

TECHNICAL SPECIFICATIONS

# Isark

MINI COLD ROOM



**ColdKit**  
A Purever Company

# Mini Cold Room



## ISARK - MINI COLD ROOM

ColdKit is the most innovative and comprehensive manufacturer within the catering industry.

Committed investment in R&D, technological innovation and new production facilities, ColdKit's range of products is today larger than ever and gives solutions to any professional catering need with top quality products and durability together with a superb variety of finishes tailored to customers individual requirements.

Today, ColdKit offers a wide variety of solutions aimed for hotels, restaurants, all kitchens, public venues, food franchises, supermarkets, food logistics and agro-food industry.

### ColdKit's range of products includes:

- Linx, a selection of neutral furniture in stainless steel
- Dubhe, cold storage and freezer cabinets
- Mizar, counter refrigerators
- Nassau, Bali and Saona, modular bars and display cabinets for pastries, bakeries and cafeterias
- Araya all-purpose showcase
- Calabria display cabinets for pastry
- Bread displays
- Fish displays
- Alyat full range of self service equipment
- Matrix cold rooms
- Isark mini cold rooms
- Industrial foodsafe panel for agroalimentary purposes
- A range of insulated and service doors

ColdKit offers a wide range of products for professional kitchens, food storage and display in hotels, restaurants, pastisseries, bakeries, food franchisings, supermarkets, cold logistics and to all the agroalimentary industry.

ColdKit has a professional distribution network with solid experience developing complete catering projects. If you are interested in learning more about our solutions, log on to our website or contact us and by return one of our certified specialists in your area will be in touch with you.

All our products have been design for professional performance, using high quality components and strict production techniques. On top of this and due to our quality processes, ColdKit Ibérica, our mother factory, has been awarded with the ISO 9001 certification.

Now, ColdKit's products are manufactured in modern facilities in Spain, Portugal, France, Brazil and India.

For more information, visit [www.coldkit.com](http://www.coldkit.com)



Adding to the ISO 9001 certification, ColdKit Ibérica is the only manufacturer in this field to have been awarded with the Controlvet certification for the quality and hygiene of its products, procedures and facilities, in accordance to the current sanitation rules.

Controlvet is certified by the Portuguese Certifying Institute, no LO224-1, has more than 10 years of experience and is specialized in certifying companies related to the food industry, with more than 1500 satisfied clients.

# Isark

MINI COLD ROOM

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# Mini Cold Room



Isark is an innovative **modular cold room** which stands out from traditional cold rooms.

It is the result of a major research effort which involved professionals from a number of countries.

**It offers practical and professional solutions** to meet conservation and storage needs in hotels, restaurants, catering businesses, shops and commercial/industrial kitchens.

**The Isark range, within the ColdKit range of cold rooms, was developed to combine:**

- Aesthetics and quality
- Ease of transport and assembly
- Economical price and low energy consumption
- Easy maintenance

Isark, with volumes from 2,3 up to 20m<sup>3</sup>, is ideal for small spaces, the perfect substitute for situations in which refrigerators and refrigerated cabinets are no longer enough.

**Due to its practical conception in assembly and operation, it is specially recommended for establishments such as:**

- Small restaurants
- Fast Food Outlets
- Shops
- Individuals

**In addition, within the Isark range the model Isark Plus is supplied fully equipped with:**

- Competitive refrigeration unit
- Aluminium shelving with food-safety certificate
- Interior and exterior skirting
- Coving sections
- Pressure relief valves (in cold rooms at negative temperatures)
- And your choice of additional extras



NEGATIVE OR POSITIVE WITH FLOORING

# Isark



## MINI COLD ROOM



POSITIVE WITHOUT FLOORING

The best finishes guarantee quality and robustness as they are made in a modern plant meeting the most stringent European standards. In the vertical modules and the roof, galvanised steel with epoxy paint suitable for use with food is used.

Isark has 92 standard models, with one single panel thickness, 85mm and two exterior heights, 2m and 2,40m for cold rooms with floor and 2,03 m and 2,43 m for cold rooms without floor. The insulation is 85mm thick polyurethane, with a 40kg density per m<sup>3</sup> and is finished in sheet steel lacquered in white, food-safe.

The standard construction is with flooring for cold rooms for negative or positive temperatures or without flooring for cold rooms at positive temperatures.

In the case of **Isark** for negative temperatures, the floor panels are reinforced and have a resistant phenolic resin finish.

Moreover, **Isark** positive temperature rooms without floors are supplied with a special PVC profile which includes the coving section. This assures easy assembly and a perfect finish, and guarantees the breakdown of the thermal bridge.



## ENVIRONMENT AND SERVICE

Environmental responsibility is no longer simply a business image strategy. Today it is as important as other economic and social sectors, when evaluating profit accounts and the company's position in the market. **ColdKit** contributes to sustainable development and acknowledges that this contribution generates confidence for customers, the market and the company in general.

Therefore **ColdKit** has implemented significant work in the field of R&D, and a notable investment in non-polluting technology, which enables it to comply with the Kyoto protocol.

**Isark** is manufactured with materials that respect the environment (for example, **CFC** and **HCFC's** free polyurethane insulation), in modern factories and with cutting edge machinery that ensures permanent levels of quality.

Our logistics department, fully devoted to the customer, assures reliability and short delivery times, thanks to excellent warehouse and transport monitoring.

These technical data sheets, which provide full information on all of our products, are available to our customers. If you require information, please consult our technical services; they are always on hand.



## CALCULATION PARAMETERS

The thermal conductivity  $\lambda$ , expressed in **W/m.k** or **W/m.°C**, is the amount of energy (in Watts) that passes through a surface of **1m<sup>2</sup>** that is **1m** thick, according to the temperature difference between each of the faces (**K** or **°C**).

With respect to the polyurethane insulation, we must know the first parameter. To do so, a measurement must be made in the laboratory, according to the current standards, on samples extracted from the products of the manufacture in the factory itself.

The heat transfer **K** or **U**, expressed in **W/m<sup>2</sup>.K** or **°C**, is the sum of the thermal resistance of each layer of material that makes up the panel, plus the resistances of interior and exterior surface exchanges.

## TECHNICAL AND PHYSICAL CHARACTERISTICS

This value for the **Isark** panels is:

$$K = 0,258 \text{ W/m}^2 \cdot ^\circ\text{C}$$

The difference between temperature **T1** (interior) and **T2** (exterior) allows us to calculate the loss of heat through the walls (**Q**), expressed in **W/m<sup>2</sup>**.

$$Q = K \cdot \Delta T$$

The normal heat loss values are generally between 10 and 13 **W/m<sup>2</sup>** for a cold room at positive temperatures and between 8 and 10 **W/m<sup>2</sup>** for cold rooms at negative temperatures. In the case of the **Isark** cold room, these values are as follows:

$$\Delta t \text{ usual (Q) temperature loss } 10 \text{ W/m}^2 = 35^\circ\text{C}$$

$$\Delta t \text{ usual (Q) temperature loss } 13 \text{ W/m}^2 = 50^\circ\text{C}$$

The maximum air temperature permitted is **40°** with a relative humidity of **90%**.

## ASSEMBLY

It is assembled from the inside, which, in the case of small premises, enables you to take maximum advantage of the available space and height.

Thanks to the **20cm** wall and roof modules, the assembly time is reduced and the involvement of numerous people in the process is avoided.

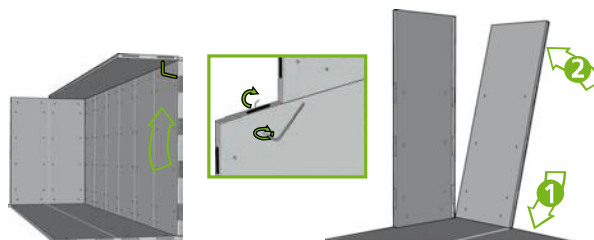




WITHOUT FLOOR

## JOINT SYSTEM

The modules are joined together thanks to the junction of two metal catches with anti-corrosion treatment, fitted in high resistance PVC casing. Assembly is quick and easy, without any need to make cuts.



### options:

2 heights available for each type of cold room:

- 2 and 2,40 metres with floor
- 2,03 and 2,43 metres without floor

## SIZES AND VOLUMES

Depending on the height selected, the cold room may have the following sizes and volumes:

### WITH FLOOR

DEPTH (mm)		HEIGHT (2m)										
m <sup>3</sup>	970	1370	1570	1770	1970	2170	2370	2570	2770	2970	3170	3370
1770	2,35	3,52	4,10	4,69	5,27	5,86	6,95	7,03	7,62	8,20	8,79	9,37
2170	2,93	4,40	5,13	5,86	6,59	7,32	8,06	8,79	9,52	10,25	10,98	11,72
2570	-	5,28	6,15	7,03	7,91	8,79	9,67	10,55	11,42	12,30	13,18	14,06
2970	-	6,15	7,18	8,20	9,23	10,25	11,28	12,30	13,33	14,35	15,38	16,40

DEPTH (mm)		HEIGHT (2,40m)										
m <sup>3</sup>	970	1370	1570	1770	1970	2170	2370	2570	2770	2970	3170	3370
1770	2,86	4,29	5,00	5,71	6,43	7,14	7,85	8,57	9,28	10,00	10,71	11,42
2170	3,57	5,36	6,25	7,14	8,03	8,92	9,82	10,71	11,60	12,49	13,38	14,28
2570	-	6,43	7,50	8,57	9,64	10,71	11,78	12,85	13,92	14,99	12,85	17,13
2970	-	7,50	8,75	10,00	11,24	12,49	13,74	14,99	16,24	17,49	18,73	19,99

### WITHOUT FLOOR

DEPTH (mm)		HEIGHT (2,03m)										
m <sup>3</sup>	970	1370	1570	1770	1970	2170	2370	2570	2770	2970	3170	3370
1770	2,49	3,74	4,37	4,98	5,62	6,23	6,87	7,47	8,12	8,72	9,36	9,96
2170	3,12	4,67	5,46	6,23	7,02	7,78	8,58	9,34	10,14	10,90	11,70	12,45
2570	-	5,61	6,56	7,47	8,43	9,34	10,30	11,21	12,17	13,08	14,04	14,94
2970	-	6,54	7,65	8,72	9,84	10,90	12,02	13,08	14,20	15,25	16,38	17,43

DEPTH (mm)		HEIGHT (2,43m)										
m <sup>3</sup>	970	1370	1570	1770	1970	2170	2370	2570	2770	2970	3170	3370
1770	3,01	4,51	5,27	6,01	6,77	7,51	8,28	9,01	9,78	10,51	11,28	12,01
2170	3,76	5,67	6,58	7,51	8,46	9,38	10,34	11,26	12,22	13,14	14,10	15,01
2570	-	6,76	7,90	9,01	10,16	11,26	12,41	13,51	14,67	15,76	16,92	18,01
2970	-	7,88	9,22	10,51	11,85	13,14	14,48	15,76	17,11	18,36	19,74	21,02

## VERTICAL AND ROOF PANELS



### CHARACTERISTICS

- Manufactured in polyurethane injected at high pressure, free from **CFC** and **HCFCs**.
- The insulation is polyurethane, 85mm thick, smooth finish in galvanised steel plate pre-lacquered with 25 micron polyester lacquer coloured white reference 1006 and 0,5mm thickness with protective polythene film.

### SIZES

ROOF PANELS				
	600	800	1000	1200
1600				
2000				
2400				
3200				

VERTICAL PANELS						
	400	600	800	885	1000	1200
2000						
2400						

# Mini Cold Room



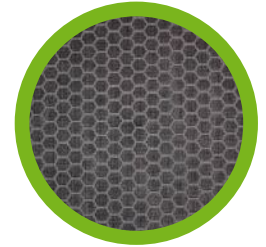
## FLOOR PANELS

**Isark** modular floor panels are made of polyurethane injected at high-pressure and free of **CFC** and **HCFCs**. The **Isark** standard floor panel is recommended for conventional service demands.

The interior covering is **10mm** plywood (**CTBX**) coated with a brown non-slip **phenolic resin**. The material used is Finnish birch. The exterior finish in both cases is smooth in galvanised sheet steel pre-lacquered in **25 micron** polyester in white, **reference 1006**, **0,50mm** thick with a protective polyethylene film.

### DETAILS OF THE FLOOR PANELS

SIZES	800	1200
	1600	
2000		
2400		
3200		



PHENOLIC RESIN (NON-SLIP)

### MECHANICAL AND TECHNICAL CHARACTERISTICS

Uniformly distributed static load	3.000Kg/m <sup>2</sup>
Concentrated static load	400Kg/60cm <sup>2</sup>
Dynamic load on pneumatic 4-wheel truck	500Kg

## DOORS

The panel and door ensemble of the entire **Isark** range is manufactured in the same way as the panels. The outer face is galvanised sheet steel lacquered in **0,5mm** white, **reference 1006**, similar to **RAL 9002**.

Between the two steel plates, a rigid polyurethane foam is injected with a **40 +/-2 Kg/m<sup>3</sup>** density and a **85mm** thickness, free from **CFC** and **HCFCs**.

During manufacture, reinforced plastic casings are fitted for assembly with the vertical and floor panels.

The joints are manufactured in extruded **EPDM**, and it is possible to replace them, should they deteriorate with time and use. The hinges are composite (no risk of corrosion) and the **Fermod 421** closure has a lock with a key and an opening system.

The **Isark** door panels are available in two measurements:



CONNECTION BOX WITH HOOK (CAM LOCK)



EXTERNAL CATCH



INTERNAL CATCH

### MEASURES

Versions	Interior height (mm)	Exterior height (mm)	Free height door access (alt. x anch. mm)
without floor POS	1945 / 2345	2030 / 2430	1900 x 700 / 1900 x 800
with floor POS/NEG	1830 / 2230	2000 / 2400	1830 x 700 / 1900 x 800





## COMPLEMENTS AND ASSEMBLY ACCESSORIES

### ALUMINIUM SHELVING WITH FOOD-SAFETY CERTIFICATE

Isark can be equipped with shelves, manufactured in **15 micron** anodised aluminium, with food-safety certification.

Following the philosophy of **ColdKit** products, these shelves combine a functional and elegant design with quick and easy assembly, and with finishes designed to facilitate cleaning and maintenance.

In addition, its resistant materials guarantee a capacity per shelf of between **100** and **120kg**. The adjustable legs and set of shelves (up to 10), together with the angular assembly ability, help it to adapt perfectly to the space inside the cold room.



### DIMENSIONS mm

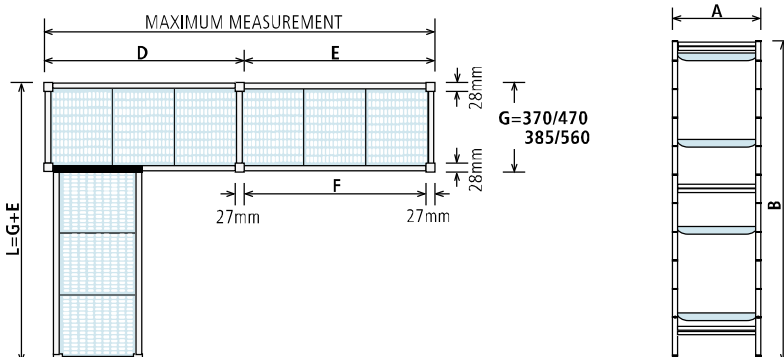
#### 370 LINE / 470 LINE

A	370 / 470
B	1670 / 2000
C	650 / 770 / 890 / 940 / 1060 / 1180 / 1300 / 1480 / 1600
D	644 / 764 / 884 / 939 / 1059 / 1179 / 1299 / 1474 / 1594
E	618 / 738 / 858 / 913 / 1033 / 1153 / 1273 / 1448 / 1568
F	591 / 711 / 831 / 886 / 1006 / 1126 / 1246 / 1421 / 1541

#### 385 GN LINE / 560 GN LINE\*

A	385 / 560
B	1750 / 2000
C	710 / 820 / 930 / 1035 / 1145 / 1255 / 1365 / 1470 / 1580
D	704 / 814 / 924 / 1029 / 1139 / 1249 / 1359 / 1464 / 1574
E	677 / 787 / 897 / 1002 / 1112 / 1222 / 1332 / 1437 / 1547
F	650 / 760 / 870 / 975 / 1085 / 1195 / 1305 / 1410 / 1520

\*Gastronorm Line presents measures specially adapted to 1/1 and 2/3 Gastronorm containers.



### COVING SECTION KIT

The coving section **kits** are composed of 2 parts, the **PVC** channel that is fixed to the wall, and the white **RAL 9002** profile that is rounded in the shape of a quarter circle, and which clips into this channel. For each of the corners of the cold room there is also a finishing part, called the edge corner.



HYGIENIC PROFILE SET



INSTALLATION



INTERIOR CEILING FINISH

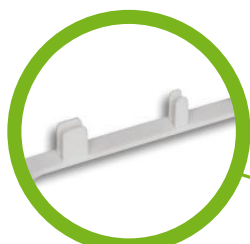
# Mini Cold Room



## SKIRTING

The skirting boards are **PVC** profiles in white **RAL 9002** fixed to the base of the vertical panels to ensure their protection.

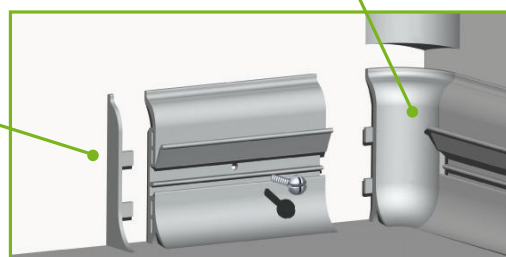
There are also **PVC** parts intended to be fitted to the corners of the cold room and onto the ends of the profiles.



SIDE FINISH



INTERIOR ANGLE

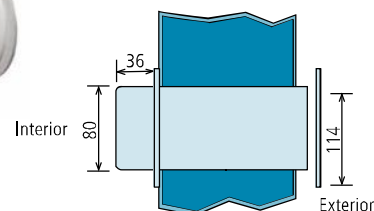


INTERIOR FLOOR FINISH

## PRESSURE BALANCING VALVE

The assembly instructions for the cold room are accompanied by a complete guide for this element. The valve must be used according to the volume of the cold room, as explained in the following table:

TEMPERATURE INSIDE THE COLD ROOM				
Volume (m <sup>3</sup> )	<-20	<-15	<-10	<-5
<20	1	1	1	1
<50	2	2	2	2



## STRIP CURTAINS

They consist of **PVC** strips with hinged polyethylene supports fitted in a **PVC** tube.

The transparent strips are **200mm** wide and **2mm** thick.



SUPORTE



CÂMARA COM CORTINAS DE LÂMINAS





# ColdKit

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## “Protecting what matters most”

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