# Modular Cold Rooms

- ISO Range
- Minibox

**isocab**

By Kingspan

# Contents

**The complete range from Isocab comprises of clean rooms, modular cold rooms, as well as a large range of doors and accessories for every application.**

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# About Isocab

**Isocab has more than 40 years of succes in the insulated sandwich panel industry. The brand is renowned for its quality, innovation, reliability and customer service.**

Founded in 1973, the company has been part of The Kingspan Group since 2012.

Isocab manufactures modular cold stores and freezers for the food and retail industries, including meat, fish, dairy, and vegetable processing plants, restaurants, supermarkets and storage facilities.

Today, with 3 production sites in Belgium and France, and an annual turnover of over €100 million, Isocab is one of the biggest manufacturers of controlled environment systems.

Isocab's comprehensive product range includes clean rooms, modular cold rooms and insulated panel systems, as well as a range of doors and accessories to suit every application.

## Service and guarantee

Since its creation, and to this day, Isocab is dedicated to serving its customers with products that satisfy the highest level of specifications, and which achieve all major international industry certification standards.

Isocab have built its success on precise and timely response to customer needs, thanks to its dedicated and qualified personnel.

Isocab deliver full turn-key service, from the design stage through to after sales care, in its core European markets, as well as in many export destinations around the world.

**CE** Only applicable for the door range

ISO 9001
BUREAU VERITAS
Certification

BUREAU VERITAS
1828

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# ISO Range

## Product decription

**The ISO Range is a modular cold room solution that is created for coldstore facilities, that are adapted for sectors requiring the stockage of perishable goods.**

The ISO Range insulated sandwich panels are composed of two smooth metal sheets, and injected, rigid, polyurethane foam. The insulated sandwich panels resist humidity, mould and bacteria, and are adapted for internal wall or ceiling installations. Once installed following the Isocab specification, the system allows buildings to maintain controlled environments, thanks to strict tolerances, and a precise insulated panel manufacturing process.

All our systems are designed and adapted based on the space available to the customer.

## Technical specifications

| Construction | Insulated PUR foam core panels with modular dimensions |
|---|---|
| **Width of the module** | 300mm |
| **Width of the panel** | 300mm - 600mm - 900mm - 1,200mm (± 1,0mm) |
| **Length of the panel** | From 300mm to 3,900mm (± 1,5mm) except for floor panels which have a maximum length of 3,000mm |
| **Joint junction** | Special locking system, incorporated in the panel during the injection of the foam |
| **Finish** | Coated galvanised steel, white, RAL 9002 and RAL 9010, thickness 0,63mm, protective film as standard. Other options are also available |
| **Floor panel** | Multiplex of 9mm with phenolic, anti-slip layer, reinforced with mineral wool as standard. Other options are also available |
| **Corner profiles** | PVC profiles, PUR insulation with protective, removeable, film (curved corner profiles in PVC or aluminium optional) |
| **Insulation** | Rigid PUR foam core, CFC free, density 40kg/m$^3$ (± 3kg/m$^3$) |
| **Lambda value** | 0,0223 W/mK - EN 12667 - after 9 weeks |
| **Reaction to fire** | Panels and doors B-s3, d0 according to NF EN 13501-1<br>Floors Cfl-s1 according to NF EN 13501-1 |

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Brushed finish
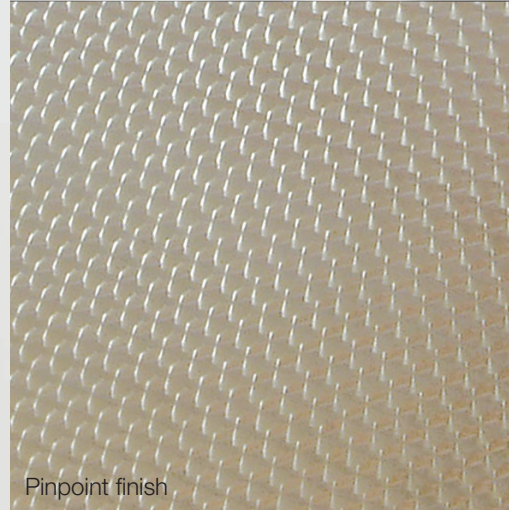


Pinpoint finish

## Panel range

**The ISO Range maintains various temperatures, based on the requirement of the application and the type of ISO panel used (see detail in table below).**

| Type of panel | Thickness of the panel | Weight | U value-thermal transmission | Range of temperatures |
|---|---|---|---|---|
| ISO 60 | 60mm | 12,5kg/m² | 0,372 W/m²K | Positive temperatures |
| ISO 80 | 80mm | 13,3kg/m² | 0,279 W/m²K | Ambient temperatures at -20 °C |
| ISO 100 | 100mm | 14,1kg/m² | 0,223 W/m²K | Ambient temperatures at -25 °C |
| ISO 140 | 140mm | 15,7kg/m² | 0,159 W/m²K | Negative temperatures up to -35 °C |

## Internal wall and ceiling panels

The internal wall and ceiling panels in the ISO Range use a coated galvanised steel sheet with a CLEAN*safe* 25 finish (polyester 25µm), with a removeable protective film, as standard.

Based on the project needs, a wide range of coatings and finishes are available:

• steel sheet with CLEAN*safe* 55 white RAL 9002 or RAL 9010 coating

• steel sheet ALU-ZINC (185g/m²)

• inox sheet with CLEAN*safe* Inox 304 / CLEAN*safe* Inox 316L coating, choice of brushed or pinpoint finish

For more information, please read our Coating Selector & Maintenace Guide brochure.

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# ISO Range

## Advantages of the ISO range

- **Flexible modular cold room solution which is easy to take apart**
- **Quick installation**
- **Easy to clean- no silicone joint application needed on site**
- **Practical and efficient temperature control for temperature controlled environments**
- **Large choice of models and accessories**
- **The take-off for projects is available on request by Isocab**
- **Installation possible from the outside or inside (on request)**
- **A double tongue and groove jointing method ensuring a secure airtight and watertight joint**
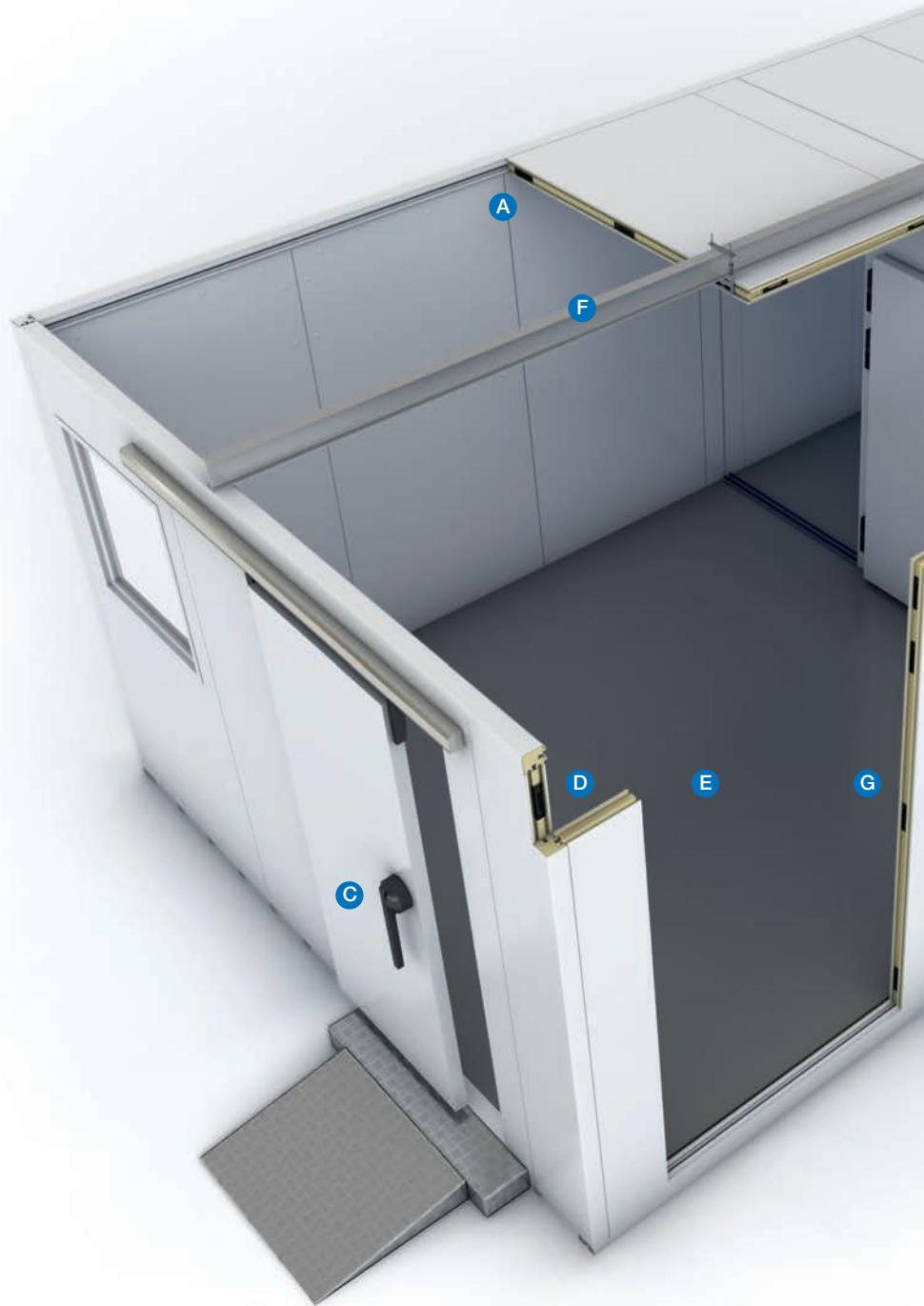
## Contruction information

**A**
Insulated pillars with junction between internal wall and ceiling

**B**
High quality locking system in PVC, incorporated in the panel during the injection of the foam

**C**
Sliding door for positive and negative temperatures with a robust door lever

**D**
Insulated corner pillar in PVC with removable protective film for junction between internal walls

**E**
Brown floor with phenolic, anti-slip layer, reinforced with mineral wool as standard.

**F**
Ceiling suspension with beam

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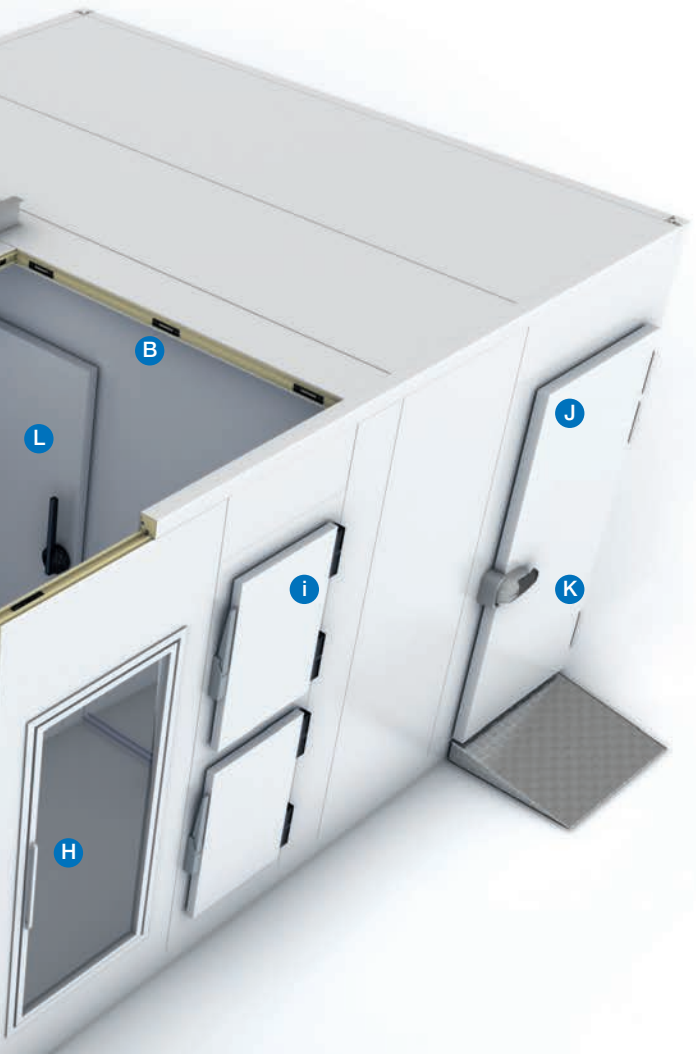
## Product applications

The ISO Range is the perfect solution for constructions requiring positive or negative temperatures, and freezers. They are ideal for supermarkets, the retail and restoration sector, hotels, and pharmaceutical and industrial constructions.

| Application | Recommended panel system |
|---|---|
| Cold rooms for the preparation and transformation of food | ISO 60/80/100/140 |
| Storage facilities for medication and laboratory testing | ISO 60/80/100/140 |
| Cold store facility for stocking dairy produce, cooked foods and ready-made meals | ISO 80/100 |
| Freezer rooms | ISO 100/140 |
| Freezer rooms for stocking of frozen goods | ISO 140 |

**G**
Panels installed thanks to the unique locking system

**H**
Door with window

**I**
Door with hatches

**J**
Door leaf in polyester 25μm or inox (optional)

**K**
Hinged door for cold rooms with a robust door handle

**L**
Turning lever

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# ISO Range

## Installation

**The ISO Range is quick and easy to assemble and install. All the packs are marked with descriptions of the product, are individually packed and contain complete installation information.**

The surface on which the floor panels will be installed should be level and smooth. The panels are assembled with the aid of the unique locking system installed during the injection of the foam. The panels can be locked in place with the hexagon shaped M10 key.

The doors for the ISO Range are delivered with their own doorframe. The system can be easily taken apart, which allows for a large flexibility in the event of an extension being needed.

Please note that the electrical work, for example ventilation port and heating cables should be installed by qualified personnel.



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# Junctions
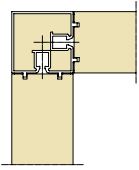
### ISO 60
Internal wall/Internal wall -
Ceiling
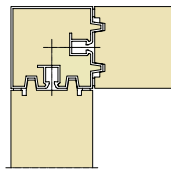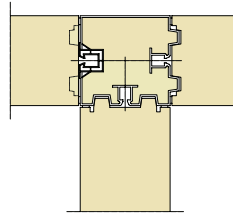
### ISO 80/100/140
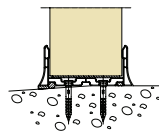Internal wall/Internal wall -
Ceiling

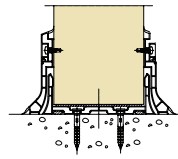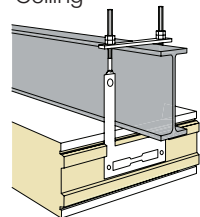### ISO 80/100/140
Internal wall/Internal wall -
Ceiling
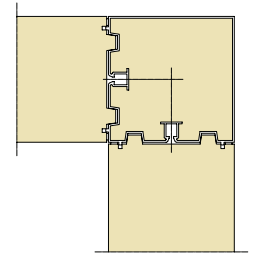
### ISO 80/100/140
Internal wall/Internal wall -
Ceiling
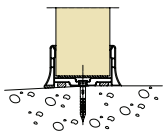
### ISO 60
Without floor

### ISO 80/100
Without floor

### ISO 80/100
Without floor + plinths*
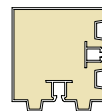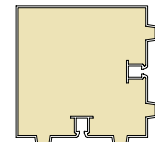
### Ceiling suspension
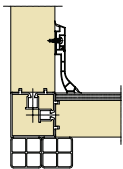
### C0
ISO 60
Angle

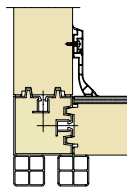### H0/F0/D0
ISO 80/100/140
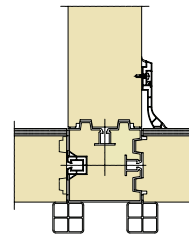Angle

### H1/F1/D1
ISO 80/100/140
Angle
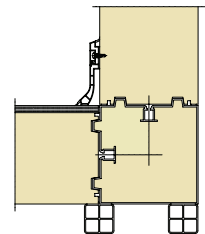
### H2/F2/D2
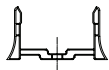ISO 80/100/140
Angle

### ISO 60
Floor + plinths*

### ISO 80/100/140
Floor + plinths*

### ISO 80/100/140
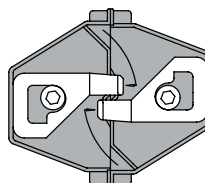Floor + plinths*

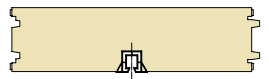### ISO 80/100/140
Floor + plinths*

### UC ISO 60
U-profile for installation

### UH - ISO 80/ UF - ISO 100
Internal wall/Internal wall

### Locking system

### T-Panel 300 mm

### RST4242 Rafter

When floor panels are ordered are ordered
individually, rafters also need to be ordered.

* Plinths are optional

# ISO Range

## Doors

**Isocab proposes a complete range of high range door systems for coldstore facilities. The Isocab doors are manufactured according to the strictest norms.**

The door leafs are in galvanised steel, pre-coated in white RAL 9002 or 9010. An inox finish is available as standard. Other finishes and colours are available as an option.

The ISO range has the following doors:

• Swing door Type D, available with 1 or 2 leafs (see pages 11 & 12)

• Hatch Type M (see page 13)

• Hinged service door Type B available with 1 or 2 leafs (see pages 14 & 15)

• polyethylene swing door Type N with 1 or 2 leafs (see page 16)

• Insulated swing door Type F available with 1 or 2 leafs (see page 17)

• Sliding cold room door Type E or L (see page 18)





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# Hinged cold room door type D

Door handle reference 7504
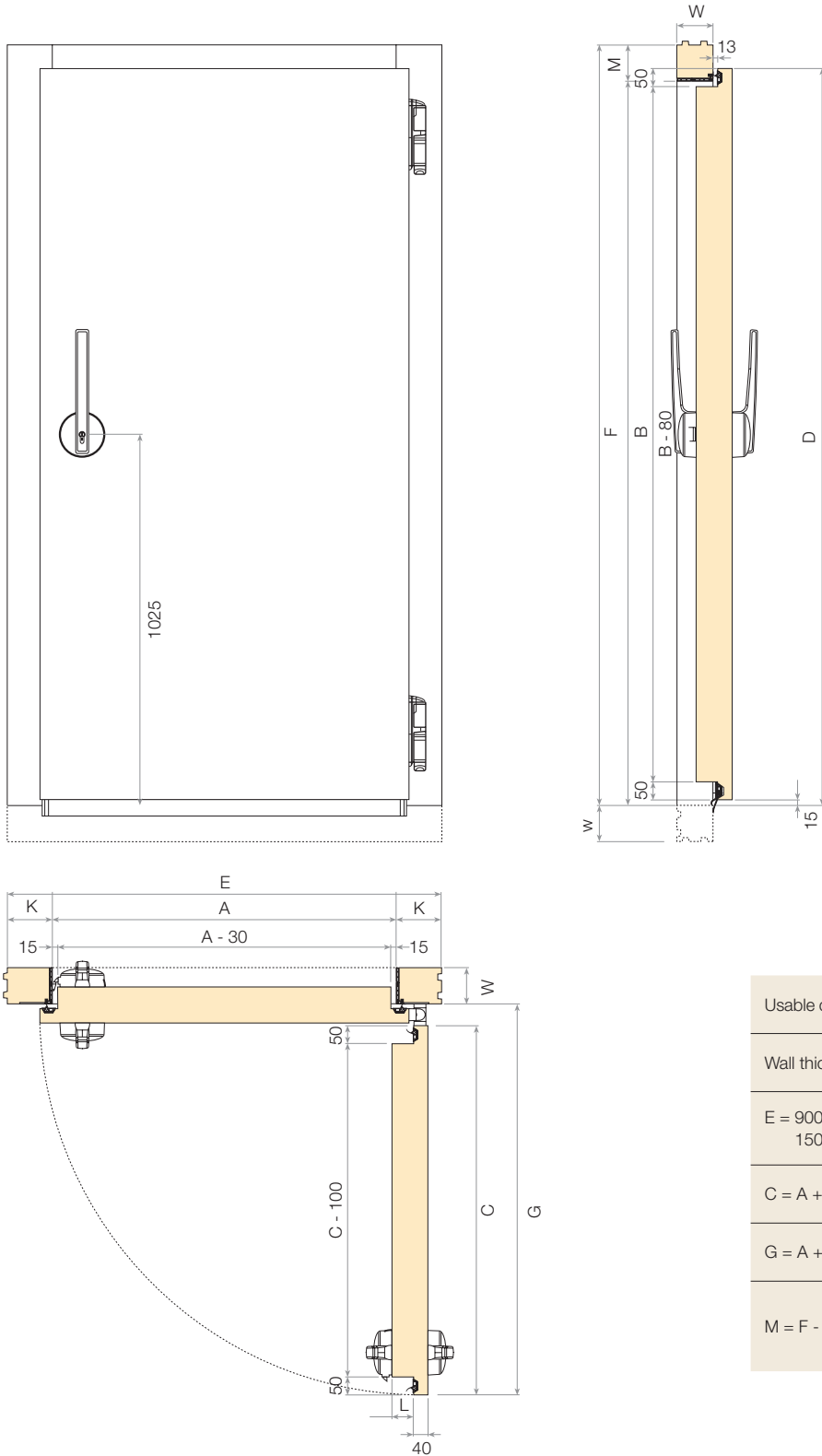


| Usable dimensions | A x B | |
|---|---|---|
| Wall thickness | W = 60-80-100-140 | |
| E = 900-1200-<br>1500-1800 | F = 1800-2100-<br>2400-2700 | |
| C = A + 70 | D = B + 35 | |
| G = A +130 | K = (E-A)/2 | |
| M = F - B | L = 20 (POS T°)<br>= 60 (NÉG T°) | |

All dimensions are in mm.

## Hinged cold room door type D

Door handle reference 521
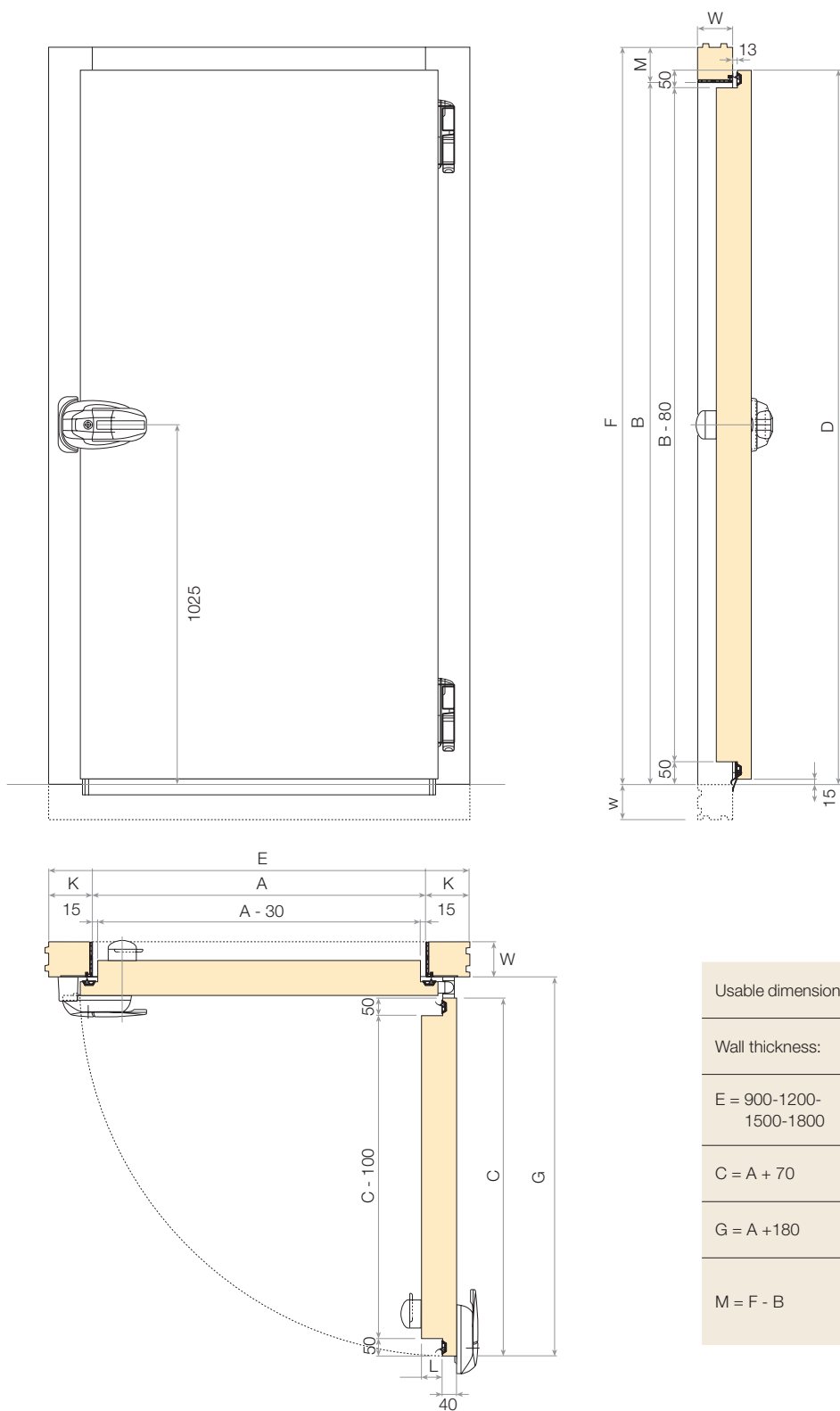
| Usable dimensions | A x B | |
|---|---|---|
| Wall thickness: | W = 60-80-100-140 | |
| E = 900-1200-1500-1800 | F = 1800-2100-2400-2700 | |
| C = A + 70 | D = B + 35 | |
| G = A +180 | K = (E-A)/2 | |
| M = F - B | L = 20 (POS T°) = 60 (NÉG T°) | |

All dimensions are in mm.

# Hinged hatch door type M
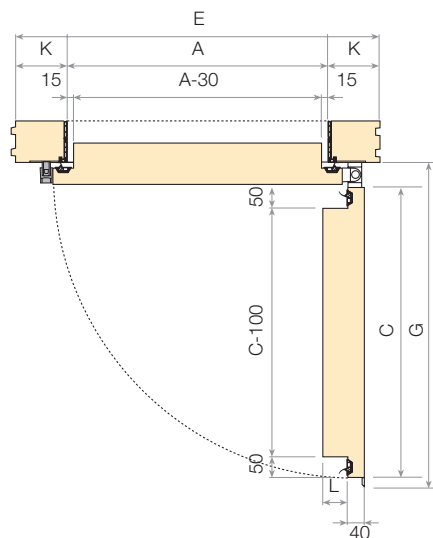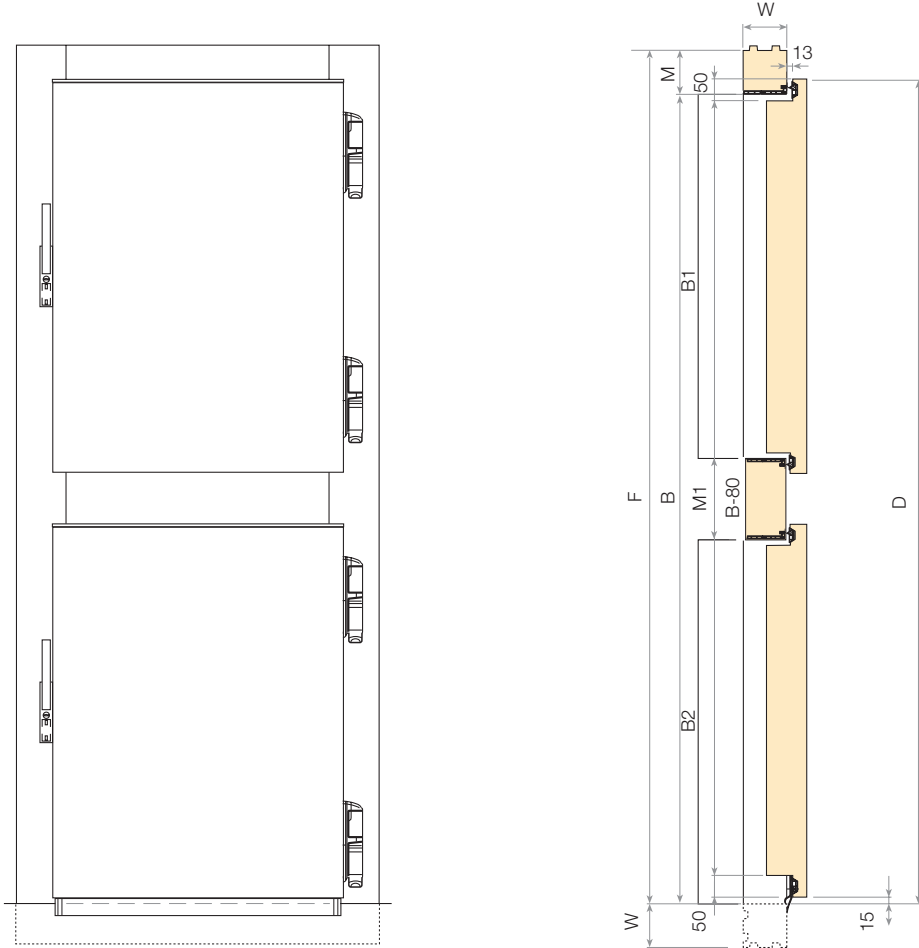


All dimensions are in mm.

| Usable dimensions | A x B1  A x B2 | |
|---|---|---|
| Wall thickness: | W = 60-80-100-140 | |
| B = B1 + M1 + B2 | | |
| E = 900-1200 | F = 1800-2100-2400-2700 | |
| C = A + 70 | D = B + 35 | |
| G = A + 160 | K = (E-A)/2 | |
| M = F - B | L = 20 (POS T°) = 60 (NÉG T°) | |
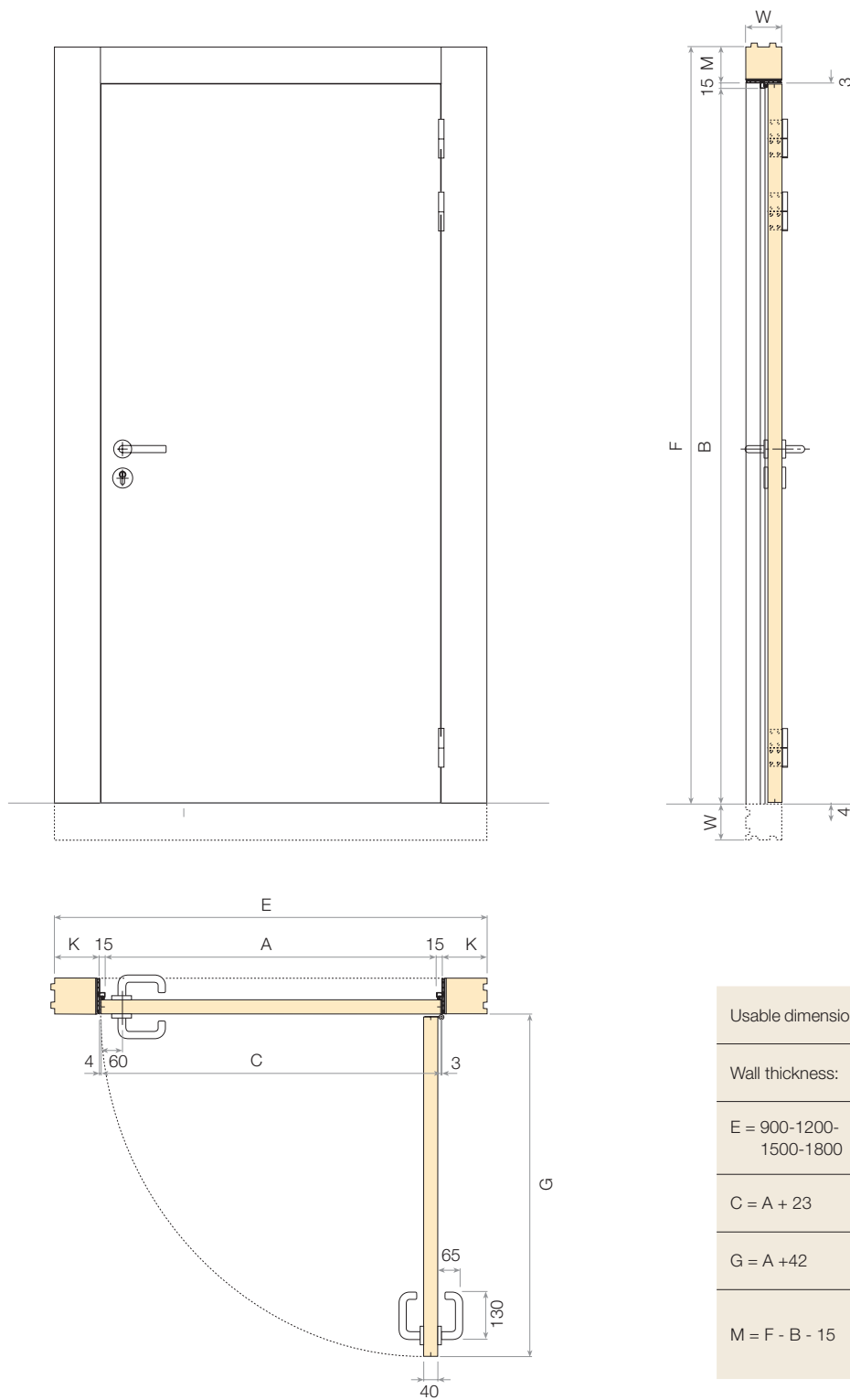
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# Hinged service door type B



| Usable dimensions | A x B | |
|---|---|---|
| Wall thickness: | W = 60-80-100-140 | |
| E = 900-1200-1500-1800 | F = 1800-2100-2400-2700 | |
| C = A + 23 | | |
| G = A +42 | K = (E-A-30)/2 | |
| M = F - B - 15 | L = 20 (POS T°)<br>= 60 (NÉG T°) | |

All dimensions are in mm.

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# Hinged service door type B

Semi-flush window 400 x 700 as option.
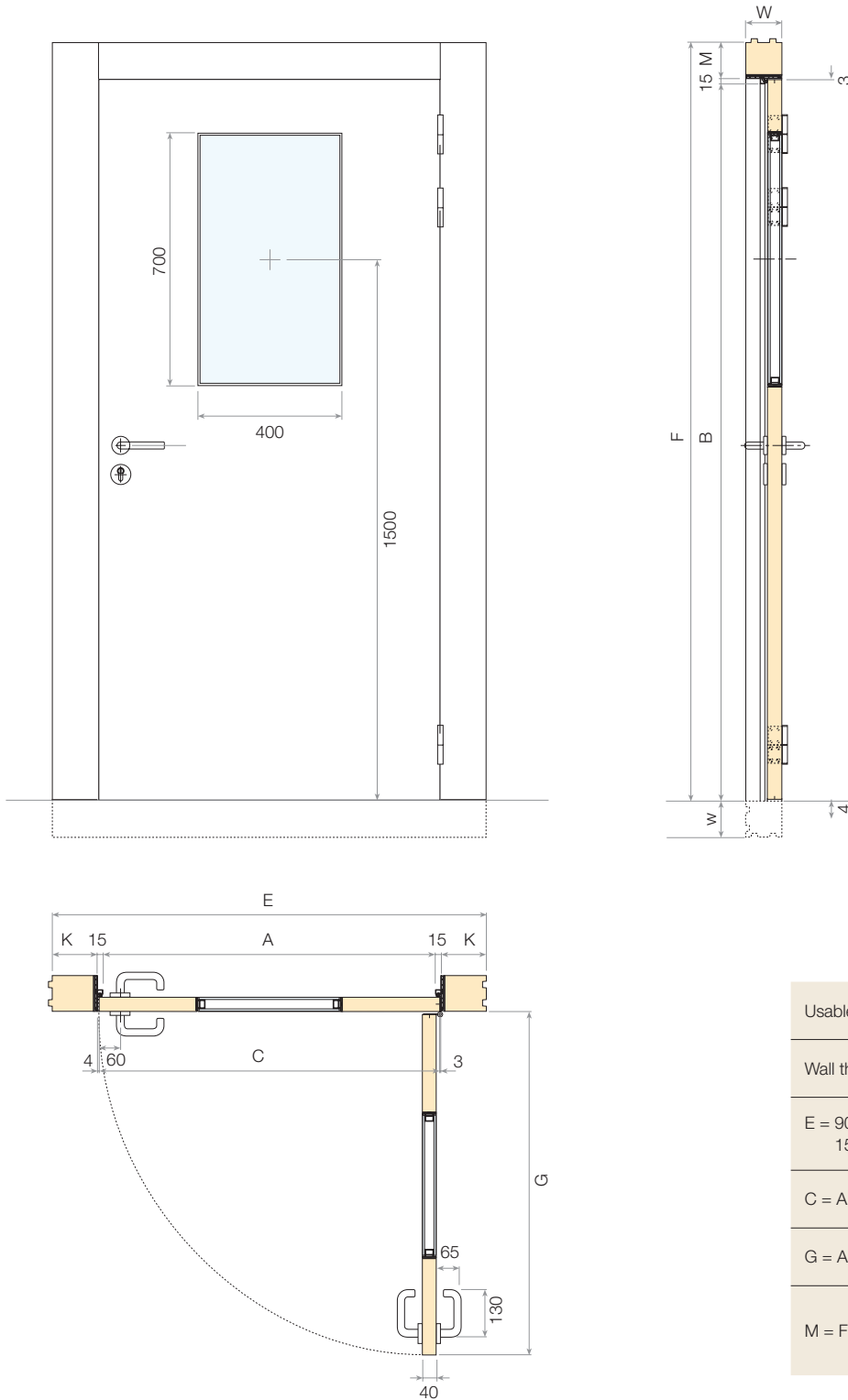


| Usable dimensions | A x B | |
|---|---|---|
| Wall thickness: | W = 60-80-100-140 | |
| E = 900-1200-<br>1500-1800 | F = 1800-2100-<br>2400-2700 | |
| C = A + 23 | | |
| G = A + 42 | K = (E-A-30)/2 | |
| M = F - B - 15 | L = 20 (POS T°)<br>= 60 (NÉG T°) | |

All dimensions are in mm.

# Polyethylene swing door type N
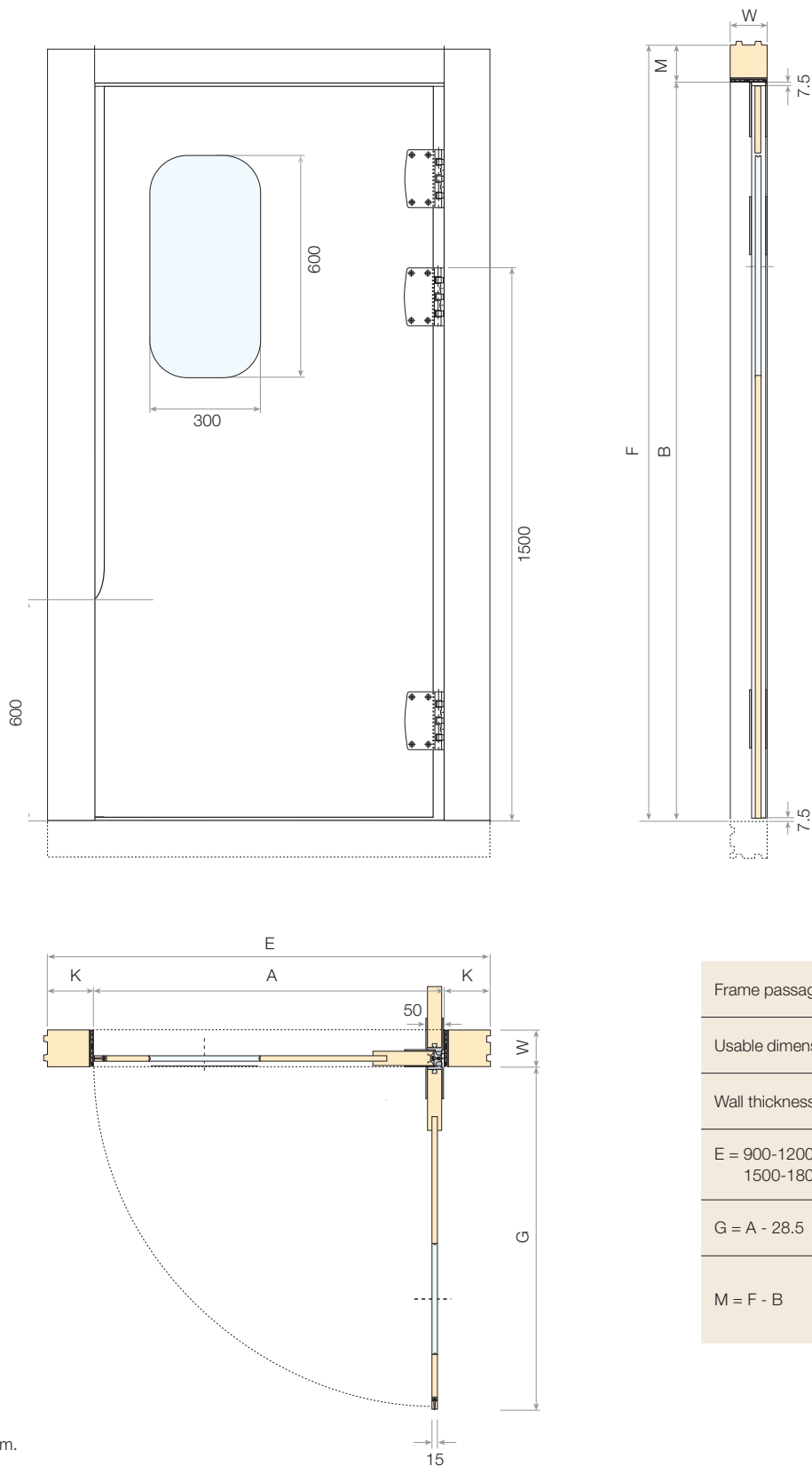
600

300

1500

600

W

M

7.5

F

B

7.5

E

K

A

K

50

W

G

15

| Frame passage: | A x B |
| --- | --- |
| Usable dimensions | (A-50) x B |
| Wall thickness: | W = 60-80-100-140 |

| E = 900-1200-1500-1800 | F = 1800-2100-2400-2700 |
| --- | --- |
| G = A - 28.5 | K = (E-A)/2 |
| M = F - B | |

All dimensions are in mm.

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# Insulated swing door type N
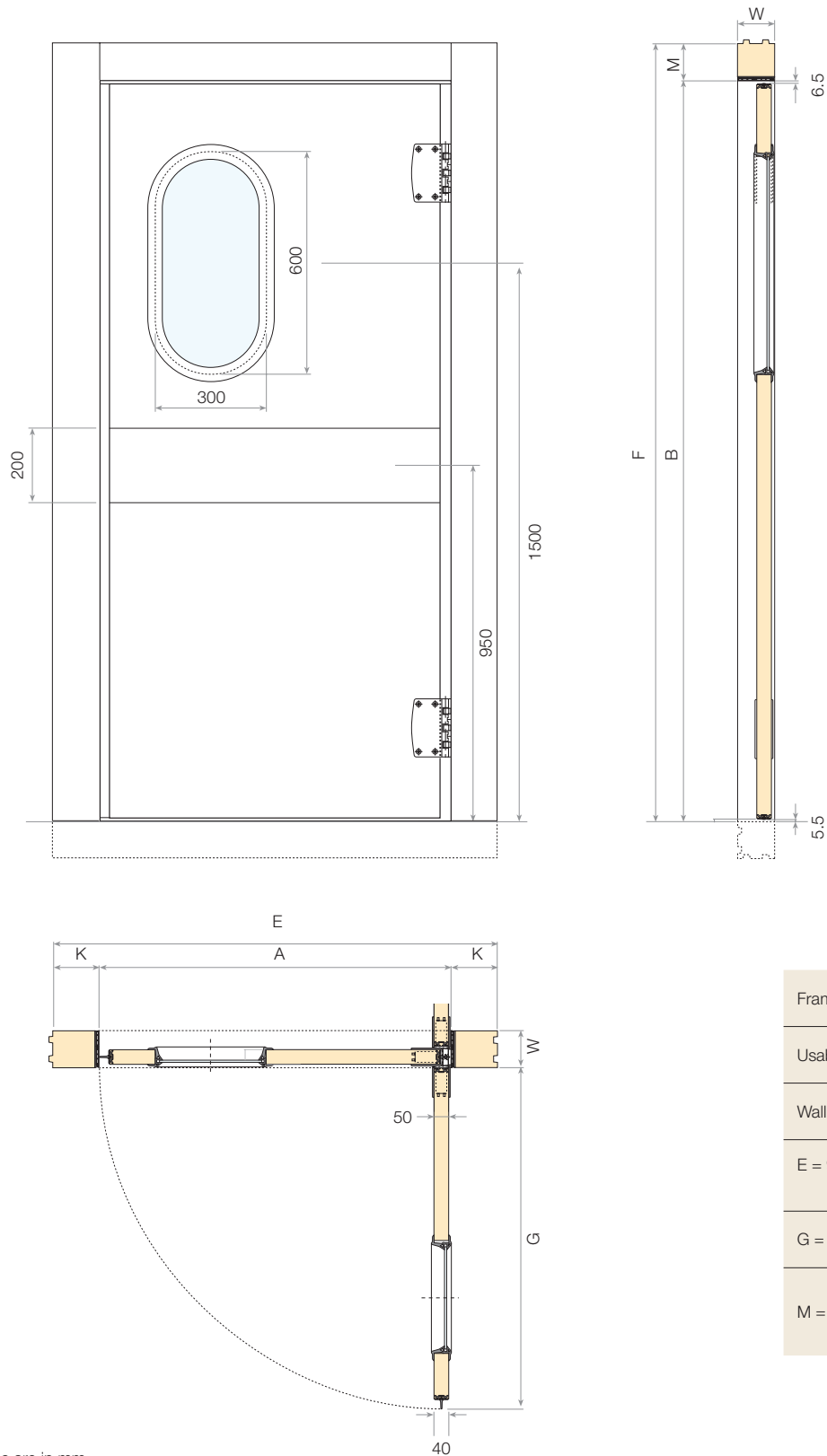


All dimensions are in mm.

| Frame passage:: | A x B | |
|---|---|---|
| Usable dimensions | (A-50) x B | |
| Wall thickness: | W = 60-80-100-140 | |
| E = 900-1200-1500-1800 | F = 1800-2100-2400-2700 | |
| G = A - 28.5 | K = (E-A)/2 | |
| M = F - B | | |

# Sliding coldroom door type N or L
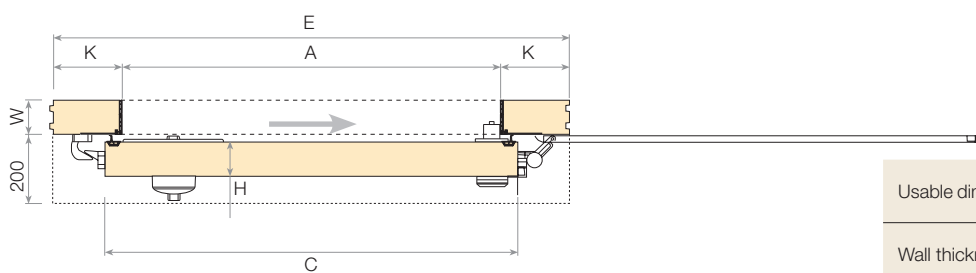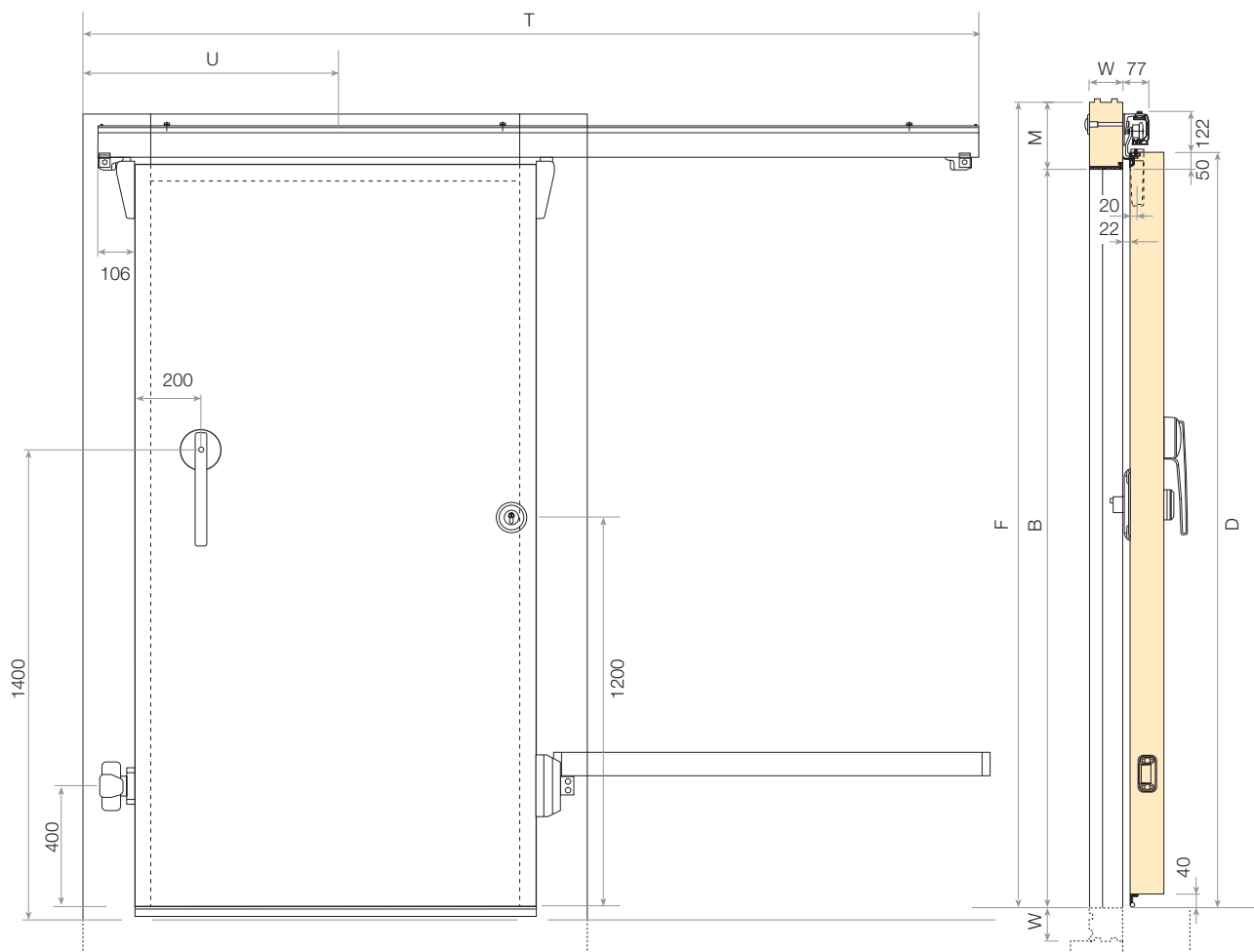


All dimensions are in mm.

| Usable dimensions | A x B | |
|---|---|---|
| Wall thickness: | W = 60-80-100-140 | |
| E = 900-1200-1500-1800 | F = 1800-2100-2400-2700 | |
| D = B + 50 | T = 2A + 424 | |
| C = A + 100 | K = (E-A)/2 | |
| M = F - B | U = A/2 +156 | |
| H = 60 (POS T°) = 100 (NÉG T°) | | |

## Door options

A large range of door options are available. For more information, please contact your sales person.



Door options – double glazed 20mm



Anti-panic bar



Door lock with key, type HRS 7150 for sliding doors



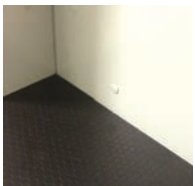Hinges in inox for swing doors

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# ISO Range

## Door coatings

**The floors conform with the strictest norms.**

Thanks to a large range of floor coatings, it is easy to find the correct option for your need.
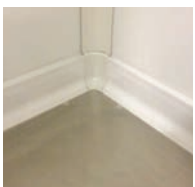
**Standard floor**



**Floor with PVC coating**



**Inox steel sheet 5 WL with anti-slip R13**



| Floor suppport | Floor coating | Maximum weight for 4 rubber wheels |
|---|---|---|
| Factory assembly | Standard wooden multiplex cover with phenolic, anti-slip layer, reinforced with mineral wool 9mm thick | 500kg |
| | Grey PVC coating - steel sheet of 1mm | 250kg |
| | Inox steel sheet (AISI 304) 5 WL with anti-slip R13, 0,80mm thick | 500kg |
| Site assembly | Aluminium profiled sheet (Damier Quintett), 2,5/4mm thick, with insulated panel and multiplex of 9mm thick | 750kg |
| | Aluminium profiled sheet (Damier Quintett), 3,5/4mm thick, with insulated panel and multiplex of 9mm thick | 1000kg |
| | Aluminium profiled sheet, 3mm thick, with insulated panel and multiplex of 9mm thick | 750kg |
| | Steel profiled sheet, 3mm thick, with insulated panel and multiplex of 9mm thick | 1200kg |
| | Steel sheet with metal strip, 5/7mm thick, with insulated panel and multiplex of 9mm thick | 1500kg |

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## Modular shelving systems

**The modular shelving systems with moveable shelves, allows for a practical and efficient storing system for food, and other products in the coldstore facilities.**



### Specifications

- Return angle on the full depth allowing unobstructed access

- Possibility to adjust the shelving precisely thanks to the fibre composite

- Simple and quick installation without tools

- Functioning temperature from -40 °C to +60 °C

- Possibility to adjust the shelves by 150 mm intervals to reach the desired height

- Width of the shelving of 360mm available as standard. Other configurations available on request

- Height of shelving = 1,680mm

- Easy cleaning thanks to moveable shelves (washable in machine up to +100 °C)

- High level of rigidity thanks to assembly with copyrighted conique metal clips

- Completely accessible from both sides as no wall support needed

- Anodised shelving in reversible aluminium (flat tube or semi-circular)

- Maximum weight: 900kg between two suppports (600kg for corner configuration)

- Possible configurations for straight installations in 'L4', 'U', 'T' and in a 'cross'

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# Minibox

## Product description

**The Minibox is a small coldroom solution for small businesses that wish to keep their produce in a refrigerated space. This solution can integrate easily in areas with limited space.**

Thanks to its modular construction and simple installation, the Minibox can be easily integrated for private usage aswell as for smaller scale commercial usage, such as bakeries, supermarkets, pharmacies, restaurant services and restaurants.

Whether you are looking for a temperature controlled solution to conserve your best wines and your food in a cold environment, or whether you wish to have a coldstore facility for your private events, our Minibox is the most appropriate solution. It can also be used for SME's which need to manage their stocks with care, but do not have the neccessary space to integrate a larger installation.

## Technical specification

| | |
|---|---|
| **Construction** | Insulated PUR panels with modular dimensions |
| **Module width** | 300mm |
| **Panel thickness/ Door thickness** | 80mm |
| **Junction** | Unique locking systems installed at the injection of the foam |
| **Dimensions** | Min. 900mm x 900mm; max. 2,400mm x 4,500mm |
| **Height** | 2,100mm or 2,400mm (external) |
| **Usable dimensions** | 700mm wide x 1,940mm or 2,240mm high |
| **Door (opening over total height)** | Swing door with lock on left or right side, central door handle with key, with internal safety release and two hinges. Pressure relief valves and rafter profiles under floorpanel for negative temperatures available on request |
| **Coating, internal walls & ceiling** | Galvanized steel in pre-coated white RAL 9002, RAL 9006 or RAL 9010. Total thickness of 0,63mm |
| **Floor** | **Standard** <br> - Grey PVC coating on galvanized steel of 1mm with a protective film <br> **Optional** <br> - Multiplex 9mm with phenolic, anti-slip layer, reinforced with mineral wool <br> - Multiplex 9mm & RVS 5WL steel inox 0,8mm 304-R13 |
| **Lambda value** | 0,0223 W/mK - EN 12667 - after 9 weeks |
| **Reaction to fire** | Panel and doors B-s3, d0 according to NF EN 13501-1 <br> Floors Cfl-s1 according to NF EN 13501-1 |

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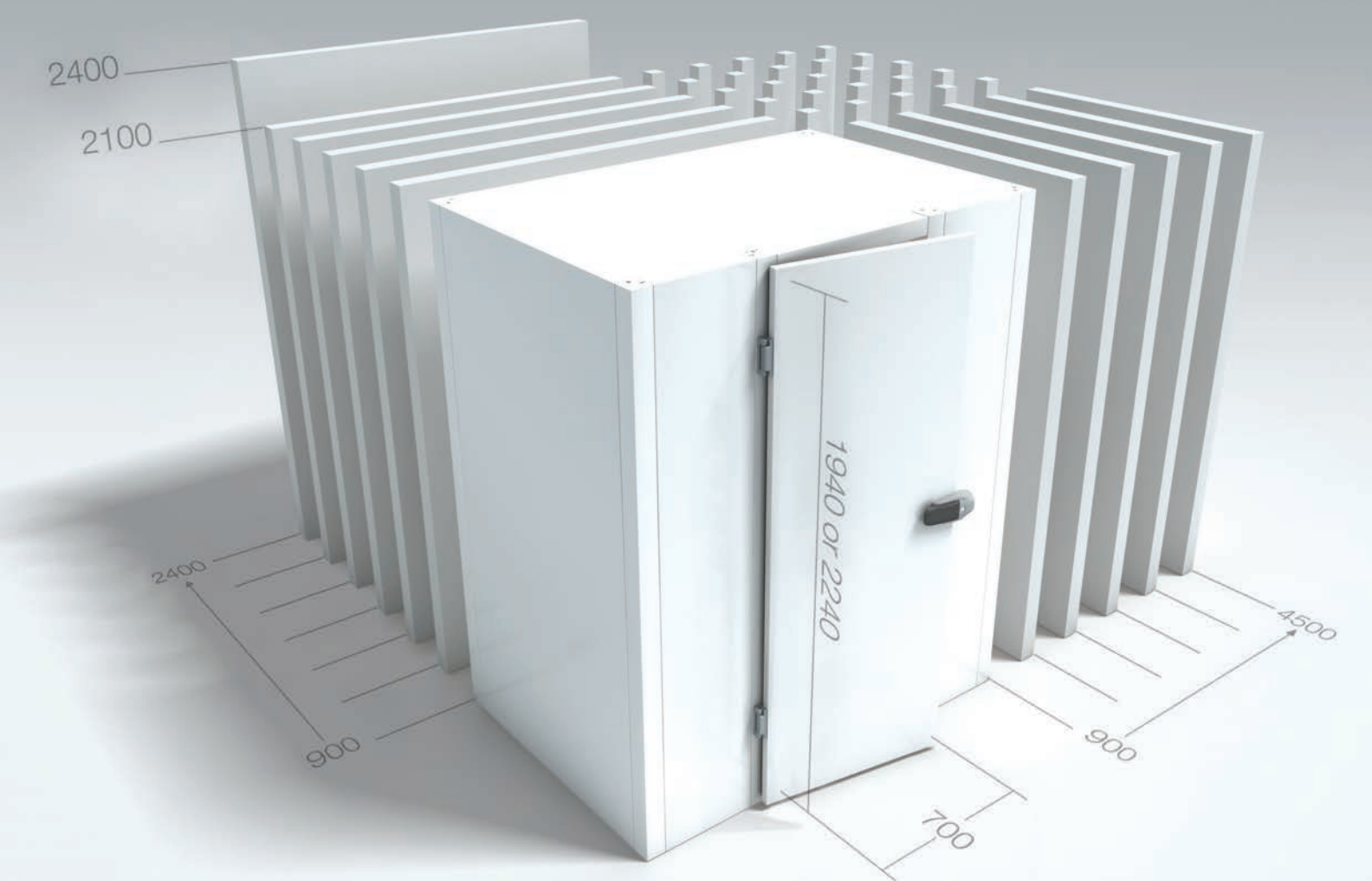
## Installation

**The Minibox is quick and easy to assemble and install. All the packs are marked with descriptions of the product, are individually packed and contain complete installation information.**

The surface on which the floor panels will be installed should be level and smooth. The panels are assembled with the aid of the unique locking system installed during the injection of the foam, which are within the Minibox.

The installation of the door is reversible.

Please note that the electrical work must be carried out by qualified personnel.

## Range of products

Depending on the use of the Minibox, we can offer two types:

- the Minibox MHF can be used for positive temperatures

- the Minibox MHD can go from 0 °C to - 25 °C, with rafter profiles under floor panel (optional) and heating pressure relief valve (optional). It also allows the conservation of products already frozen and the stockage of frozen goods.
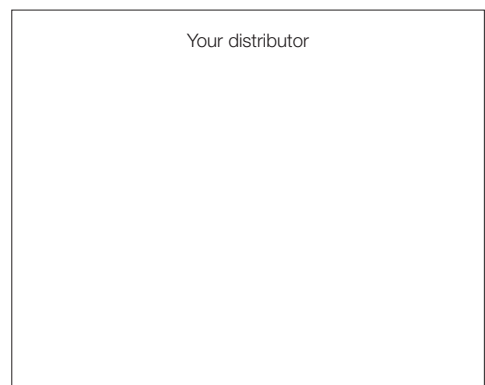
### Minibox advantages

- Practical and ergonomic solution
- Quick and easy installation
- Large choice of models and accessories

The Modular Coldrooms from Isocab are the ideal solution for coldstore and food processing facilities in all sector activities. The ISO Range and Minibox are practical and efficient cold room solutions, for stockage facilities where the objective is to stock perishable goods.

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