

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.

Contents

General Information		
ZK VALENCIA COLD ROOM DOORS	8	
Sliding	9	
Lithe	9	
Jumbo	11	
Automatisms	13	
Jumbo Vertical Lift	15	
Jumbo Fire rated EI2-60	17	
Hinged	19	
Lithe	19	
Jumbo	21	
Display	23	
Strip Curtains	25	
DOORS FOR SPECIAL APPLICATIONS	28	
Controlled Atmosphere	29	
Overhead Rail Systems	31	
Combined Systems	32	
ZK BILBAO INTERIOR DOORS	34	
Hinghed	35	
Insulate Service	35	
Clean Room	37	
Fire Rated	39	
Viewing Window	40	
Flip Flap (Swing)	41	
Sliding Service	43	
ZK MADRID HIGH SPEED DOORS	46	
Roll-up	47	
Lithe and Jumbo	47	
Self-Reparable	49	
Clean Room	51	
High Speed Cold Room	53	
Fold-up	55	
ZKV BARCELONA LOGISTICS	58	
Jumbo Sectional Doors	59	
Dock Shelters	61	
Dock Levellers	63	
ZK NUMANCIA PE PROTECTIONS	66	
Bolards and Guardrails	67	
Hygienic protective Plinth	68	
DRAWLINGS	70	
Overall Dimensions	71	

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







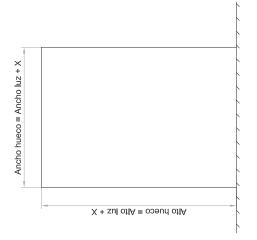


Information about measurements

- 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.

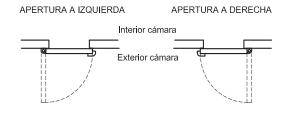


Opening directions

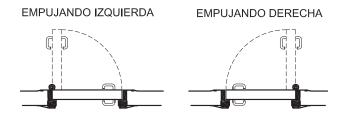
SLIDING DOORS

APERTURA A IZQUIERDA APERTURA A DERECHA Interior cámara Exterior cámara MANETA

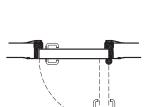
HINGED COLD ROOM DOOR



HINGED SERVICE DOORS

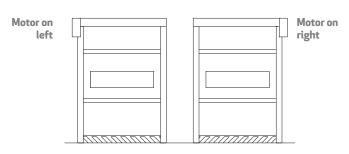


TIRANDO IZQUIERDA

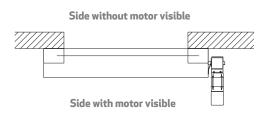


TIRANDO DERECHA

MOTOR SIDE (RAPID DOORS)



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	161616	1616	1616	≟
PVC	16.6.6	16.6	16.6	. ♣
SS	161616	1616	1616	≟
PP	16.6.6	16.6.6	16.6.6	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 IF		Sliding IF
		> 2x2.6m		Sliding IF	
Hinged	High	up to 1.1x2.2m	Hinged Standard Hinged Indust		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	161616	.4	NO
Rapid Roll-up (Large Sizes)	1616	161616	161616		NO
Rapid Fold-up	.6.6.6		4444		
Rapid Cold Room	Only for cold chambers				







Frame and installation types

Panel-mounted frame:

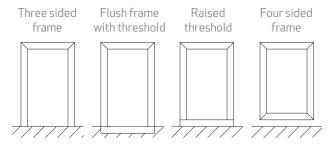
- Consists of a main frame in combination with a secondary frame (referred to as the counter frame). This combination is adjusted to the thickness of the panel into which the door is to be installed.
- If the panel is thicker than the standard counter frame combination, a third frame (supplementary frame)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

Wall frame:

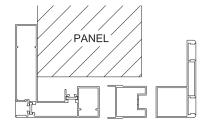
- Consists of a main frame to which several construction clamps are attached, arranged in such a way that the door can be correctly fixed to the wall.
- The clamps are made from galvanised steel.



Types of frame:



COMMERICAL COLD ROOM FRAME



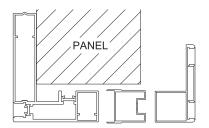
Benefits:

- 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



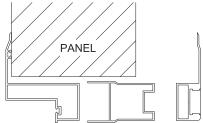
Benefits:

- 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



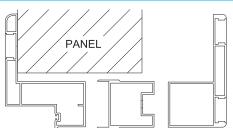
Benefits:

- 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.



HIGH SPEED COLD ROOM



Application

■ Roll-up door for chiller and freezer chambers, usually installed in combination with a sliding cold room door in cold chambers in any industrial sector: food, meat, fish, logistics services...

Advantages

- Minimal loss of cold when opening cold room door.
- Reduces chambers' electricity use.
- No icing of essential components or of passageway.

Benefits

- Saves energy.
- Saves costs.
- Reliability of operation.



MAXIMUM DIMENSIONS

Opening width	Max. 3.5m		
Opening height	Max. 5.5m		
Other specific dimensions upon request			

Standard features



Detail of structure



Detail of motor



Control panel for cold room rapid door.



Interior safety button suitable for low temperature (provided as standard).

Structure

■ Low wear anodised aluminium guides with flexible joints for improved insulation.

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- White coloured metallic lintel, with dynamic lintel system which adapts to the fabric to avoid the passage of air and loss of temperature.
- Support panel and fixtures.
- Fabric without viewing window
- Heated resistance in freezer application

Motor

- STANDARD MOTOR: 3x380/400 VAC+N+PE, 0.37 kW, 90 rpm, IP65.
- Speed of door varies depending on dimensions: Max: 1.16M/s Min: 0.41M/s
- Electronic limit switches.
- Suited for use in negative temperatures down to -25°C.

Control unit

- Digitally controlled door positioning and adjustment.
- Standard model equipped with 3P+N+T CEE plug, 16A, 400V, IP65, 24V, 50-60Hz.
- External connection by means of a set of high quality terminals and possibility of time-delayed opening.
- IP65 protective case in ABS plastic for mounting in positive temperature areas.
- Three phase 3x380/400 VAC+N+PE connection.

Safety

■ Equipped with photocell barriers for positive temperature applications.

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- Doors for negative temperature use have an emitter-receiver type photocell integrated into the guide, so that condensation does not cause false positives, and a safety line with a flexible spiral wiring resistant up to -40 °C outside of the doorway to avoid possible accidents.
- Emergency stop button inside and outside (inside suitable for low temperature).

Optional features

- Door manufactured **ENTIRELY** in **STAINLESS STEEL** (guides, lintel, control panel, base and screws in 304 stainless steel).
- Several opening options: radar, handle, magnetic field and remote control.
- White-lacquer as option.(VL
- Flashing safety beacon.
- Standard configuration

Distinguishing features

- Installed with a double heating system when used in negative temperature applications, to avoid ice formation.
- Special 7mm Infraca fabric with thermal transmittance of 3.3 W/m²K for temperature resistance down to -25°C. **High insulation performance.**
- Heating elements in guides, motor and door blade. "No Frost" system.