



COLD ROOMS & FREEZER ROOMS

MODULAR PANEL SYSTEM WITH CAMLOCK JOINTS

MODULAR COLD ROOM CONSTRUCTION

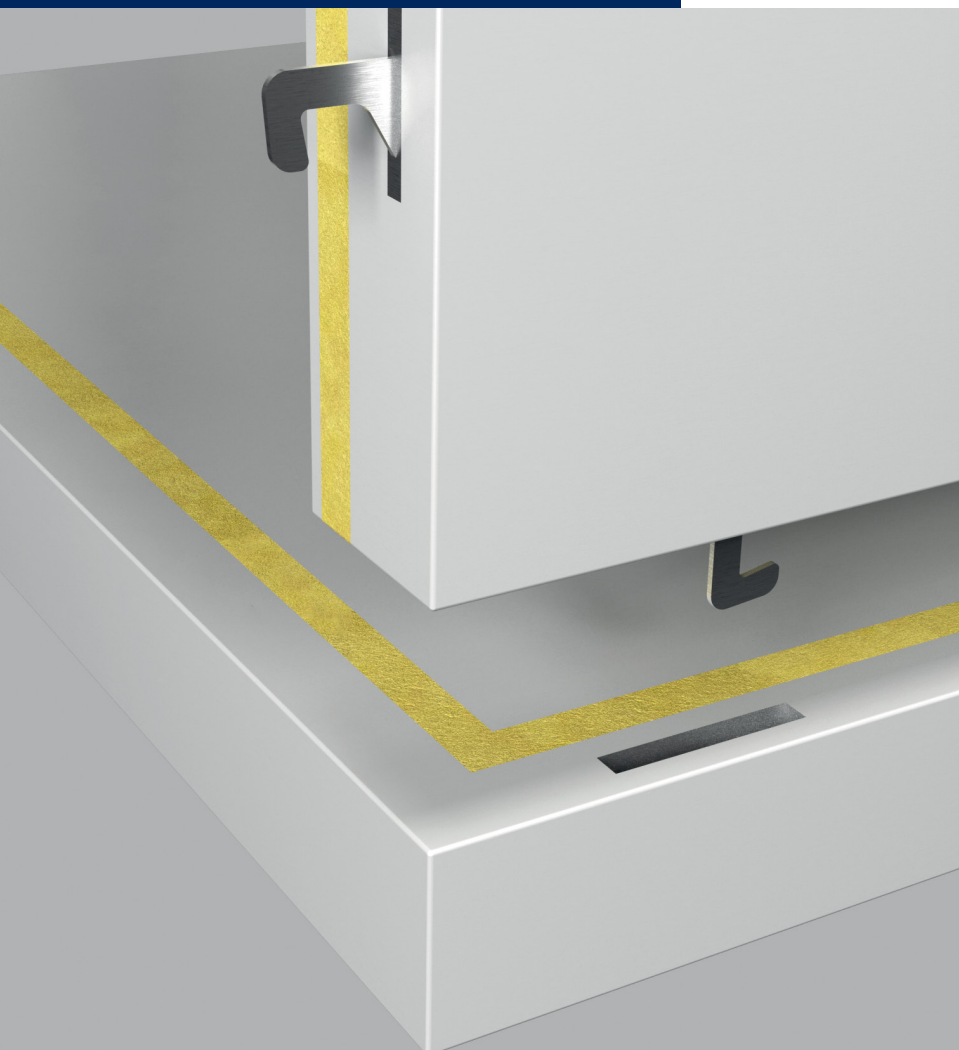


Modular cold rooms offer a quick and flexible way to create a refrigerated space tailored to the available area. **Their construction is based on insulated panels connected with CAMLOCK joints**, enabling efficient installation as well as easy disassembly or expansion when required. The system provides excellent airtightness and stable temperature control, contributing to high energy efficiency.

- ① Modular insulated panels with a polyurethane foam core, 80 or 100 mm thick
- ② Simple CAMLOCK jointing system
- ③ Single- or double-leaf hinged or sliding doors
- ④ Modular insulated floor panels with a polyurethane foam core, 80 or 100 mm thick (optional for cold rooms)
- ⑤ 3 mm stainless steel or aluminium tread plate (optional)

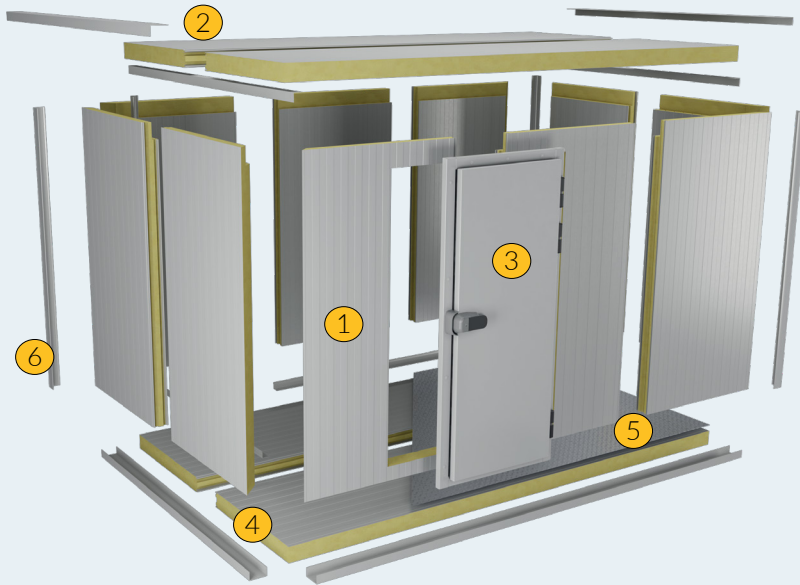
CAMLOCK SYSTEM

The CAMLOCK jointing system provides a quick and convenient way of connecting wall, ceiling and floor panels. Metal cam locks embedded in the polyurethane foam and additionally fixed to the panel facings create a tight and strong connection that allows repeated assembly and disassembly without the need for additional flashings. When two panels are joined, the hook in one panel engages with the corresponding socket in the other. Turning an Allen key pulls the panels together and locks the joint with a characteristic “click”, creating a tight, rigid and vibration-resistant connection between the panels.



PIR SANDWICH PANEL COLD & FREEZER ROOMS

SANDWICH PANEL COLD ROOM CONSTRUCTION

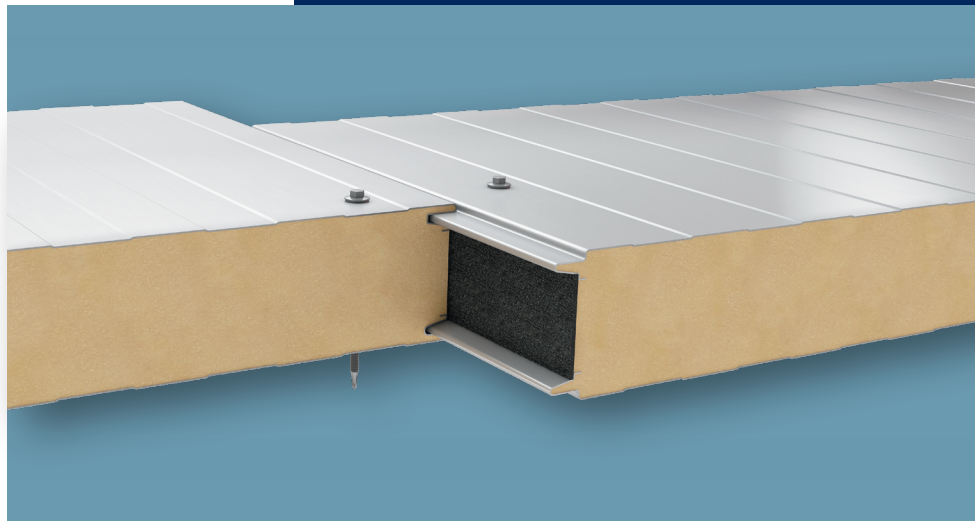


Cold rooms made of **PIR sandwich panels with a core density of 40 kg/m³** are suitable for both small cold rooms and large cold-storage facilities and freezer rooms. In smaller facilities, the panels are usually installed vertically, while in larger ones they can be installed either vertically or horizontally. They provide excellent thermal insulation, airtightness and durability, while the tongue-and-groove joint system enables efficient installation and helps maintain hygienic conditions.

- ① PWPIR-CH or PWPIR-S sandwich panels, 80, 100, 120, 160, 180 or 200 mm thick
- ② Tight tongue-and-groove panel joint
- ③ Single- or double-leaf hinged or sliding doors
- ④ Thermal floor insulation (optional for cold rooms)
- ⑤ Floor made of 3 mm stainless steel or aluminium tread plate (optional)
- ⑥ Flashings

PWPIR-S PANELS

Standard sandwich panels used in cold rooms and other spaces operating at positive temperatures. They provide good thermal insulation and high mechanical strength, making them suitable for storage facilities and food industry facilities. Available in thicknesses from 40 to 120 mm.



PWPIR-CH PANELS

Specialist cold-room sandwich panels designed for facilities operating at temperatures down to -30°C and used in freezer rooms. They provide enhanced vapour tightness and very good thermal insulation, helping to maintain stable temperature conditions in demanding refrigeration applications. The panels are available in thicknesses from 120 to 200 mm and require additional sealing during installation.



ADVANTAGES OF PANELTECH COLD & FREEZER ROOMS

MAXIMUM THERMAL INSULATION

Paneltech cold rooms and freezer rooms provide high thermal insulation performance thanks to panels with a heat transfer coefficient U_c as low as $0.11 \text{ W/m}^2\text{K}$. This solution helps maintain a stable temperature, reduce energy losses and ensure full control over product storage conditions.

thickness	heat transfer coefficient U_c [$\text{W/m}^2\text{K}$]
80	0,27
100	0,22
120	0,18
160	0,14
180	0,12
200	0,11

FLEXIBLE DESIGN

Paneltech cold rooms can be adapted to the building, available space and room layout. They can be used both in new-build projects and for the modernisation of existing cold rooms.

SERVICE SUPPORT WHEN YOU NEED IT

Wide availability of spare parts and accessories ensures efficient servicing and helps reduce the risk of downtime.

PEACE OF MIND DURING EVERY INSPECTION

CAMLOCK cold rooms and doors have a Hygienic Certificate, while cold rooms made of sandwich panels have a Health Quality Certificate. The refrigeration facilities meet applicable inspection requirements and sanitary regulations, helping to reduce the risk of unexpected issues during inspections.

COMPLETE SYSTEM – DOORS INCLUDED

Each Paneltech cold room can be supplied with doors matched to the system, creating a complete and fully compatible solution ready for installation. This saves time and ensures full system compatibility.

LOWER ENERGY COSTS

Excellent thermal insulation and efficient refrigeration systems help reduce energy consumption and, as a result, lower operating costs. It is an investment that pays off in everyday operation.



Do you have a question or need a quotation?
Scan the QR code, complete the short form and we
will get back to you within 24 hours.

APPLICATIONS

FOOD PROCESSING

for storing meat, cold cuts, dairy products, vegetables, fruit, bakery products and ready-made food.

MANUFACTURING AND PROCESSING FACILITIES

as part of production lines requiring refrigerated or freezer zones.

GROCERY STORES AND SUPERMARKETS

for refrigerated back-of-house areas and the storage of fresh and frozen products.

WAREHOUSES AND LOGISTICS CENTRES

for temporary storage of goods at controlled temperatures.

LABORATORIES AND PHARMACEUTICAL FACILITIES

where stable temperature conditions and a high level of environmental cleanliness are required.

HORECA

in restaurants, hotels and catering facilities for storing ingredients and ready-made dishes.

HORTICULTURE AND FLORISTS

for storing plants and cut flowers requiring refrigeration.

BIOTECHNOLOGY AND RESEARCH FACILITIES

for areas requiring a controlled microclimate.



TECHNICAL DATA – MODULAR COLD ROOMS

PANEL TECHNICAL DATA

- **Facing:** 0.75 mm steel sheet coated with polyester paint in RAL 9010, or 0.8 mm stainless steel sheet, type 1.4301;
- **Core material:** polyurethane foam with a minimum density of 40 kg/m³;
- **Jointing system:** CAMLOCK joints ensuring an exact and tight connection between all panel edges;
- **Panel dimensions:**
 - thickness: 80 mm for cold rooms or 100 mm for freezer rooms;
 - maximum length: 3500 mm;
 - maximum width of wall, roof and floor panels: 1150 mm.

STANDARD EXTERNAL DIMENSIONS

- 1310x2100x2200/2300* (h) mm;
- 1310x3250x2200/2300* (h) mm;
- 1310x4400x2200/2300* (h) mm;
- 2460x2100x2200/2300* (h) mm;
- 2460x3250x2200/2300* (h) mm;
- 2460x4400x2200/2300* (h) mm;
- 3500x5550x2200/2300* (h) mm;
- 3500x5550x2500 (h) mm;
- custom dimensions available on request.

* cold room with a floor

ADDITIONAL ACCESSORIES

- Cold room and freezer room doors: hinged or sliding, equipped with FERMOD hardware, made of painted steel sheet or stainless steel sheet, grade 1.4301;
- PVC strip curtains;
- Floor finish: 3 mm aluminium or stainless steel tread plate;
- Windows available as an option.



Scan the QR code to learn more about our cold rooms.

TECHNICAL DATA – COLD ROOMS MADE OF SANDWICH PANELS

STANDARD SPECIFICATION

- the cold room is installed inside an existing building or room with its own roof and walls;
- the walls and ceiling of the cold room are made of PWPIR-S sandwich panels, 80–120 mm thick (cold room), or PWPIR-CH sandwich panels, 120–200 mm thick (freezer room);
- panel facings: 0.5/0.5 mm or 0.5/0.4 mm;
- as standard, the panels are supplied in RAL 9010; availability and the option of other colours from the RAL colour range upon request;
- wall panels installed vertically;
- panels connected using a tongue-and-groove joint system;
- vertical and ceiling corners made in accordance with the Paneltech technical catalogue;
- mechanical processing of sandwich panels and flashings is required during installation, while PWPIR-CH panels require additional sealing in accordance with the Paneltech sandwich panel technical catalogue;
- design and supporting structure – outside Paneltech scope.

ADDITIONAL OPTIONS

- thermal floor insulation made of sandwich panels;
- floor made of a sandwich panel, waterproof plywood and tread plate;
- vertical corner flashings for walls cut at a 45° angle;
- freezer room wall panels with an upper cut-out;
- cold room or freezer room doors without additional substructure: up to 1200 mm wide for walls up to 120 mm thick, and up to 2000 mm wide for walls 160 mm thick or more.

COLD ROOM SIZES

- minimum cold room size: 1130 × 1130 × 2000 mm + ceiling panel thickness;
- maximum cold room length: approx. 30 m; however, it must not exceed the length of the building section between expansion joints.

panel thickness[mm]	maximum cold room dimensions	
	width* [mm]	height [mm]
80	4250	3000
100	5500	4000
120	6000	5000
160	7000	6000
200	8000	7000

* The stated values take into account a permissible ceiling load of 0.90 kN (installation load) and a permissible panel deflection of L/200.

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