any gaps and helping to prevent the spread of fire. The design behind the frame guarantees structural integrity and the ability to remain fireproof, preserving the safety of people and properties.



* In conjunction with the Manusa Hermetic Visio+ Operator (Hermetic EI typology) + the necessary accessories for Hermetic EI typology.



Hermetic glazed door

These doors are suitable for observation rooms since they provide great visibility inside the room, whilst also guaranteeing a hermetic seal.

Product designed specifically to guarantee low air permeability because when the leaf/leaves close, they approach the frame and the floor, hermetically sealing the perimeter of the opening.

Hence, we maintain a positive or negative pressure, inside the white room with the added feature of the leaves being completely glazed.

A common application for this type of door leaf is in ICU wards, so that patients can be monitored and supervised from outside the room.

The frame is designed to cover the clear width of the opening on the side of the leaf and can be adapted to any wall, ensuring a flat contact surface with the leaf to guarantee airtightness.

Technical Specifications

They enable hospital staff to medically monitor each of the modules that compose ICUs, resuscitation, pre-anaesthesia, etc.

MOTOR GROUP ELECTRICAL SPECIFICATIONS

Standard power supply	220-240V ± 6% 50-60 Hz
Power source option	100-120V ± 6% 50-60 Hz
Motor	2 x Three-phase AC
Nominal Power	250 W
Inverter Technology (exclusive to Manusa)	VV-VF
Protection fuse	3.15 A (220V) / 5A (110 V)
Operating temperature	-15°C to 50°C
Transport and storage temperature	-15°C to 50°C
Rechargeable fail-safe batteries	1 x 12 V DC 700 mAh

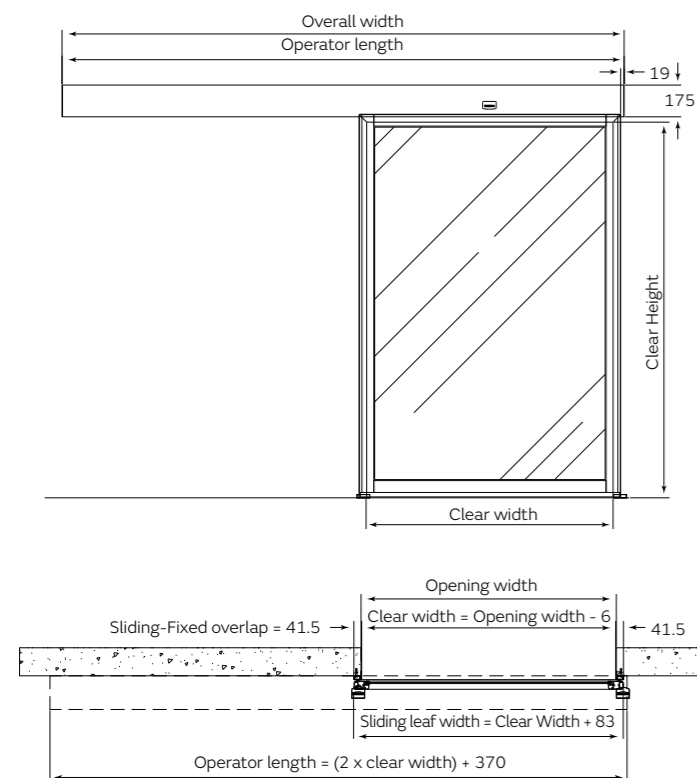
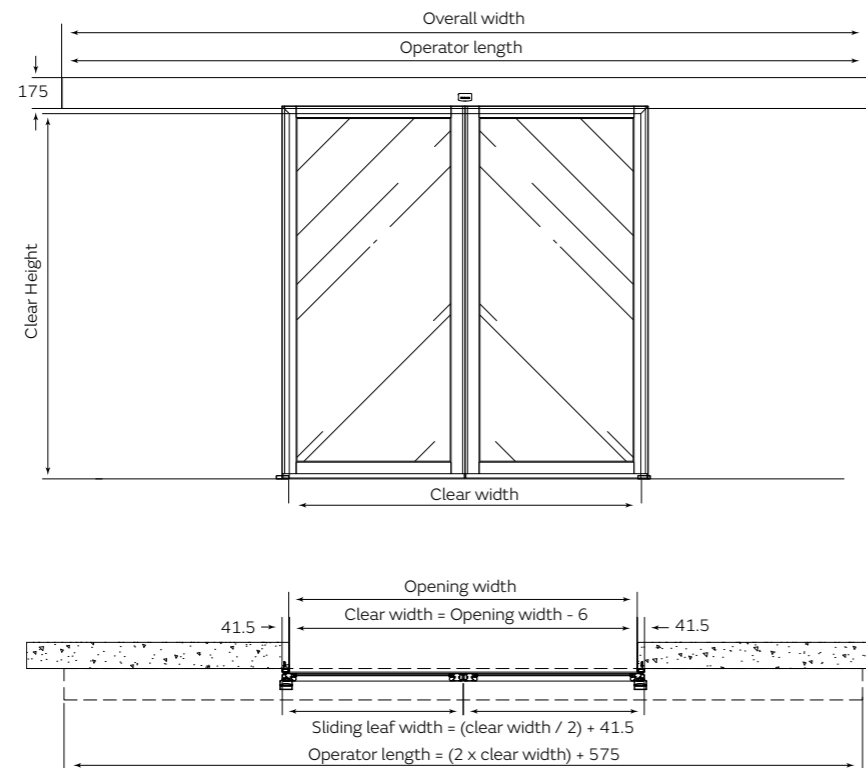
KINEMATIC SPECIFICATIONS OF THE MOTOR GROUP





Adjustable leaf opening speed	≤ 1 m/s
Adjustable leaf closing speed	0.15 to 0.6 m/s
Maximum acceleration	0.8 m/s ²
Maximum weight of LD leaves (single/bi-parting)	1x90 Kg / 2x65 Kg
Maximum weight of HD leaves (single/bi-parting)	1x200 Kg / 2x150 Kg

OPERATOR CHASSIS TECHNICAL SPECIFICATIONS

Operator dimensions (height x depth)	175 x 220 mm
Maximum operator length	5900 mm
Side clear width (min./max.)	495 / 1800 mm
Bi-part clear width (min./max.)	1070 / 2660 mm
Recommended maximum clear height	2400 mm

Drawings



-  The entire door guarantees low air permeability
-  Ideal visibility for the observation room
-  Extruded aluminium finish.
-  Electro-polarised glass or glass screen (optional)

Technical information and finishes

Hermetic glazed door

This door is made in aluminium, which permits an anodised or lacquered finish. The latter is available in the entire RAL range.

The leaves made with extruded aluminium with a thickness of 44 mm, frame the whole perimeter of the glass by means of a glazing gasket. It is compatible with all types of conventional safety glass: laminated, tempered, with standard thicknesses between 6 and 10 mm.

If greater visibility is desired for the hermetic glazed door, a fixed leaf can be added, when it is single slide door, or two fixed leaves for a bi-parting door. Hence, patient visibility is maximised and virological contamination is minimised.

Optionally, when a certain level of privacy is required, there is the option to install electro-polarised glass or glass with an integrated Venetian blind, which provides the door with opacity or transparency at any given time.





High-speed door with EI120 fire curtain

The EI120 high-speed door with fire curtain, an innovation in industrial, fire-safe accesses.

A new solution which combines a self-repairing high-speed door with a non-irrigated fire curtain in the same structure, forming a single unit.

It consists of two parallel fabrics, one for operation as a high-speed door and the other as an EI120 fire curtain. Both fabrics are rolled up inside a header.

Each of them has its own independent drive system to optimise the operating features.

This door also stands out for its space optimisation. Compared to a single-slide opening industrial fire door, the entire system is housed in a single structure, freeing up the space on either side of the door and maximising storage space.

In terms of safety, it connects to the fire alarm and detection system for automatic activation in emergency situations.

Standard equipment

The curtain's EI120 rating provides up to 120 minutes of fire resistance, protecting people and property. The door connects to the fire detection and alarm system, which is automatically activated in the event of an emergency.

MAIN FEATURES

Opening	Vertical
Maximum dimensions	2500 x 3000 mm
Use	Indoors
Fire curtain	EI120
Structure	Lacquered steel
Adjustable opening and closing speeds	Adjustable from 0.8 m/s to 2 m/s

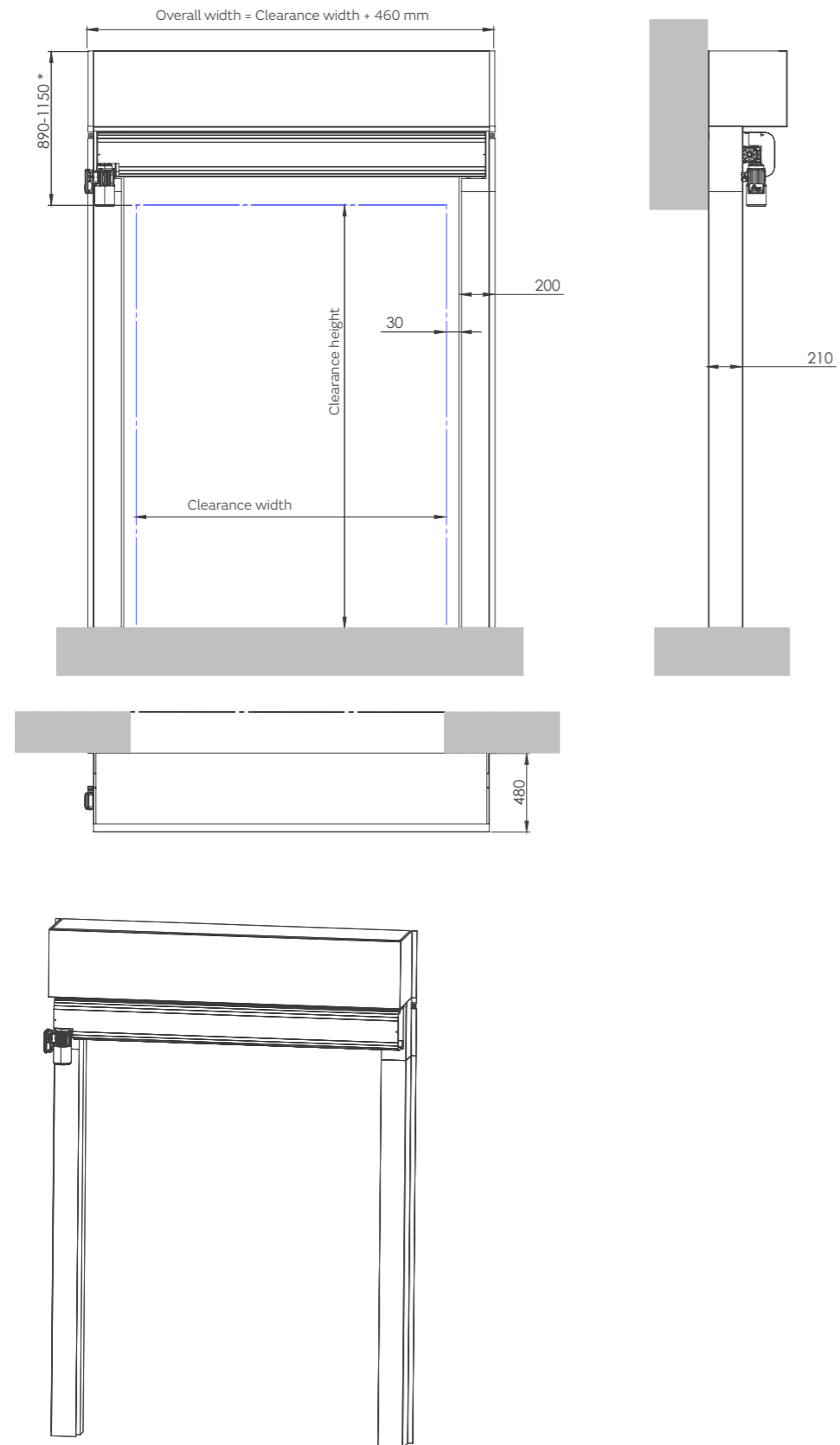
FABRIC SPECIFICATIONS

Material	AT 1100 dtex polyester
Covering	PVC 2 sides
Weight	900 g/m ²
Finish	Lacquered 2 sides
Tensile strength	4000N/5cm UNE EN ISO 1421
Tear resistance	800N/5cm EN ISO 13937-2
Adherence	100 N/5 cm
Operating temperature	-30° + 70°
Burning behaviour	ISO 3795-89
Light fastness	6 - 8
Surface electrical resistance	<5x10e90 OHMs
Noise reduction	12%
Zip	Self-lubricating POM 230V III ±10% 50Hz

CHARACTERISTICS FIRE CURTAIN

Class	EI120
Regulation	UNE EN 13501-2
Materials	4 layers of fibreglass, polyurethane coated steel, fire retardant aluminium and fibre blanket.

Drawings



Optional equipment

High-speed damage-resistant door with EI120 fire curtain

FEATURES

Double-height stop program switch

Auxiliary button panel

Ceiling handle

Remote control

External push button

Motion sensor

Presence and motion sensor

Magnetic field

Vision panels: square and rectangular Horizontal and vertical



FABRIC COLOURS

RAL 9016		RAL5005	
RAL 1014		RAL7038	
RAL 5002		RAL9005	
RAL 7037		RAL2004	
RAL 8014		RAL6026	
RAL 1003		RAL 5010	
RAL 3002		RAL7016	

* Illustrative measurements in drawings. Manusa reserves the right to make changes or modifications to the design.

Custom-Made Solutions

We have a large R&D+i team with enough experience and know-how to carry out any project they are given. We offer 360° solutions tailored to our clients' needs, supported by the latest technology that enables the optimization of all processes and the creation of intelligent solutions.

Remote Management

Using IoT technology makes it possible to control connectivity and remotely control any Manusa access.

- Any action that you need to take in relation to your access can be managed from your mobile phone.
- Allocation of keys and access permissions.
- Creation of spaces for managing and grouping different accesses together.
- Different profile types, which make it possible to match functional features to individual needs.

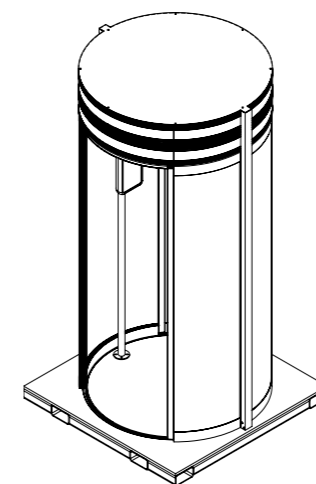
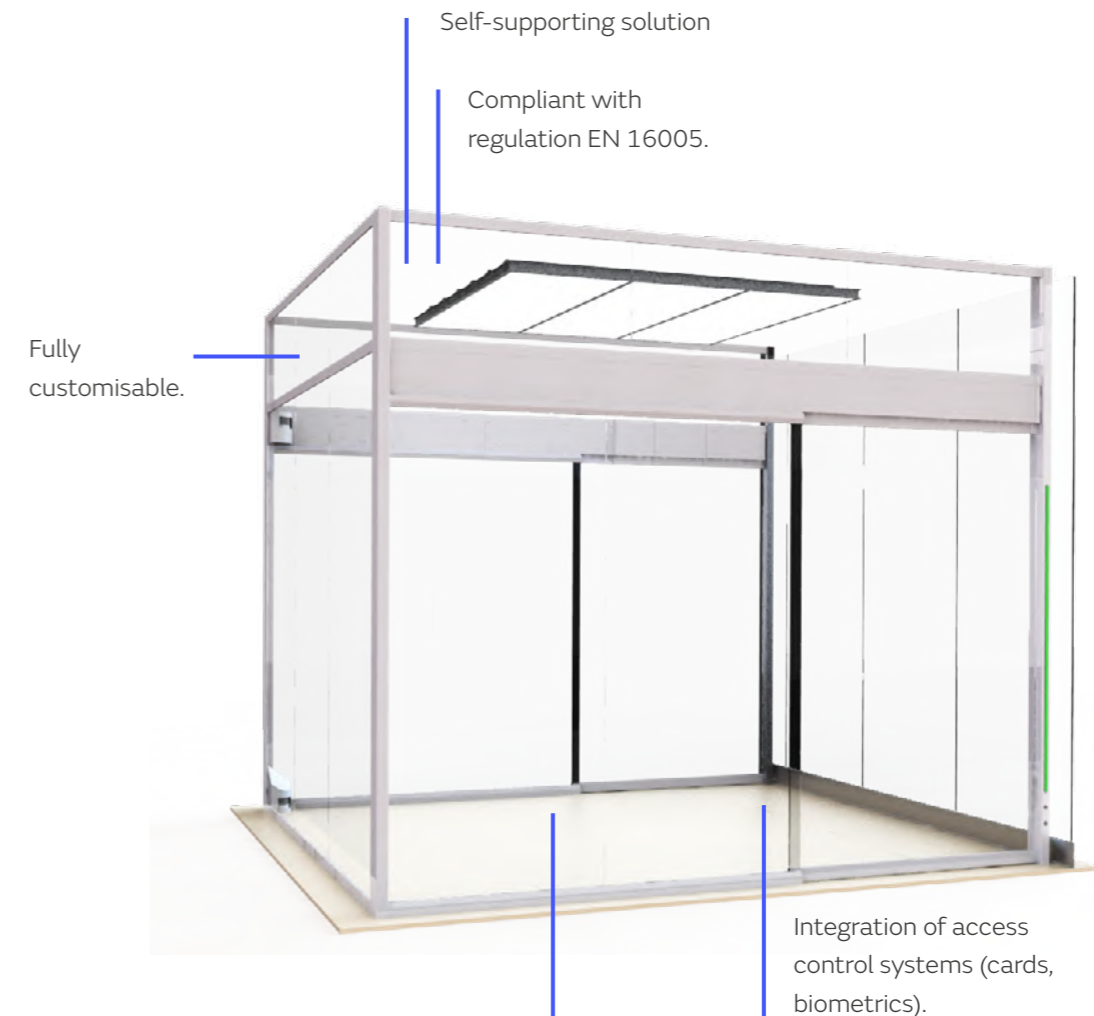
Airlock System

Some facilities have rooms that need to be controlled to prevent the transmission of pathogens, such as ICUs, acute burns units, laboratories, etc. In these cases, safety and strictly controlling access are of critical importance, and the airlock system makes this possible.

Regardless of the door and access control installed, Manusa's interlock systems offer multiple options for control and external connectivity options to be integrated with other hospital control systems, allowing for management and supervision.



Airlock System with Sliding Door



Airlock System with Circular Sliding Door

Wide range of operating and safety accessories: movement sensors, pressure sensors, thermal sensors, camera systems, card readers, camera systems, card readers, biometric readers, facial recognition systems, RFID readers and volumetric sensor systems.

Manusa Services



Manusa Service is Manusa's after-sales service.

A leading service offered in line with our strict quality standards, with the utmost guarantees and on a par with the highest levels of thoroughness.

Manusa Service means you can forget about everything relating to the working order of the automatic accesses and enjoy a barrier-free access.

Correct assistance and regular maintenance ensure the long life of automatic doors and compliance with current regulations regarding user safety.

Technical Assistance Service

Contacting the Manusa TAS is always a guarantee. We are committed to offering the best solution quickly, honestly, and transparently.

Immediate attention

From 8 a.m. to 8 p.m. Monday to Friday, non stop.

Professional response

Over 50 years of experience in the automatic door market endorses us and makes us professionals.

Maximum coverage

A leading infrastructure enables us to offer a leading service, and our 100% in-house production streamlines the management of spare parts and components.

Maintenance

A Manusa maintenance contract is the best option in increasing the working life of your accesses, preventing any incidents, and complying with current safety regulations.

Bespoke contracts

Personalised to suit each customer, or standard modalities.

Safety inspections

The goal of a technical safety audit is to check the actual safety levels of an automatic door, and to propose a plan of action that eliminates the risks that could jeopardise users.



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