



Established in 1980, **INFRACA** is an internationally recognized **industrial door manufacturing** company with production plants in several continents. Eversince our birth we have focused on continuous product development employing the very latest technologies. Today, Infraca is one of the leading manufacturers of **high quality industrial doors**. Currently operating in more than 60 countries with over 3,000 satisfied customers worldwide , making us a global benchmark in the industrial door manufacturing sector. Having consolidated our position in emerging markets over the past ten years this has acted as a catalyst for our continued growth. **Our target being, complete customer satisfaction**.

With a distinct international character ,INFRACA is a company proud of its history and its **brand**. Through listening to our customers and providing a **personalized service** we strive to maintain a **proactive position** in design and build projects. We seek to understand market needs and take measures to **adapt** accordingly; dedicated to a practical and modern design and manufacturing of strong, reliable and aesthetically attractive products through continuous **innovation** and **development**. Caring for the environment being a priority and supported by an efficient after sales **service** and **technical support**; we strive to offer an economically **competitive** product design. Having a well-trained, strong and qualified workforce we aim to offer a highly respected lead time from order to production and **delivery**. We work with our suppliers in a **transparent and responsible way**; complying to current guidelines and **standards** and the application of the latest technologies. Through strong, **teamwork**, **integrity**, **honesty**, a shared **commitment** to targets and the long-term **sustainability** of the company being at the very core of our company's strategy, we maintain a very solid relationship with our shareholders based on **trust** and transparency always offering an efficient, **cost effective** and responsible option through good planning.

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The data included in this catalogue are indicative and may be modified without prior notice due to Zirkel Infraca's ongoing improvement and development of products. ENG-.V.1902







# Information about measurements

• Door sizes are defined by the dimensions of the free passage with the door open, commonly known as "clear opening width" and "clear opening height".

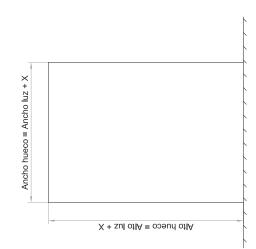
• The dimensions of the door are specified as indicated: first the clear opening width, followed by the clear opening height, and then the units of the measurement.

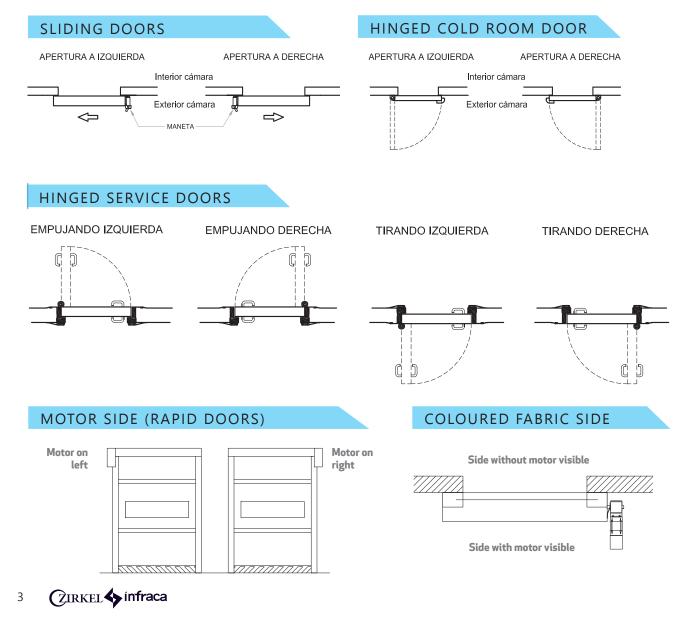
OPENING WIDTH (mm) x OPENING HEIGHT (mm)

• One of the most important measurements for the installer is the size of the cut out in the panel / structural opening, which is always specified in terms of the measurements of the free passage of the door plus an extra margin (in mm).

• This margin corresponds to the space needed to install the frame, after which a filler can be injected into the remaining gap.

# Opening directions





# **Special** Applications Interior Doors

# Range of finishes

Zirkel Infraca's doors come with certain standard finishes, which depend on the particular type of door. The table below compares the different finishes, to allow selection of the most suitable for a given application.

### Polyester finish (CS)

■ Galvanized steel sheet EN10142 and EN10147 with 25µ polyester protection: Pyrenees white 1006 (equivalent to RAL 9002), dark grey (RAL 7015) and pearl grey 5001 (equivalent to 9006), ask for others.

- Corrosion resistant.
- Food grade approval.
- Supplied with protective film.

### **PVC** finish

■ Galvanized steel sheet EN10142 and EN10147 steel sheet with 130-200µ PVC protection, white colour (equivalent to RAL 9002).

Very high resistance to corrosion and chemical agents.

- Food grade approval.
- Supplied with protective film.

### Stainless steel finish (S/S)

- AISI 304 2B stainless steel sheet.
- High corrosion resistance.
- Food grade approval.
- Supplied with white-lacquered counter frames.

# Product range table

### Cold room doors

### Polypropylene finish (PP)

Isotactic polypropylene sheet with smooth finish, white colour (equivalent to RAL 9010).

- Corrosion free and high resistance to chemical agents.
- Food grade approval.
- Supplied with protective film.

### Polyester/ Fibre Glass composite finish (GFRP)

Fibre Glass-reinforced polyester sheet with smooth finish, white colour (equivalent to RAL 9010), ask for other finishes. Corrosion free and high resistance to chemical agents.

- Food grade approval.
- Supplied with protective film.

### **Comparison of finishes**

	Mechanical resistance	Impact resistance	Corrosion resistance	Hygiene
CS	.6.6.6	.6.6	.4.4	<b>.</b>
PVC	.6.6.6	.4.4		<b>1</b>
SS	.4.4.4	.4.4	.4.4	<b>.</b>
РР	6.6.6	16.6.6	161616	<b>1</b>
GFRP		<b>16</b> 16		<b></b>

				Temperature range	
Type of opening	Usage frequency	Size	+0°C	-20°C	-40°C
Sliding	High	up to 2x2.6m	Sliding 002 Sliding		Sliding IF
		> 2x2.6m		Sliding IF	
Hinged	High	up to 1.1x2.2m	Hinged Standard Hinged Indu Hinged Industrial		Hinged Industrial
		> 1.2x2.2m			
Fire Doors	Low	up to 2.5x3m	IFire +0°C	IFire -20°C	-

### **Rapid doors**

	Opening height		Wind		
Type of door	Up to 3.4m	> 3.4m	Low	Moderate	Strong
Rapid Roll-up	<b>161616</b>	<b>4</b>		.6	NO
Rapid Roll-up (Large Sizes)		161616	161616		NO
Rapid Fold-up	<b>ک، ک، ک</b> ،		.4.4.6		
Rapid Cold Room	Only for cold chambers				







# Frame and installation types

# Panel-mounted frame:

• Consists of a main frame in combination with a secondary frame (referred to as the counter frame). This combination is adjusted to the thickness of the panel into which the door is to be installed.

■ If the panel is thicker than the standard counter frame combination, a third frame (supplementary frame) is used.

■ The frames are joined to each other by screws, which remain hidden beneath the counter frame beading.

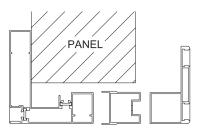
# Wall frame:

■ Consists of a main frame to which several construction clamps are attached, arranged in such a way that the door can be correctly fixed to the wall.

The clamps are made from galvanised steel.



### COMMERICAL COLD ROOM FRAME



### **Benefits:**

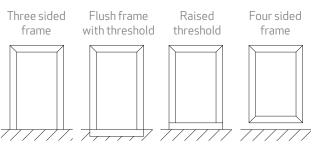
- High mechanical strength and lightweight.
- Easy and fast installation, adaptable to any panel thickness.
- Double thermal break, ensuring thermal insulation.

### Applicable to doors:

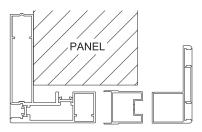
■ Sliding commercial (002), Hinged commercial.



# Types of frame:



# INDUSTRIAL COLD ROOM FRAME

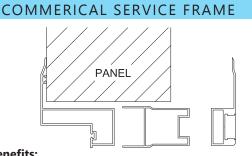


### **Benefits:**

- High mechanical strength
- Easy and fast installation, adaptable to any panel thickness.
- Double thermal break, ensuring thermal insulation.

### Applicable to doors:

Sliding industrial (IF), Hinged industrial.



### **Benefits:**

- Aesthetically appealing finish.
- Easy and fast installation, adaptable to any panel thickness.

### Applicable to doors:

Commercial doors.

# INDUSTRIAL SERVICE FRAME

# Benefits:

- High mechanical strength
- Easy and fast installation, adaptable to any panel thickness.

### Applicable to doors:

Industrial service doors.

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# **Sliding** Lithe

0

**ZK Valencia** 

Z

Cool Room

Doors

Jumbo Jumbo Vertical Lift Jumo Fire Rated El2-60

# Hinged Lithe

Lithe Jumbo Display

Strip curtains





# Application

Sliding door for cold chambers used for preservation (+0°C) and freezing (-20°C).
Installation in any type of business, shop, supermarket or in the catering and hospitality sector.

# Advantages

- Pre-mounted doors.
- High flexibility co-extruded EDPM weather strip.
- Four-point precision adjustment.

Available in stainless steel and anodised aluminium.

■ Easy access to guide during installation / adjustment / repair.

- Low wear of mechanical elements.
- Light and versatile door.
- Self-supporting frame.

# Benefits

- Quick, easy and intuitive installation (cost saving)
- High degree of sealing, insulation, and ease of adjustment to installation position.
- Ease of adjustment (fast and efficient installation).
- Corrosion resistance and reliability in aggressive environments (depending on finish).
- Ease of maintenance.
- Does not require any auxiliary structure (saving time and costs).

# WORKING TEMPERATURES

Temperature	0°C	-20°C
Leaf thickness	80mm	100mm
Heating element power		40W/m

### MAXIMUM DIMENSIONS

Opening width	Max. 2m			
Opening height	Max. 2.6m			
Other specific dimensions upon request				



Detail of sealing system



Frame and counter frame



Lower guide

### Sealing system

Hermetic seal with 45° drop, made from stainless steel and extruded aluminium; allows manual opening with minimum effort.

■ Internal and external handles, all screws made from stainless steel and anodised aluminium, designed and manufactured by Zirkel Infraca.



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New upper guide

### Frame

Constructed from L-section extruded aluminium with thermal break,
20 micron anodising treatment or white lacquered finish.

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Doors finished in stainless steel come with the frame finished in anodised aluminium.

■ Frames for panel chambers are supplied with counter frames made from white-lacquered extruded aluminium, suitable for all panel thicknesses.

### Leaves

■ Overlap the frame, with internal supporting frame (depending on thickness) and anodised aluminium frame.

■ Injected polyurethane with density of 40-45kg/m<sup>3</sup>. Sealing guaranteed by high flexibility co-extruded EDPM double weather strip.

Available finished in painted steel (colour stripe), AISI 304/2B stainless steel, PVC, GFRP, etc.

Supplied with white-lacquered counter frames.

# Optional features

- Track/ Guide cover.
- Key lock (IFL01/IFL02).
- Glazed observation window 300x300 for preservation doors. Sideways guide option so floor is not modified
- Support handle.
- Stainless steel / checkerboard bumper.
- Electromagnetic latch.

- Frame with cut-out for overhead rails.
- Any type of frame.
- Sideways guide option so floor is not modified (+0°C version only).
- Automation.

# Distinguishing features

- Patented self-supporting guide system over the frame. High strength.
- Exclusive frame and counter frame system. **Adaptable to any thickness.**
- Frame/ threshold embedded in floor allowing forklift access and including heating element housing. **Ease of** maintenance.
- Fluorescent internal handle base plate. Security.

New guide design facilitates installation of the door, producing a more compact system and improved appearance of the assembly, due to the replacement of the polyethylene inserts by a single aluminium element.

■CE Mark







# Application

■ Industrial sliding door suitable for cold chambers used for preservation (+0°C), freezing (-20°C) and tunnel freezing (-40°C). Recommended in cold chambers and entrance areas where doors with large dimensions or overhead rails are required.

# Advantages

- Pre-mounted doors.
- High flexibility co-extruded EDPM double weather strip.
- Four-point precision adjustment.
- Available in stainless steel and anodised aluminium.
- Easy access to guide during installation / adjustment / repair.
- Low wear of mechanical elements.
- Patented sealing system.
- Up to seven polyethylene bearings, depending on size.
- Self-supporting frame.

# WORKING TEMPERATURES

# 🗾 Benefits

- Quick, easy and intuitive installation (cost saving)
- High degree of sealing and insulation.
- Ease of adjustment (fast and efficient installation).
- Corrosion resistance and reliability in aggressive environments.
- Complete flexibility and adaptability to the market.
- Easy and low maintenance.
- Guaranteed sealing.
- High strength and durability.
- Does not require any auxiliary structure (saving time and costs).

Temperature	0°C	-20°C	-40°C
Leaf thickness	90 - 100mm	120mm	140mm
Heating element power		40W/m	50W/m

# MAXIMUM DIMENSIONS

Opening width	Max. 4m		
Opening height	Max. 6m		
Maximum total area	Max. 12 m <sup>2</sup>		
Other specific dimensions upon request			

# 11 CIRKEL Infraca



External handle



Frame and counter frame



Aluminium lower guide



Full Inox IF door

### Sealing system

■ Hermetic seal with 45° drop, made from stainless steel and extruded aluminium; allows manual opening with minimum effort.

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■ Internal and external handles and all screws made from stainless steel and anodised aluminium, designed and manufactured by Zirkel Infraca.

### Frame

Constructed from L-section extruded aluminium with thermal break,
20 micron anodising treatment or white lacquered finish.

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Doors finished in stainless steel come with the frame finished in anodised aluminium. The counter frames may be anodised as an option.

■ Frames for panel chambers are supplied with counter frames made from white-lacquered extruded aluminium, suitable for all panel thicknesses.

### Leaves

■ Overlap the frame with internal supporting frame (depending on thickness) and anodised aluminium frame.

■ Injected polyurethane with density of 40-45kg/m<sup>3</sup>. Sealing guaranteed by high flexibility co-extruded EDPM double weather strip.

■ Available finished in painted steel (polyeter finish), AISI 304/2B stainless steel, PVC, GFRP, etc.

Custom manufacture.

# Optional features

### Door manufactured ENTIRELY in STAINLESS

- **STEEL** (guides, leafs, frame and screws in 304 S/S).
- Frame with cut-out for overhead rails.
- Guide cover.
- IFL01 key lock for manual doors.
- IFL02 key lock for automatic doors.
- Double glazed observation window 300x300 on doors for preservation chambers.
- Support handle.
- Any type of frame.
- Automation.
- Anodised counter frames.

# Distinguishing features

- Patented self-supporting guide system over cold room frame. High strength.
- Exclusive frame and counter frame system. Adaptable to any panel thickness.
- Frame embedded in floor allowing forklift access and including separate housing for heating elements. Ease of

### maintenance.

Fluorescent internal handle base plate. Security.

### ■ C€ Mark



Guide on top of frame



Detail of forklift access



# AUTOMATISMS



# Application

Industrial automatism used in sliding doors in preservation and freezing rooms.

Can be installed in doors of any dimensions.

# Advantages

Recommended for rooms with a high load traffic and large doors subject to intensive use.

■ Recommended for logistics centres, the meat and fish industries and drying sheds.

# Benefits

■ Supplied with CE marking and certified in accordance with the UNE EN 13241-1 standard, in compliance with all applicable safety requirements.

■ Easy, simple and quick programming, which is supplied preinstalled.







Motor IP54



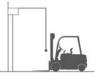
Cuadro de control IF10VF

# Other

- Easy manual opening in the event of a failure in the electric power supply.
- Transmission system protected by anodized aluminium profile, held in position by stainless steel components.
- Supplied with all the corresponding safety elements: internal emergency push button, photocell and safety edge.
- AAutomatism with all the corresponding safety systems under EC standards.

# Activation options





■ pull cord



· III ·

magnetic loop

remote control

# Motor

MHigh-quality, durable motor designed for industrial settings, manufactured and tested in accordance with the DIN EN 12453 standard for Industrial, Commercial and Garage Doors. DIN EN 12978 specifications and classification, in compliance with health and accident prevention regulations.
Power: 0,37Kw.

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- Speed: 0.5 m/s.
- Electronic limit sensors.
- Maintenance-free.

### Infraca IF10VF control unit

■ Control panel designed and developed by Infraca, 1x230 VAC+PE at 50-60 Hz with frequency converter and 0.75kW maximum output power.

Digitally controlled door positioning and adjustment.

■ IP56 protective case in ABS plastic for mounting in positive temperature areas.

- Protected by the use of class II hardware and reinforced insulation.
- Case includes display window for ease of use when box is closed.

- Flashing light signal.
- Single phase UPS (Uninterrupted Power Supply).

Optional features



# JUMBO VERTICAL LIFT



# Application

■ Industrial sliding door suitable for use in cold chambers and entrance areas where lateral space is not available, but there is height clearance.

# Advantages

Pre-mounted doors.

■ High flexibility co-extruded EDPM double weather strip.

Available in stainless steel and anodised aluminium.

Stainless steel guide, guide cover and lintel cover.

■ Easy access to guide during installation for adjustment / repair.

■ Low wear of mechanical elements.

- Very simple installation and adjustment.
- Hidden cables .
- Zirkel Infraca sealing system.

# WORKING TEMPERATURES

# Benefits

- Quick, easy and intuitive installation (cost saving)
- High degree of sealing and insulation.
- Corrosion resistance and reliability in aggressive environments.
- Ease of maintenance.
- Clean and hygienic.
- Saves time.
- Improved appearance and lower exposure.
- Guaranteed sealing.

Temperature	0°C	-20°C	-40°C
Leaf thickness	90 - 100mm	120mm	140mm
Heating element power		40W/m	50W/m

# MAXIMUM DIMENSIONS

Opening width	Max. 4.5m	
Opening height	Max. 5.5mt	
Other specific dimensions upon request		



Detail of third safety cable.



Frame and counter frame



Detail of box



Example of parachute fittings

### Guide and sealing system

■ Guide covers: Built in stainless stell 304, avoid the accumulation of dirt in the guide and significantly improve the appearance of the door.

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### Frame

■ Constructed from L-section extruded aluminium with thermal break, 20 micron anodising treatment or white lacquered finish.

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Doors finished in stainless steel come with the frame finished in anodised aluminium. The counter frames may be anodised as an option.

■ Frames for panel chambers are supplied with counter frames made from white-lacquered extruded aluminium, suitable for all panel thicknesses.

### Lintel

Designed with an angled drop to facilitate cleaning and avoid the accumulation of particles and the formation of dirt on the cables.

AISI 304/2B stainless steel lintel cover.

### Leaves

• Overlap the frame, with internal supporting frame (depending on thickness) and anodised aluminium frame.

■ Injected polyurethane with density of 40-45kg/m<sup>3</sup>. Sealing guaranteed by high flexibility co-extruded EDPM double weather strip.

Available finished in painted steel (colour stripe), AISI 304/2B stainless steel, PVC, GFRP, etc.

### Automation

- Power: 3x400V at 50Hz.
- Easy, simple and fast programming, since it is supplied pre-installed.
- Motor

■ High quality IP65 motor with chain drive, very durable in industrial environments.

Power: 3x400C at 50Hz. Power: 0.45Kw/ 0.8 Kw/ 1.1 Kw. Speed: 20-24 rpm.
Includes electronic limit switches and parachute break.

### Safety

■ Photocell safety barriers positioned at height of 2-2.5m to avoid striking people or equipment, with automatic return.

- Safety parachute in case of cable breakage.
- Third safety cable.

# Optional features

### ■ Wall frame.

Double glazed observation window 300x300 on doors for preservation chambers.

■ If the chamber doesn't have another exit, the door must be ordered with an integral hinged door, or an additional hinged door must be installed.

Pre-stressed springs aperture.

# Distinguishing features

Guides, structural supports for guides and guide covers made from AISI 304 stainless steel. **Durability and corro**sion resistance.

Hermetic seal with AISI 304 stainless steel sealing face, bearings and screws. Insulation guarantee.