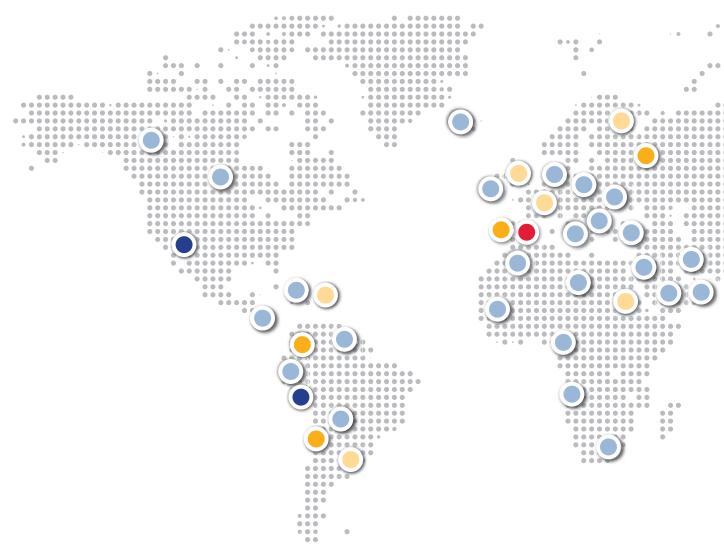


## **PRODUCT** CATALOGUE



## ZIRKEL infraca













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, consistent and solid leadership we aim to have a very motivated workforce with **mentoring**, **training**, **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







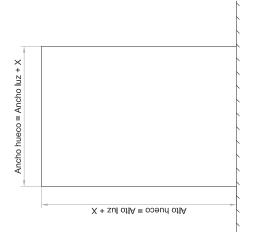


## Information about measurements

- 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.

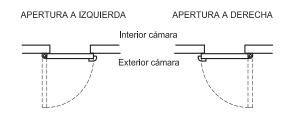


## Opening directions

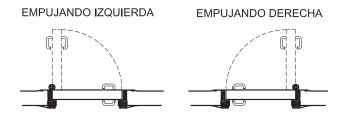
#### SLIDING DOORS

# APERTURA A IZQUIERDA Interior cámara Exterior cámara

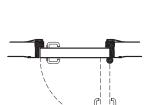
#### HINGED COLD ROOM DOOR



#### HINGED SERVICE DOORS

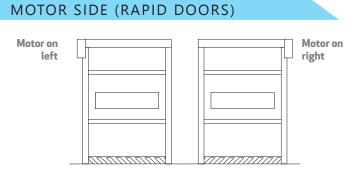


#### TIRANDO IZQUIERDA

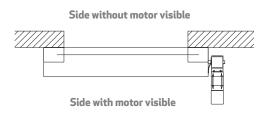


TIRANDO DERECHA

## 년 <u>원</u>



#### COLOURED FABRIC SIDE



## 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
- 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.

#### 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	16.6.6	16.6	1616	<b>≟</b>
PVC	16.6.6	16.6	16.6	<b>1</b> €
SS	161616	1616	1616	<b>≟</b>
PP	16.6.6	16.6.6	4.4.4.	4
GFRP	1616	16.6	161616	16.6.6

## Product range table

#### Cold room doors

			Temperature range		
Type of opening	Usage frequency	Size	+0°C	-20°C	-40°C
Sliding	High	up to 2x2.6m	Sliding 002 Sliding I		Sliding IF
		> 2x2.6m		Sliding IF	
Hinged	High	up to 1.1x2.2m	Hinged Standard Hinged Indus		Hinged Industrial
		> 1.2x2.2m	Hinged Industrial		
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	16.6.6	.4	16.6.6	.4	NO
Rapid Roll-up (Large Sizes)	1616	161616	161616	.6	NO
Rapid Fold-up	161	6.6	46.6.6		
Rapid Cold Room	Only for cold chambers				





## Frame and installation types

#### **Panel-mounted frame:**

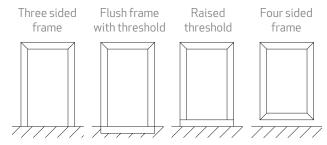
- Consists of a main frame in combination with a secondary frame (referred to as the counter frame). This combination is adjusted to the thickness of the panel into which the door is to be installed.
- If the panel is thicker than the standard counter frame combination, a third frame (supplementary frame) is used.
- The frames are joined to each other by screws, which remain hidden beneath the counter frame beading.

#### Wall frame:

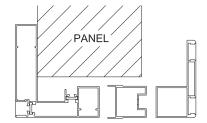
- Consists of a main frame to which several construction clamps are attached, arranged in such a way that the door can be correctly fixed to the wall.
- The clamps are made from galvanised steel.



#### **Types of frame:**



#### COMMERICAL COLD ROOM FRAME



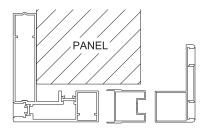
#### **Benefits:**

- 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.

#### INDUSTRIAL COLD ROOM FRAME



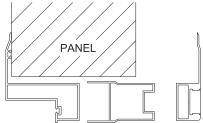
#### **Benefits:**

- 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.

#### COMMERICAL SERVICE FRAME



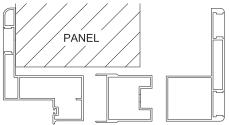
#### **Benefits:**

- 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.





## Application

- Hinge-opening door for cold chambers used for preservation (+0°C) and freezing (-20°C).
- Installation in any type of business, industrial sector, catering, hospitality, supermarkets...

## Advantages

- Preinstalled doors (easy and very fast installation).
- Completely customisable with a large variety of finishes
- Very robust frame-counterframe set and door leaf.
- Coextruded EPDM seals.

## Benefits

- Saves time and costs.
- Flexible and adaptable to project requirements.
- Low maintenance and reliable.
- High flexibility and durability.

#### **WORKING TEMPERATURES**

Temperature	0°C	-20°C	-40°C
Leaf thickness	60mm	80mm	120mm
Heating element power		40W/m	50W/m

#### MAXIMUM DIMENSIONS

Opening width	Max. 1.2m	
Opening height	Max. 2.2m	
Other specific dimensions upon request		

### Standard features



Seal 5520

#### **Frame**

- Constructed from extruded aluminium with 20 µm anodisation treatment or lacquered in white.
- Always fitted with access for forklifts unless a low frame is specified.
- Fitted with heating elements when used in freezing chambers.
- 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.



Hinge

#### **Fittings**

■ Grey-coloured composite, aluminium single point closure, with interior opening, vertical hinges which may be raised if not for a low-frame door.



Forklift access

#### Leaves

- Small overlap with frame and finished with anodised aluminium side trims.
- Finished in lacquered steel (colour stripe), AISI 304 2B stainless steel, PVC finish steel (PVC), glass fibre reinforced polyester (GFRP) or other finishes upon request.

## Optional features

- Custom manufacture option: built-in door with low frame and lever lock.
- Key lock, or any other type of fitting upon request.
- For larger gates measuring 500x500 and similar: bright chromed fixtures, single point closure and two vertical hinges.
- Observation window 300x300 on doors for preservation chambers.
- Cutout for overhead rail.
- Wall frame.
- Anti-panic push bar.
- Stainless steel / checkerboard protection.
- Stainless steel clad frame.
- Raised forklift access.
- Electromagnetic latch.
- Spring-closing doors.



Raised forklift access



Key lock 5521

## Distinguishing features

- Patented self-supporting cold room frame with double thermal break. High degree of insulation and energy efficiency.
- Internal polyethylene reinforcements to support handles. Guaranteed for intensive and long-term use.







## Application

- Industrial hinged door suitable for cold chambers used for preservation (+0°C), freezing (-20°C) and tunnel freezing (-40°C).
- For use in the meat, fish, horticultural, dairy and logistics industries.
- Suitable for areas with large gaps or with overhead rails and movement of handling equipment.

## Advantages

- Preinstalled door (easy and very fast installation).
- Completely customisable with a large variety of finishes.
- Extremely robust frame-counterframe set and door leaf
- Coextruded EPDM seals.
- High mechanical strength hinges.

## Benefits

- Saves time and costs.
- Flexible and adaptable to project requirements.
- Low maintenance and reliable.
- High flexibility and durability.
- Withstands intense usage.

#### **WORKING TEMPERATURES**

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

#### MAXIMUM DIMENSIONS

Opening width	Max. 1.8m	
Opening height	Max. 4m	
Maximum total area Max. 5m²		
Other specific dimensions upon request		

## Standard features



Interior handle



11006 closure



Hinge

#### **Fittings**

■ Grey-coloured composite, aluminium three-point closure, with interior opening, vertical hinges which may be raised if for a forklift access door.

#### Frame

- $\blacksquare$  Constructed from extruded aluminium with 20  $\mu$ m anodisation treatment or lacquered in white.
- Always fitted with access for forklifts unless a low frame is specified.
- Fitted with heating elements when used in freezing chambers.
- 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

■ Small overlap with frame and finished with anodised aluminium side trims.

•••••

■ Finished in lacquered steel (colour stripe), AISI 304 2B stainless steel, steel-PVC (plastisol), glass fibre reinforced polyester (GFRP) or other finishes upon request.

## Optional features

- Door specified for supermarkets with special frame, manual closure lever, and silent high mechanical strength hinges.
- Hinged double leaf option.
- Key lock.
- Cutout for overhead rail.
- Wall frame.
- Observation window 300x300 on doors for preservation chambers.
- Stainless steel / checkerboard protection.
- Key lock G-24.
- Raised forklift access.
- Spring-closing doors.
- Electromagnet.



Stainless steel clad frame and observation window



Hinged double leaf.

## Distinguishing features

- Patented self-supporting cold room frame with double thermal break. High degree of insulation and energy efficiency.
- Internal polyethylene reinforcements to support handles. **Guaranteed for intensive and long-term use.**





## Advantages

- Aluminium alloy anodised to 20 microns with stainless steel finish.
- Perimeter frame with double thermal break.
- Robust structure.

uct stored inside.

- Modular system.
- Zirkel Infraca clamping system for individual adjustment of each leaf.

## Benefits

- High strength and durability
- Insulation
- Withstands intensive use.
- Easy transport and installation.
- Ease of adjustment in X-Y-Z.



#### STANDARD DIMENSIONS

1 leaf	662 x 1813 mm	
2 leaves	1440 x 1813 mm	
Other specific dimensions upon request		

## Standard features



Detail of frame corner



Door handle



Door top mounting with adjustment

#### Glass

■ Low emissivity and thermally insulating 4-16-4 double glazing with dry air (zero humidity) cavity as standard.

••••••

- Heated when used at freezing temperatures.
- Thermal conductivity coefficient U=2.7 W/m²K for refrigeration model.
- Thermal conductivity coefficient U=1.4 W/m²K for freezing model.

#### **Frame**

- Modular system with easy transport and installation.
- Aluminium alloy anodised to 20 microns with stainless steel finish
- Supporting frame of anodised aluminium with stainless steel finish embedded in panel with double thermal break.
- Provided with heating elements when used in freezing chambers.
- White lacquered aluminium internal counter frames to adjust the shape to the panel and provide structural strength.

#### Leaf

- Robust internal supporting frame made of anodised aluminium alloy sections with stainless steel finish.
- Magnetised triple cavity weather strip for easy replacement.
- Interior mounting fittings for improved appearance.

#### **Fittings**

- Self-closing swivel hinge.
- Zirkel Infraca-designed top mounting, adjustable in two axes for very easy and perfect individual adjustment of each leaf.

## Optional features

- Illumination with high luminosity and efficiency LEDs (1200 lumnes/m). With IP68 protection and 100 W IP68 transformer.
- LEFT-LEFT / RIGHT-RIGHT / LEFT-RIGHT Opening.



LED lights

## Distinguishing features

- For systems used in freezing, we supply the frame, leaf and double glazing with independent heating system.
- Unique hinge adjustment system.
- LED illumination without transformer.
- Easily detachable weather strip.