



Insulated Camlock Coldstore Panels

Industrial Type / Commercial Type / Clean Room
High-Performance Insulated Panels



GANTEK

GAIN WITH
PERFORMANCE



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About Cantek Group

As food storage and processing specialist for 32 years, in 75+ countries, with more than 15.000+ projects completed successfully, Cantek produces with high technology and quality all the equipments and realizes turnkey cold storage, slaughterhouse / meat processing and plant factory projects worldwide.

With a closed production area of 40.000 m², Cantek offers complete solutions from one hand including project developing, production of all equipments, facility installation, service, warranty, remote controlling and managing systems. In addition, he provides excellent saving in energy consumption.



Cooling Technologies

- Cooling Equipment
- Cold Storage Types
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- Snow Park & Ice Skating



Meat Technologies

- Red Meat Slaughterhouse & Processing Facilities
- Chicken Slaughterhouse & Processing Facilities
- Fish Processing Plant



Turnkey Project

- Slaughterhouse and Meat Processing Facilities
- Cold Storage Facilities
- City Warehouses
- Food Centers
- Mobile Solutions

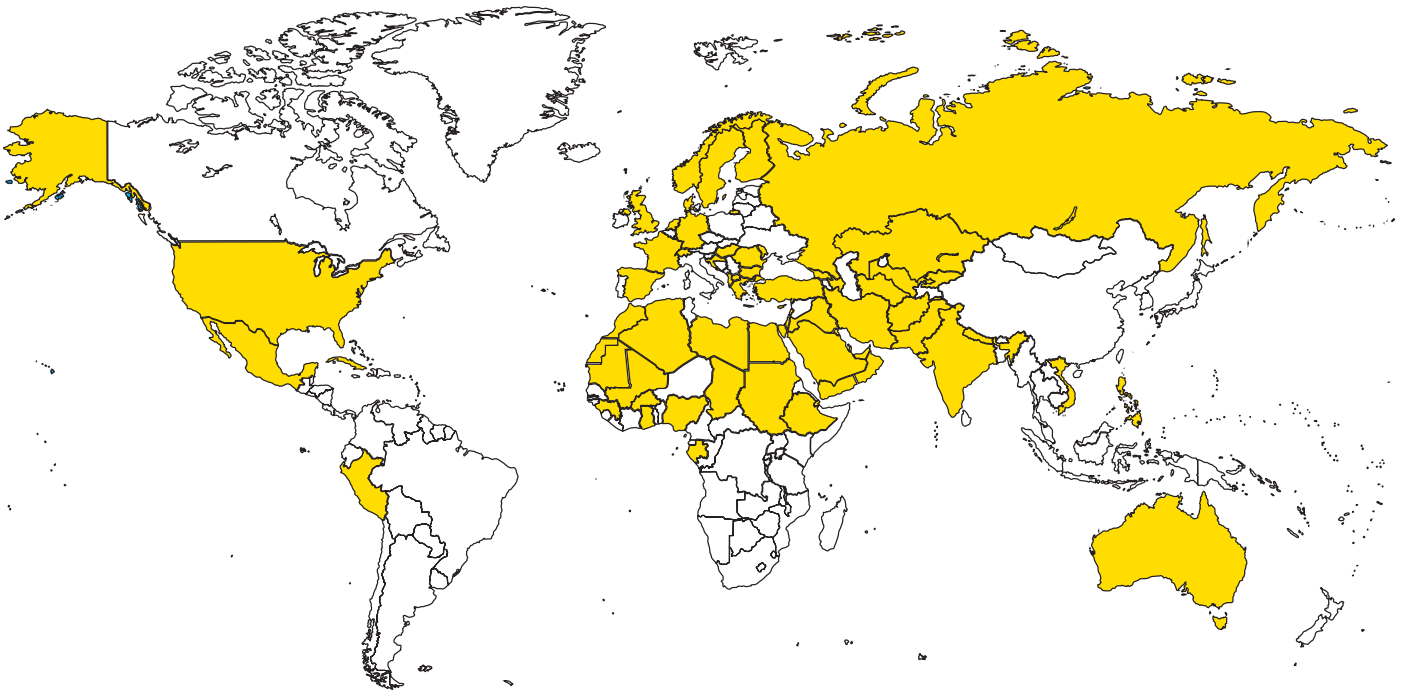


Plant Factory

- We design, manufacture and install facilities where you can harvest continuous, healthy and sustainable products all over the world for 365 days, in fully controlled environment.

"It is our goal to ensure that producers are rewarded for their efforts, and all countries thrive by using their own resources in the best way."

A Turnkey Worldwide



Cantek Group founded in 1991 in Antalya, Turkey by mechanical engineer Can Hakan Karaca, also the Chairman of the Board at Cantek. In just 32 years, Cantek has grown to become an internationally acclaimed brand and a pioneer in the global market of cooling systems, having gained and maintained momentum in its continuous success and growth since the day it was founded. Cantek has become the most reliable and preferred solution partner in turnkey cold storage and meat processing facilities for prestigious public and private corporations 75+ countries, 15.000 + projects with an increasingly rising number everyday. Thanks to its experience in international markets, qualified employees and strong business partners, Cantek has always managed to achieve

stakeholder happiness in all its projects. Thanks to its investments in R&D activities based on the high priority attached on developing new technologies, Cantek is now among Turkey's rising number of companies exporting technology to the world. Cantek developed smart cooling devices that maximise overall cold room performance and efficiency helping to maintain product quality as well as providing significant energy savings. Thanks to these devices, it started a new phase in the global cooling systems market through its software and hardware products, developed and produced entirely within the company's in-house facilities, making Cantek a leading brand in the worldwide market.

Planet Passionate

Our Global Sustainability

Termal Safe

- Our panels are Termal Safe

Energy Efficient

- With precise measurement, production methods and installations the energy leakage form our panels and doors are minimized

Reduce Carbon Emissions

- With providing energy efficiency we help you reduce your carbon footprint, as we reduce your energy waste

Value Chain

- Your products can be stored longer in the best conditions, so you can add value to the supply chain

Efficient Manufacturing

- With tailor-made projects we are able to manufacture according to the needs of our clients



Exclusive Service and Support

From project conception to handover, our dedicated team of cold store specialists with more than 30 years of know-how and experience will offer support to you for all your project needs.



Concept Design Consultation

Our technical services team provides preliminary consultation to highlight and mitigate any design related issues at conception stage. Our early stage consultation services include:

- Panel recommendation meeting project requirements
- Typical detail development
- Review of preliminary steel construction design for suitability with insulated panel construction
- Advice on feasibility, buildability, sequencing of construction



Production and Construction

Once the project moves onto the construction stage, our technical services team provides project support by generating:

- Shop drawings for installation
- Bill of quantity for panels, accessories, consumables, fasteners
- Shop drawing and cut lists for production
- On-site demonstration of product installation (optional)



Technical Support and Design

Our dedicated and bespoke design service throughout the project includes:

- Bespoke detail development
- Wall and ceiling panel load span calculations
- Fastener calculations
- Condensation analysis
- Consultancy on product compliance according to regional building codes
- Bespoke panel and coating specification development



Project Handover

On completion, we will support you as required with all the relevant documentation including data to support your operation and maintenance manuals that will ensure you get the best from your cold store solution.



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Coldstore Panel Systems

Cantek panels are produced with excellent material and workmanship quality. Therefore, they are durable and long-lasting. In addition, thanks to the eccentric locking system, their isolation capabilities are at a high level.

As a result of the perfect insulation, the products in the cold rooms stay as fresh as the first day for long time with minimum energy consumption.

With high-performance cooling equipment, the return on investment time is significantly shortened. Thus, the users generate an important gain.

Insulated Panels



Insulation



Water & Energy

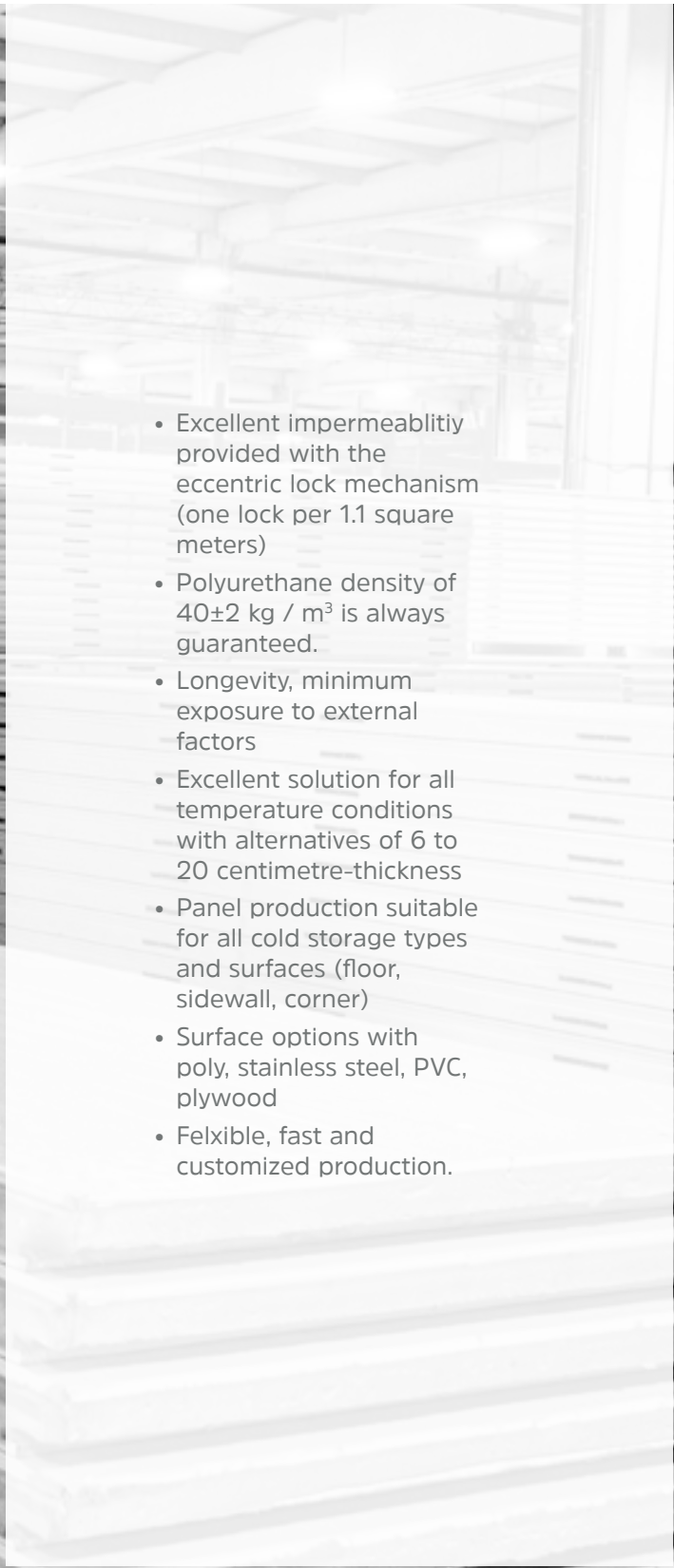


Data & Flooring
Technology



Light + Air





- Excellent impermeability provided with the eccentric lock mechanism (one lock per 1.1 square meters)
- Polyurethane density of $40 \pm 2 \text{ kg / m}^3$ is always guaranteed.
- Longevity, minimum exposure to external factors
- Excellent solution for all temperature conditions with alternatives of 6 to 20 centimetre-thickness
- Panel production suitable for all cold storage types and surfaces (floor, sidewall, corner)
- Surface options with poly, stainless steel, PVC, plywood
- Flexible, fast and customized production.

Cold Storage Panels

Poly Panel with Camlock

Applications

Suitable for internal wall and ceiling applications with a temperature range from -40 °C to ambient.

Available Lengths

Standart Lenghts	2.0 - 7.0 m
Longer Lenghts*	7.0 - 12 m

*Please contact with the manufacturer for other dimensions



PVC Panel with Camlock

Applications

Suitable for internal wall and ceiling applications with a temperature range from -40 °C to ambient.

Available Lengths

Standart Lenghts	2.0 - 7.0 m
Longer Lenghts*	7.0 - 12 m

*Please contact with the manufacturer for other dimensions



Chrome Panel with Camlock

Applications

Suitable for internal wall and ceiling applications with a temperature range from -40 °C to ambient.

Available Lengths

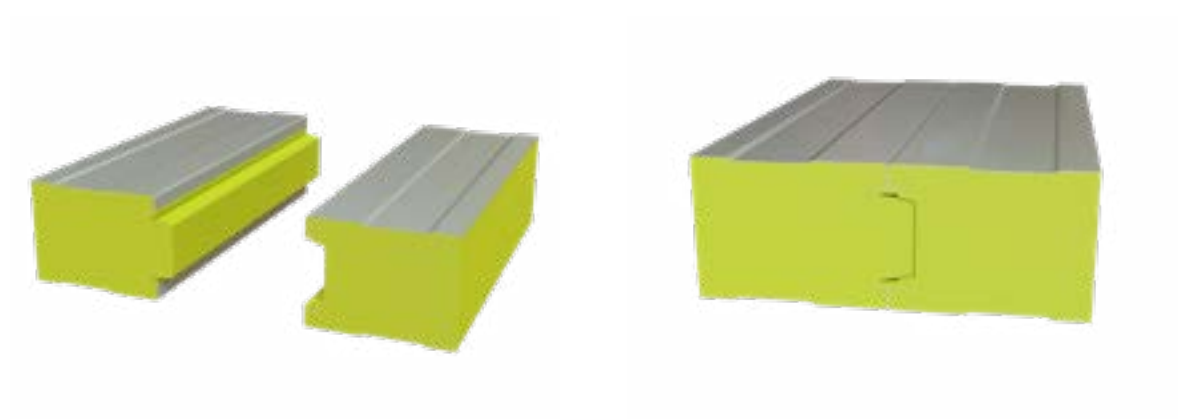
Standart Lenghts	2.0 - 7.0 m
Longer Lenghts*	7.0 - 12 m

*Please contact with the manufacturer for other dimensions



Technical Details

Wall Junction Details



Product Features

Core Type:	PU
Metal Type:	Steel / Stainless Steel
Colors and Coatings:	RAL 9002, Inox Color / PVC, Polyester, AISI 304
Cover Width:	Standard width 1100 mm
Seals:	Seals: Site applied

Tecnical Details

- Excellent impermeability provided with the eccentric lock mechanism (one lock per 1.1 square meters)
- Polyurethane density of $40 \pm 2 \text{ kg / m}^3$ is always guaranteed.
- Longevity, minimum exposure to external factors
- Excellent solution for all temperature conditions with alternatives of 6 to 20 centimetre-thickness
- Panel production suitable for all cold storage types and surfaces (floor, sidewall, corner)
- Surface options with poly, stainless steel, PVC, plywood
- Flexible, fast and customized production

Thermal Performance

Heat Transmission PUR

Optimum panel thickness can be determined according to the values where thermal flow under 10 W / m²

Heat Flow (W / m²)

Panel Thickness (mm)	60	80	100	120	150	180	200
Thermal Energy Transmission (W/m ² .K)	0,38	0,29	0,23	0,19	0,15	0,13	0,12
Temperature Differential (ΔT)							
10 °C	3,833	2,875	2,300	1,917	1,533	1,278	1,150
15 °C	5,750	4,313	3,450	2,875	2,300	1,917	1,725
20 °C	7,667	5,750	4,600	3,833	3,067	2,556	2,300
25 °C	9,583	7,188	5,750	4,792	3,833	3,194	2,875
30 °C	11,500	8,625	6,900	5,750	4,600	3,833	3,450
35 °C	13,417	10,063	8,050	6,708	5,367	4,472	4,025
40 °C	15,333	11,500	9,200	7,667	6,133	5,111	4,600
45 °C	17,250	12,938	10,350	8,625	6,900	5,750	5,175
50 °C	19,167	14,375	11,500	9,583	7,667	6,389	5,750
55 °C	21,083	15,813	12,650	10,542	8,433	7,028	6,325
60 °C	23,000	17,250	13,800	11,500	9,200	7,667	6,900
65 °C	24,917	18,688	14,950	12,458	9,967	8,306	7,475
70 °C	26,833	20,125	16,100	13,417	10,733	8,944	8,050
75 °C	28,750	21,563	17,250	14,375	11,500	9,583	8,625
80 °C	30,667	23,000	18,400	15,333	12,267	10,222	9,200
85 °C	32,583	24,438	19,550	16,292	13,033	10,861	9,775
90 °C	34,500	25,875	20,700	17,250	13,800	11,500	10,350

PUR Specifications

Dimensions and Mechanical Performance of PU Core

Thermal Conductivity (W/m.K)	0.023
Compressive Strength (kPa)	150-200
Closed Cell Ratio (Minimum)	95%
Dimensional Stability (24h @ 80 °C)	1.5 % @ 40-43 g/l
Over Width (mm)	1110
Standard Lengths (m)	up to 12 m

Dimensions, Weight and Thermal Performance of PU Core

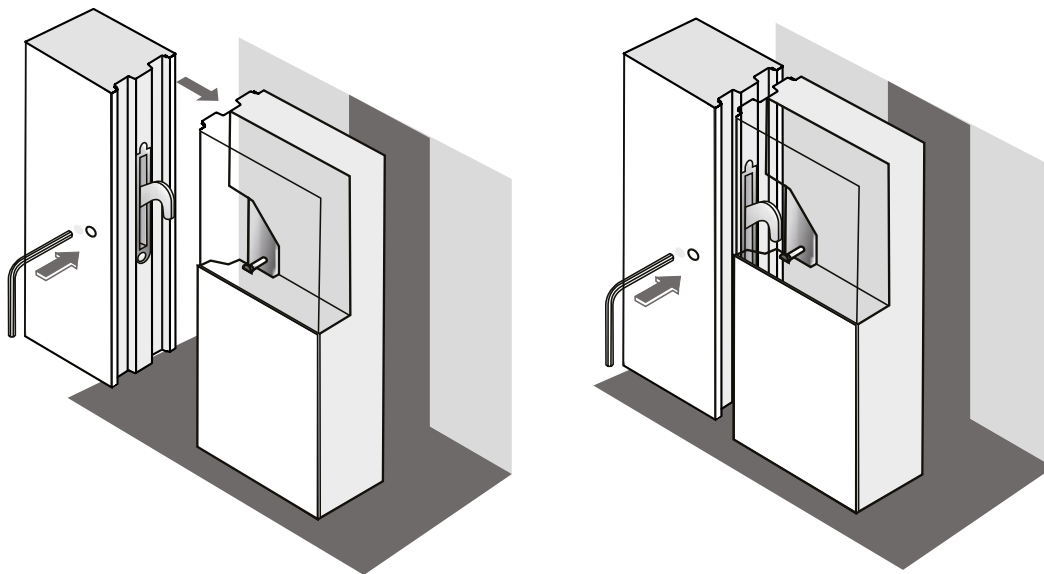
Panel Thickness (mm)	λ Value (W/m.K)	U Value (W/m ² .K)	Approx. Weight (kg/m ²)	External/Internal Sheet Thicknesses (mm)
60	0,023	0,38	10,721	0,5
80	0,023	0,29	11,561	0,5
100	0,023	0,23	12,401	0,5
120	0,023	0,19	13,241	0,5
150	0,023	0,15	14,501	0,5
180	0,023	0,13	15,761	0,5
200	0,023	0,12	16,601	0,5

Cam Lock System



Lock System

Cold Storage Panels are in male and female form and are interlocked with an eccentric lock system, with one lock per 1.1 m².



The plastic raw material used with the surface structure of the Locks (Manni Jigs) used in Cantek Locked Cold Storage Panels is PUR compatible, and the surface adhesion and PUR-Lock adhesion are at the highest level. In this way, it works at maximum performance.

During the production of Cantek Locked Cold Storage Panels, maximum insulation is provided by giving male and female forms to the panels with molds unique to Cantek.

During the production of Cantek Locked Cold Storage Panels, disassembly and assembly is very simple thanks to the eccentric locks used in every 1.1 m².

When compared to unlocked panels, locked cold room panels are combined with eccentric locks to create a more durable structure.

Since the joints are provided with eccentric locks, it provides ease of assembly when the Cold Storage is to be moved to another place.

Cantek Locked Cold Storage Panels are produced in our factory with special molds and overlaps used during side wall-ceiling assembly. In this way, no extra labor is required during assembly, and measurement precision and technical integrity are kept at a high level.



Clean Room Systems

Fireproof PU Filled Panel



Standards
* ISO 9001 * CE * EN 13501



Fireproof panel feature:
B-S1-D0 (EN 13501)



Water Absorption
Resistance



Air Resistance



Dimensions
1.200 x 3.050 mm
other dimensions
optional



Thickness
50 mm



Rockwool Filled Panel



Standards
* ISO 9001 * CE * EN 13501



Fireproof panel feature:
B-S1-D0 (EN 13501)



Water Absorption
Resistance



Air Resistance



Dimensions
1.200 x 3.050 mm
other dimensions
optional



Thickness
50 mm



Aluminium Honeycomb Filled Panel



Standards
* ISO 9001 * CE * EN 13501



Fireproof panel feature:
B-S1-D0 (EN 13501)



Water Absorption
Resistance



Air Resistance



Dimensions
1.200 x 3.050 mm
other dimensions
optional



Thickness
50 mm



A clean room is one or more working environment(s) established for research and production purposes, free from airborne particulate concentration and other particles, where business-specific pollutants are kept under control and humidity controls are provided. In order to ensure the desired level of cleanliness, the ventilation system, the equipment used and the entrances and exits of the users of the environment must be controlled. Additionally, the employees of the clean room use special clothes.

There are different types of clean rooms which need different filtration and air conditioning solutions for their intended use. Appropriate design and project planning is carried out in line with the sphere of activity, cleaning class and usage requirements of the room.



**Pharmaceutical
Industry**



Biotechnology



**Medical
Production**



**Chemical
Industry**



Microelectronics



Aviation

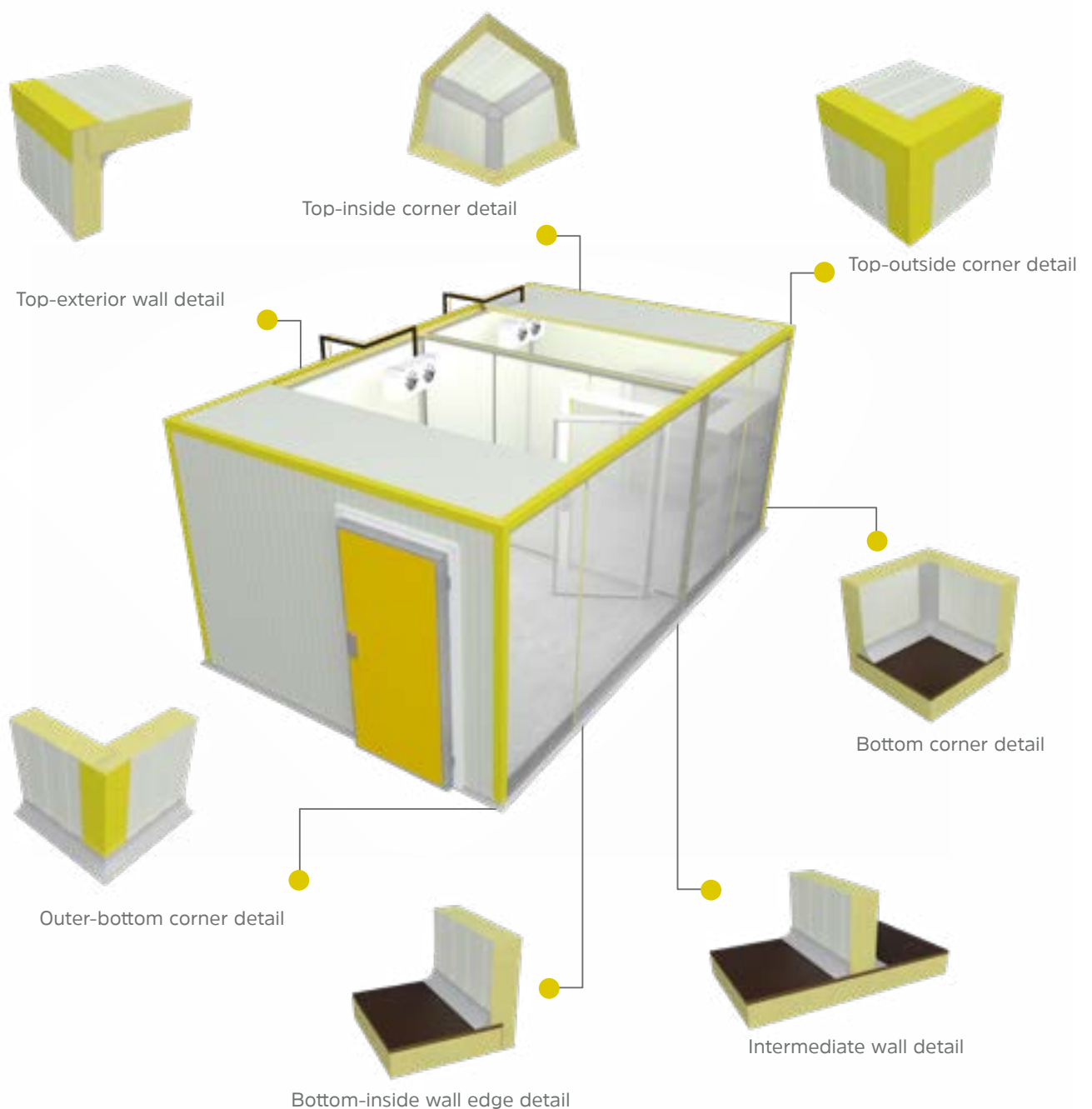


Food Industry



Automotive

Cold Storage Room Details

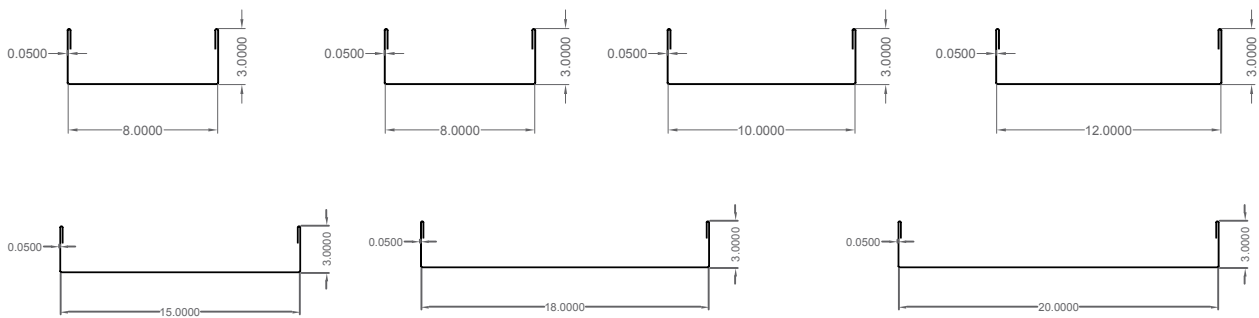


Integrated Accessories

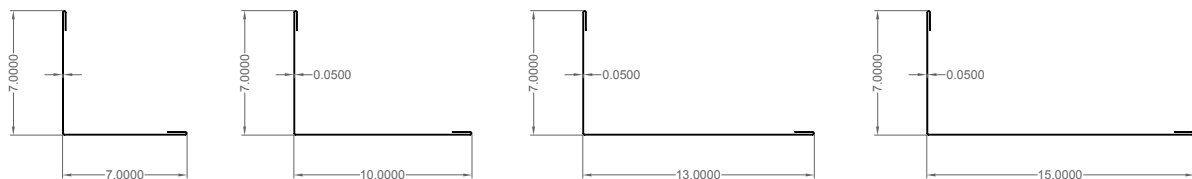
Panel Profiles and Fixings

To compliment our range of insulated panels, we have a selection of ancillaries for a fully-integrated, bespoke temperature controlled solution. Our optional equipment offering includes loading systems, cold storage doors, safety products, pressure valves, as well as floor insulation, which will create added value for your project.

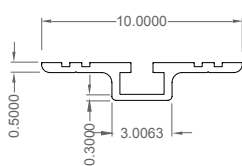
Floor U Profile



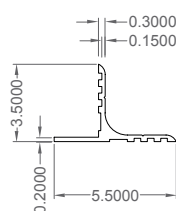
Outer Corner Profile



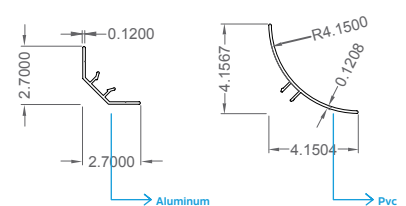
Ceiling Suspension Profile



Ceiling T Profile



Haccp Inner Corner Profilecorner profile



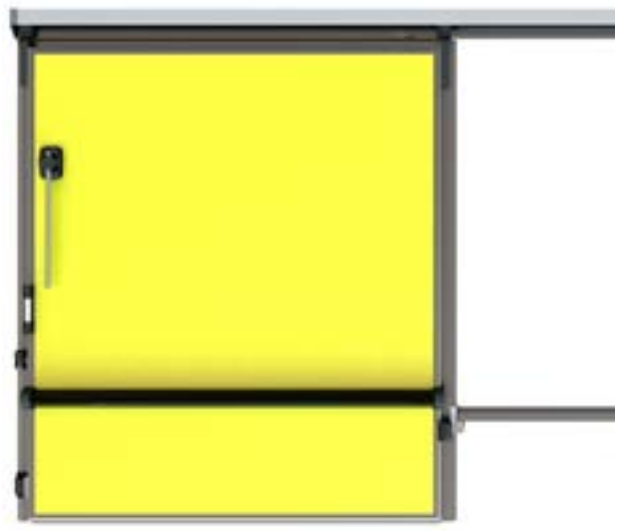
Integrated Accessories

Cold Storage Doors

New Series Sliding Doors



Sliding Door



Thermal Performance and Dimensions

Dimensions:	Single leaf: Min: 1000 X 2000 mm, Max: 2800 X 5000 mm
Thickness:	80 mm, 90mm, 100mm
U-value:	0.29 - 0.23 (W.K/m ²) depending on thickness
Finishes:	PVC, Polyester, AISI 304

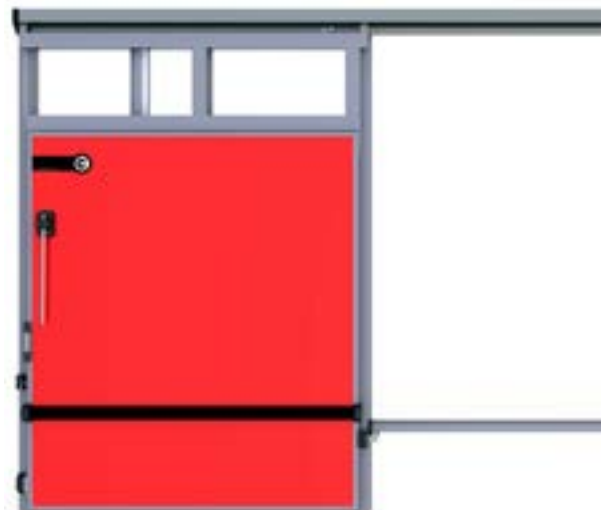
Thermal Performance and Dimensions

Dimensions:	Single leaf: Min: 1000 X 2000 mm, Max: 2800 X 3000 mm
Thickness:	80 mm, 90mm, 100mm
U-value:	0.29 - 0.23 (W.K/m ²) depending on thickness
Finishes:	PVC, Polyester, AISI 304

Auto Sliding Door



Monorail Pass Sliding Door



Thermal Performance and Dimensions

Dimensions:	Single leaf: Min: 1000X2000 mm, Max: 2800X3000 mm
Thickness:	120 mm
U-value:	0.19 (W.K/m ²)
Finishes:	PVC, Polyester, AISI 304

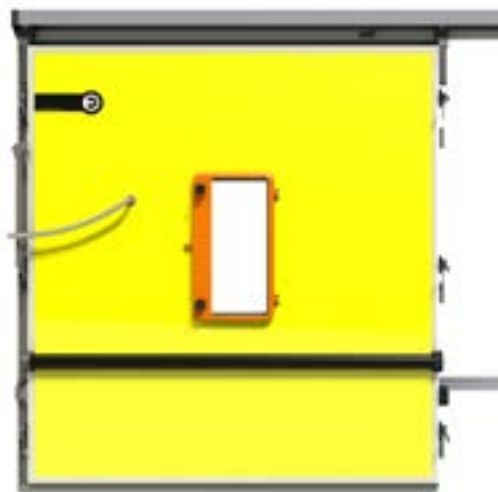
Thermal Performance and Dimensions

Dimensions:	Single leaf: Min: 1000X2000 mm, Max: 2800X3000 mm
Thickness:	80, 90, 100 mm
U-value:	0.29 - 0.23 (W.K/m ²)
Finishes:	PVC, Polyester, AISI 304

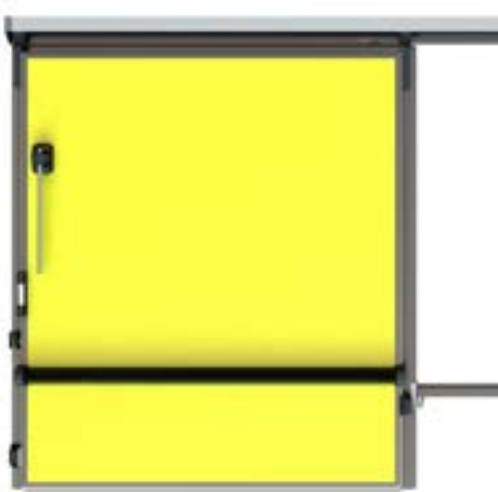
Integrated Accessories

Cold Storage Doors

Atmosphere Controlled Door



Blast Freezer Sliding Door



Thermal Performance and Dimensions

Dimensions:	Single leaf: Min: 1000X2000 mm, Max: 2800X3000 mm
Thickness:	90 mm
U-value:	0.25 (W.K/m²)
Finishes:	PVC, Polyester, AISI 304

Thermal Performance and Dimensions

Dimensions:	Single leaf: Min: 1000X2000 mm, Max: 2800X3000 mm
Thickness:	150 mm
U-value:	0.15 (W.K/m²)
Finishes:	PVC, Polyester, AISI 304

Industiral Storage Type Sliding Door



Hinged Door



Thermal Performance and Dimensions

Dimensions:	Min: 1500X3000 mm, Max: 3500X5000 mm
Thickness:	80 mm
U-value:	0.29 (W.K/m²)
Finishes:	PVC, Polyester, AISI 304

Thermal Performance and Dimensions

Dimensions:	Single leaf: Min: 700X1700 mm, Max: 1150X2200 mm
Thickness:	80 mm, 90 mm, 100 mm
U-value:	0.23-0.29 (W.K/m²)
Finishes:	PVC, Polyester, AISI 304

Integrated Accessories

Cold Storage Doors

Blast Freezer Door



Flush Door



Thermal Performance and Dimensions

Dimensions:	Single leaf: Min: 700X1700 mm, Max: 1150X2200 mm
Thickness:	150 mm
U-value:	0.15 (W.K/m ²)
Finishes:	PVC, Polyester, AISI 304

Thermal Performance and Dimensions

Dimensions:	Single leaf: Min: 800X1800 mm, Max: 1000X2200 mm
Thickness:	80 mm, 100mm, 120m
U-value:	0.29-0.19 (W.K/m ²)
Finishes:	PVC, Polyester, AISI 304

Flip Flap Door



Office Door



Thermal Performance and Dimensions

Dimensions:	Single leaf: Min: 700X1800 mm, Max: 1100X2200 mm Double leaf: Min:1200X1800 mm, Max: 2000X2400 mm
Thickness:	40 mm
U-value:	0.58 (W.K/m²)
Finishes:	PVC, Polyester, AISI 304

Thermal Performance and Dimensions

Dimensions:	Single leaf: Min: 700X2000 mm, Max: 1100X2000 mm Double leaf: Min:1200X2000 mm, Max: 2000X2000 mm
Thickness:	40 mm
U-value:	0.58 (W.K/m²)
Finishes:	PVC, Polyester, AISI 304

Integrated Accessories

Dock Levellers and Shelters

Dock Levellers



Dock levellers are electro-hydraulic moving dock equipment that corrects height differences and eliminates the gap between warehouse facilities and transport vehicles creating a passable section during the loading and unloading of materials and goods.

Depending on configuration, they can be embedded, self-hanging, boxed or constructed with pre-cast structured metal frame. The hydraulic dock levellers are available at load capacities of 6 or 10 tons as standard and can bridge any type of transportation vehicle, from a small truck (W1820 mm) all the way to a flat rack container protecting a span.

Dimensions & Weight

Temperature range:	-20 / +68 °C
Dimensions:	Min. 1800 x 2000 mm, max. 2200 x 4000 mm
Capacity:	6 tons, 10 tons static
Key Features:	CE marking, non-skid platform, self-diagnostic motor, 'dead man' lift, compatible with new-generation fork lifts, safety barrier available supplied with prefabricated frame and protection bumpers, hinged lip or telescopic lip options available

Dock Shelters



Dock shelters provide safe loading and unloading conditions in all weather conditions. Heat loss during loading is minimized and sealing between loading track and shelter provides appropriate conditions mainly isolating dust and rain.

Dimensions can vary depending on the size of loading trucks, dock station door size and placement of the door in reference to ground level. These shelters seal the dock doors to providing thermal insulation to inside while protecting the building from outside.

Thermal Performance and Dimensions

Temperature range:	30 / +80
Shelter Dimensions:	According to door
Key Features:	Dual steel frame from Galvanized steel, Foldable PVC Cover, Flaps made from 2 ply Polyster with PVC top cover on both sides

Pressure Valves

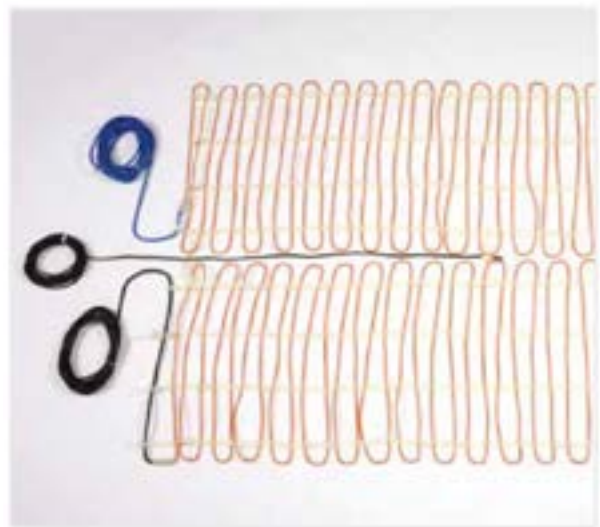


Well sealed cold stores may suffer structural damage due to pressure caused by changes in internal and external temperatures if not adequately vented to atmosphere.

Cantek offers a wide selection of pressure valves to keep the internal and external pressures of cold stores in balance.

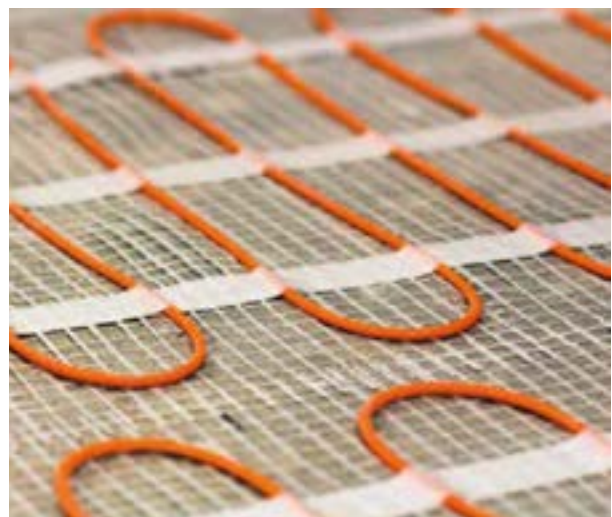


Heating Mats



Cold air released from the internal environment of cold stores may freeze the moisture contained within the soil underneath their foundation. This may result in expansion of the ground soil causing damage to the foundation and floor of the cold stores.

Kingspan offers heating mats for cold stores as a preventative measure against frost damage and dampness.



Integrated Accessories

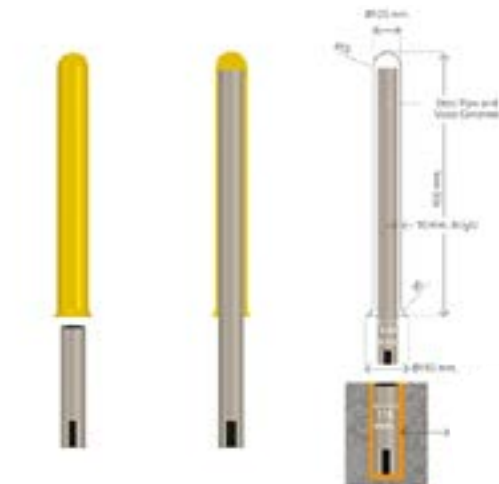
Safety

Hygienic Acrylic Safety Post (Bollard)



Safety Post (Bollard) ensures protection against impact and crashes where needed, including doors, walls, and columns. Due to its tube form and radial shape at the bottom, it reduces bacterial growth, easy-to-clean. These products allow for applications with double steel pipe and screwed system and it is easy-to-fixed with "M24" Resin Based Fixing Mortar.

Due to its flexible acrylic surface, it can absorb light impacts, reduce medium impact forces and prevents damage to your valuable equipment.

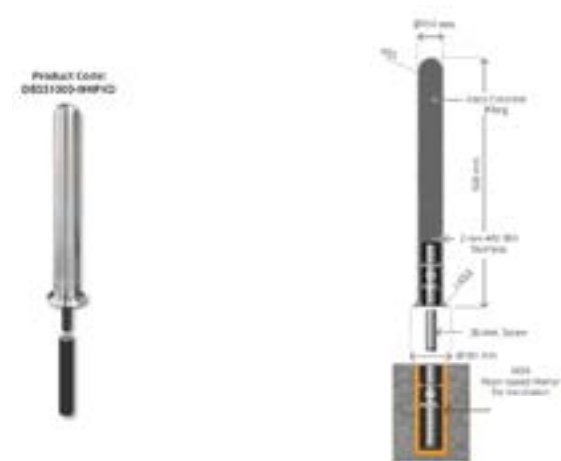


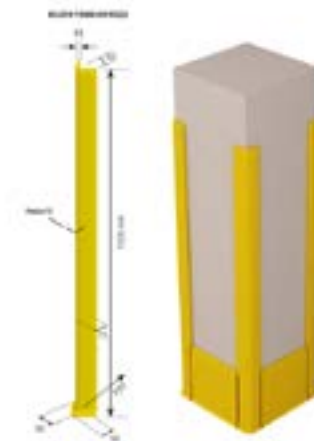
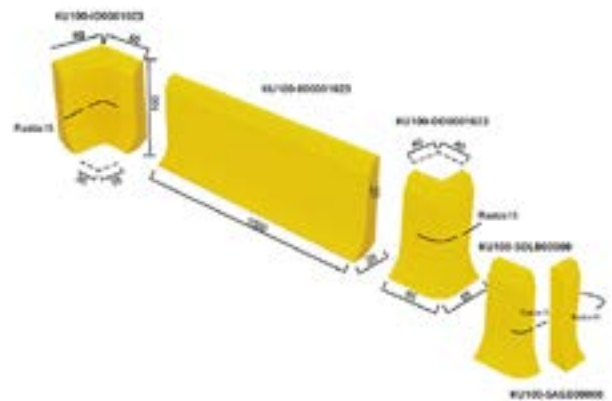
Hygienic Stainless Steel Safety Post (Bollard)



Hygienic Stainless Steel Safety Post (Bollard) ensures protection against impacts and crashes where needed. Including doors, walls, and columns. Due to its tube form and radial shape at the bottom, it reduces bacterial growth, easy-to-clean.

On the surface bollard is covered by 2 mm. thickness AISI 304 or 316 class stainless steel and inside is filled by special polymer or visco- concrete. It can be installed by screwing system and it is easily fixed with "M24" Resin Based Fixing Mortar.



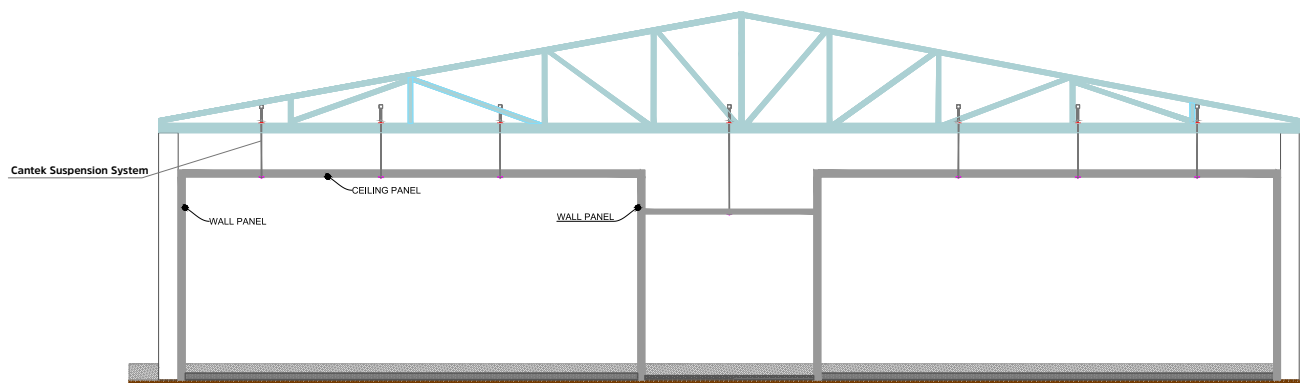


Construction Types

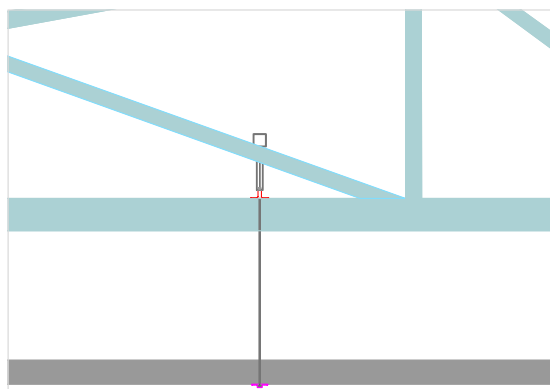
Construction Solutions

Internal Box in Box Insulated Self-Supporting System

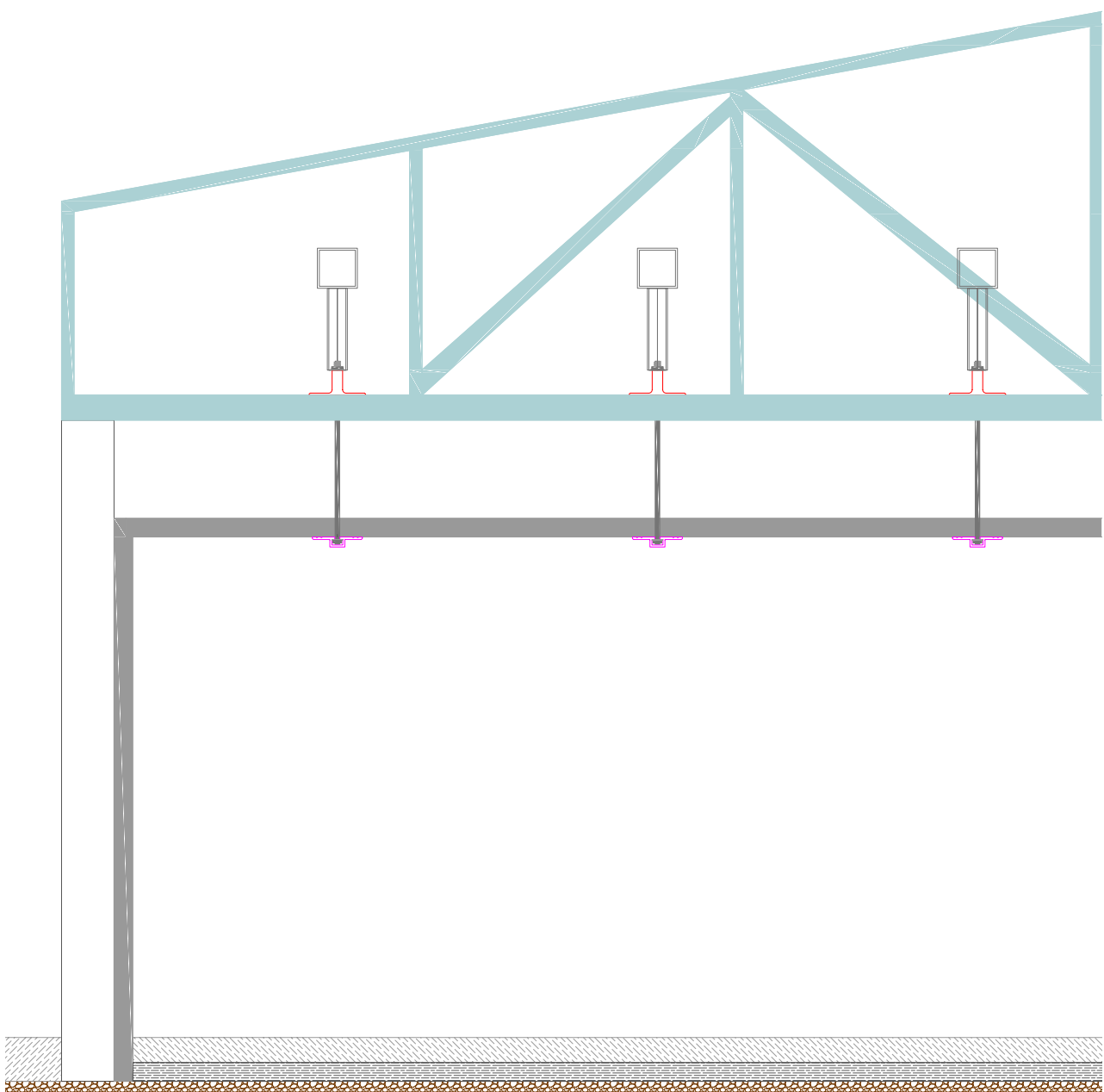
Applications : Chilled and Cold Storage
Main structure : Portal or truss construction



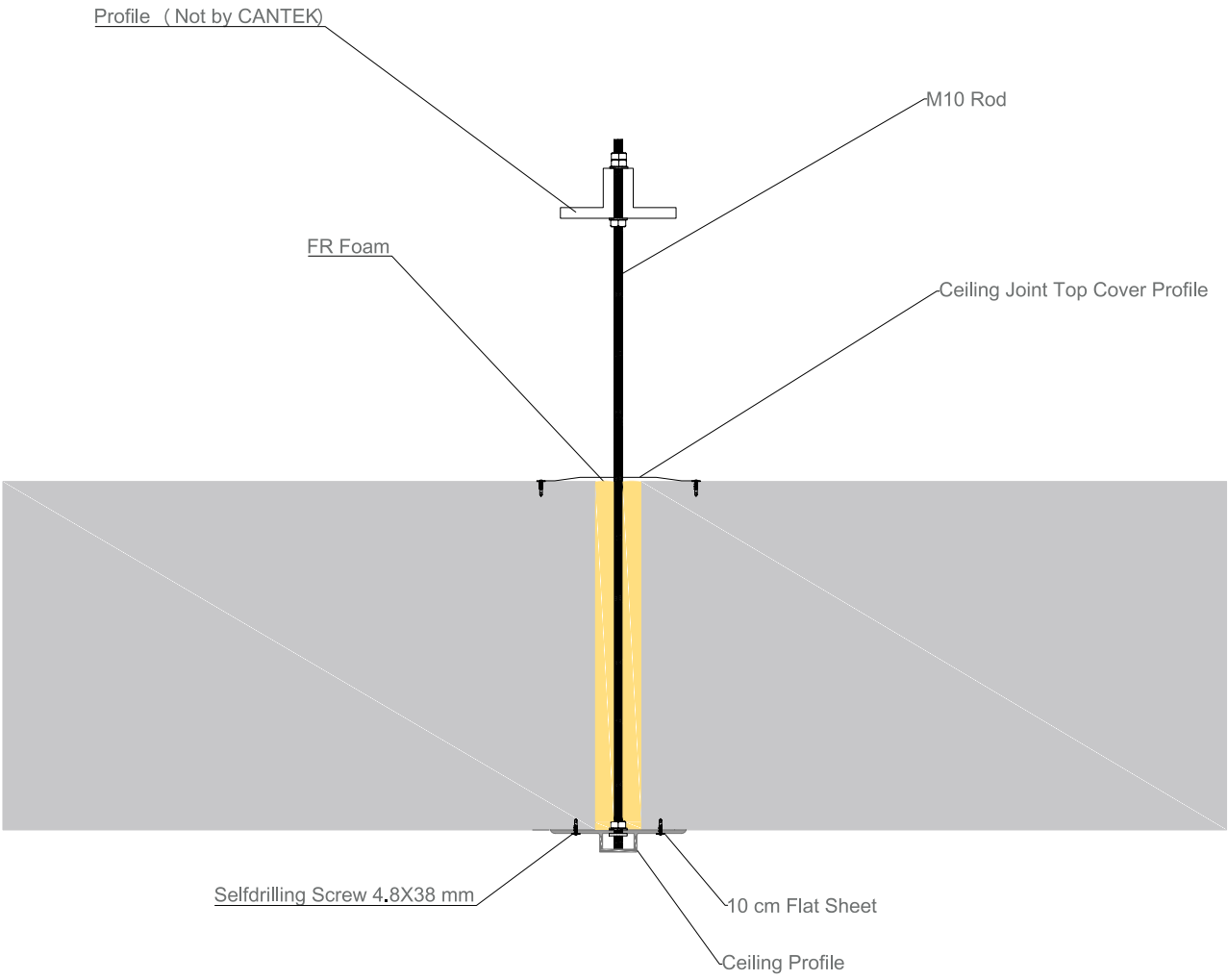
Insulated roof panels
Insulated wall panels
Suspension system



Internal Box in Box Insulated Self-Supporting System

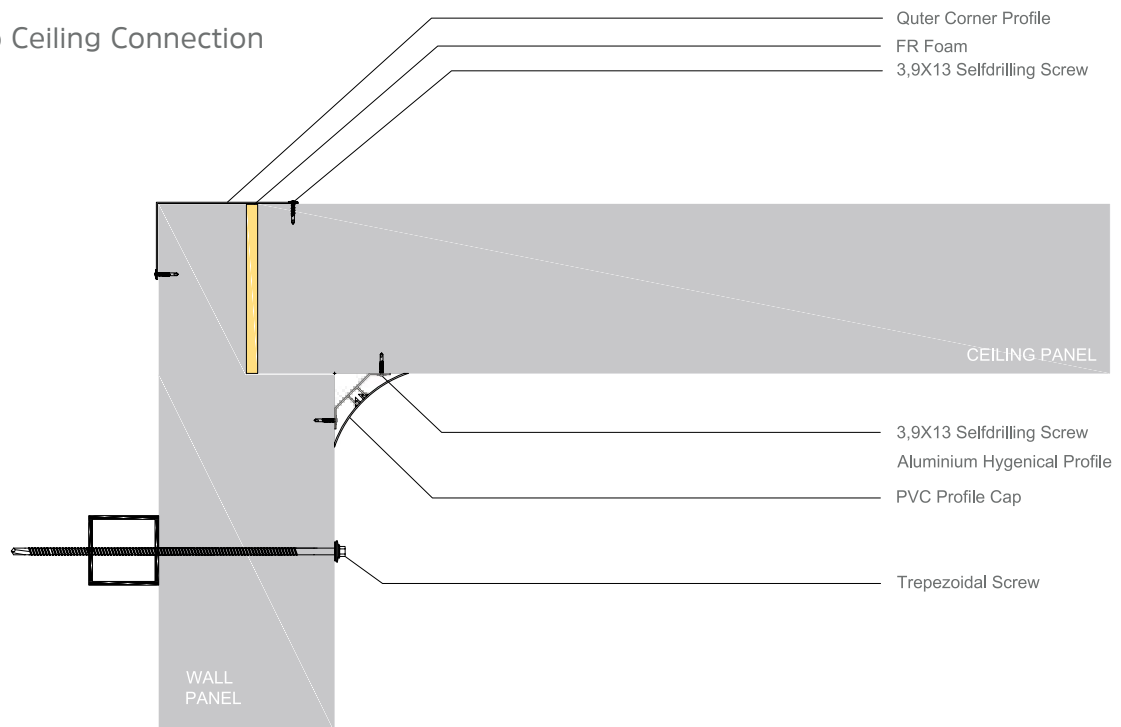


Ceiling Suspension System

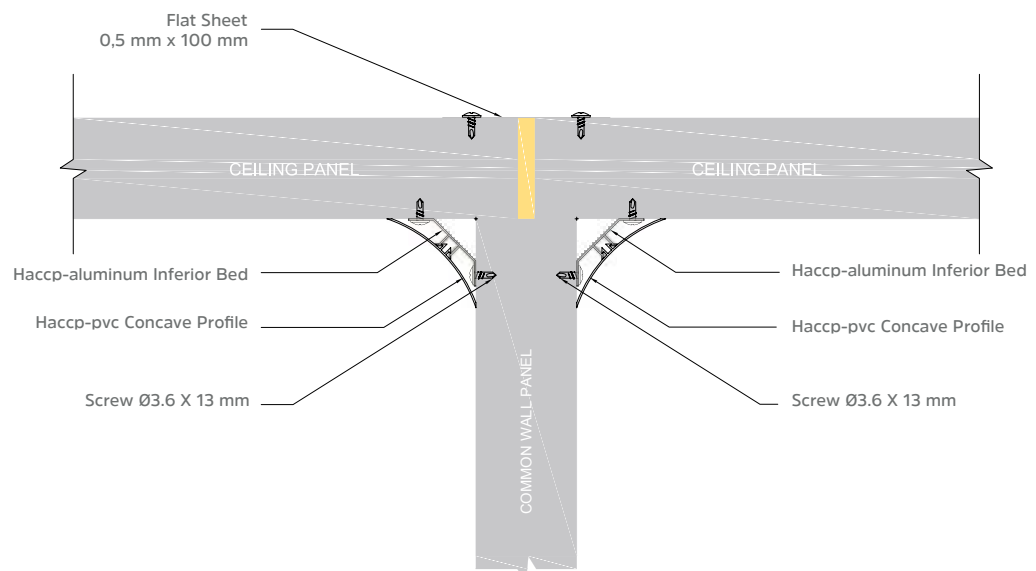


Internal Box in Box Insulated Self-Supporting System

Wall to Ceiling Connection

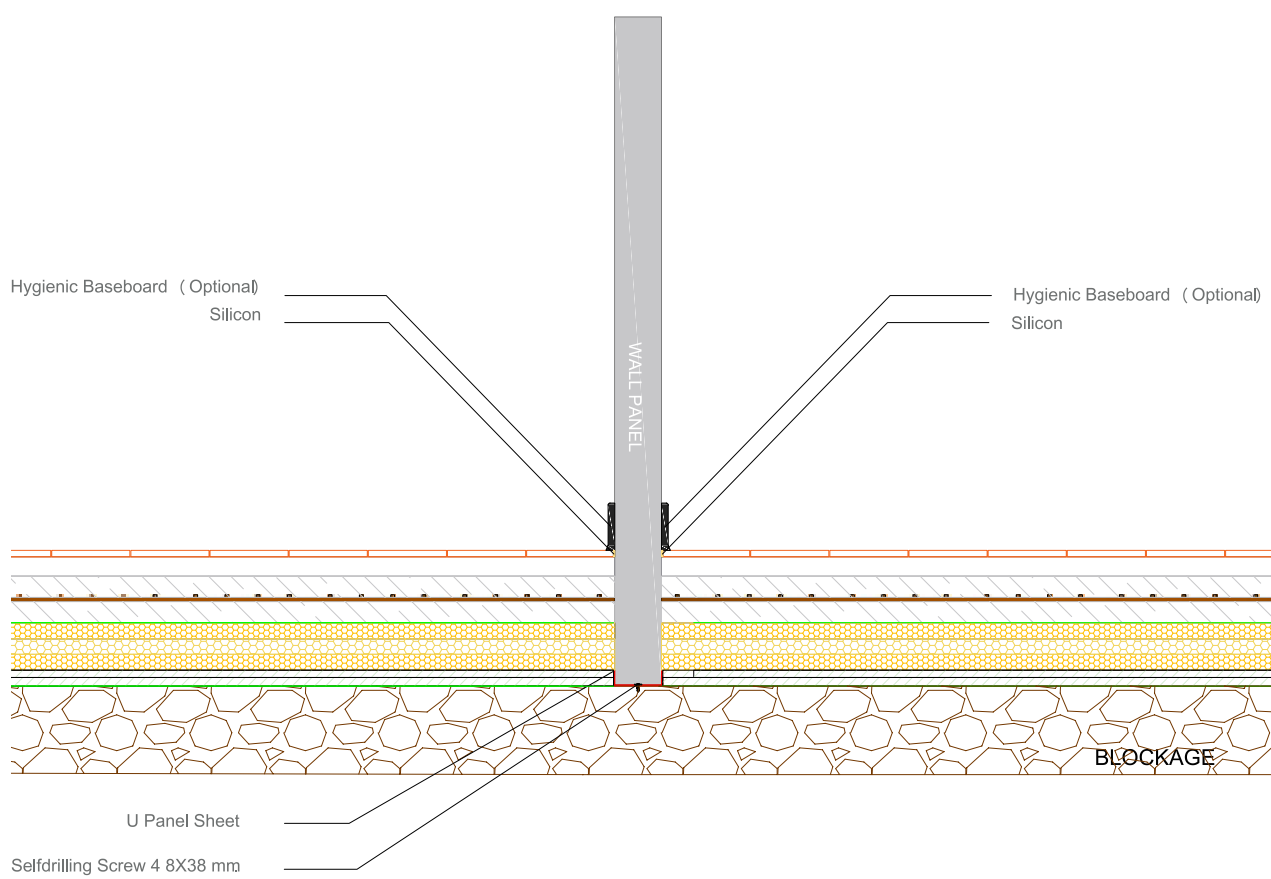


Wall to Ceiling Joint

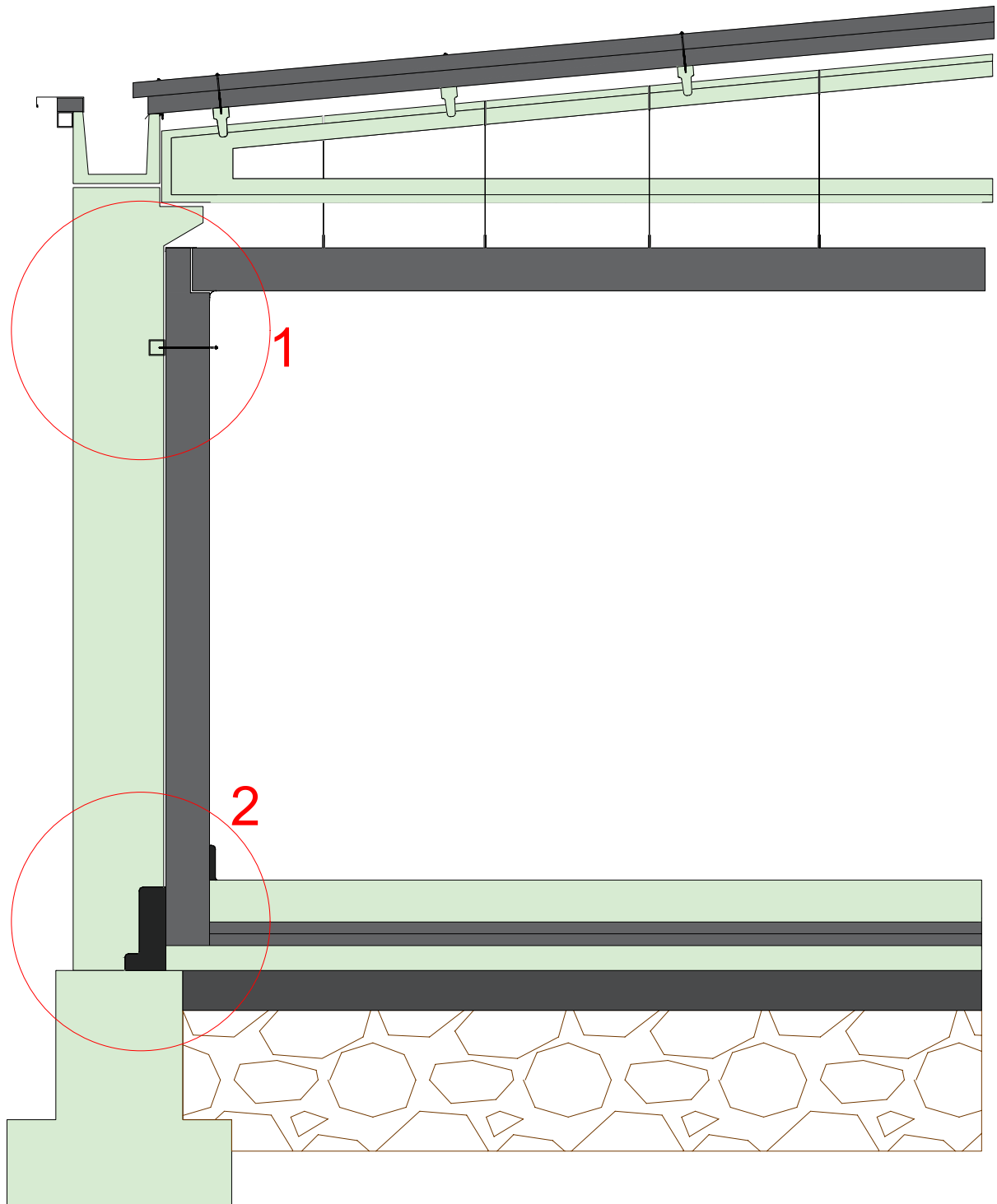


Insulated Panels

Wall to Floor Connection

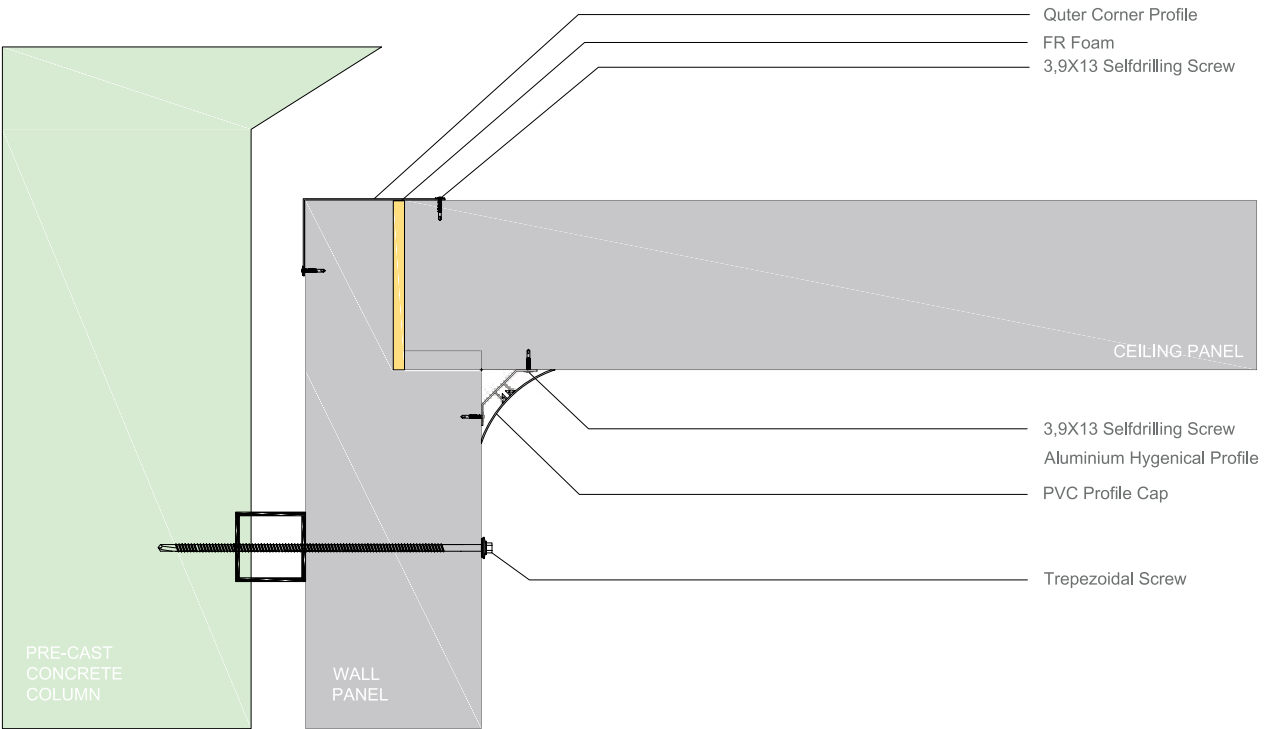


Internal Insulated System with Partial External Wall Cladding

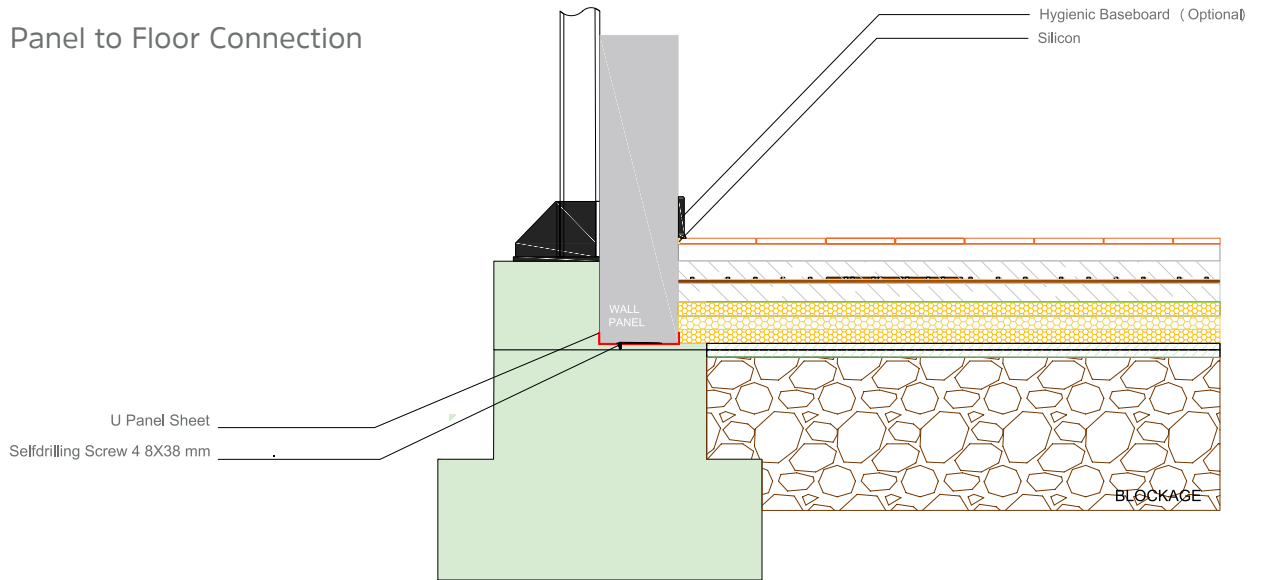


Insulated Panels

Wall to Floor Connection



Panel to Floor Connection



REFERENCES

- RED MEAT
- FISH
- FRESH PRODUCT
- POTATOES & ONION
- ATMOSPHERE
CONTROLLED
- BANANA RIPINING
- BAKERY
- MILK
- HORECA
- SNOW PARK
- PLANT FACTORY



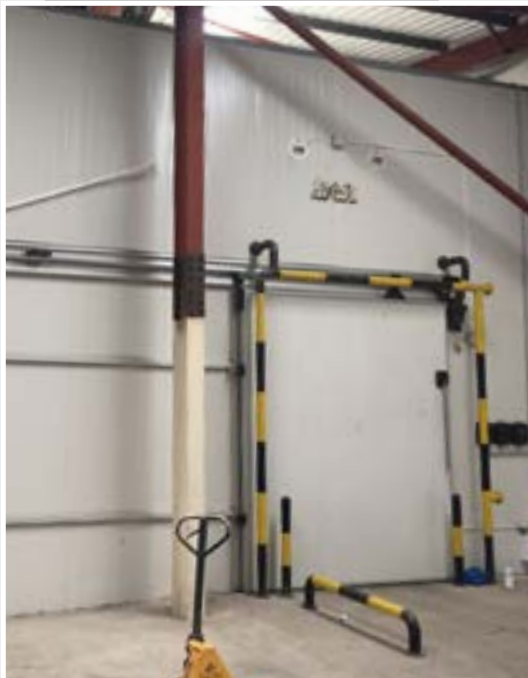


RED MEAT



GANTEK
INNOVATION IN FOOD SECURITY

FISH



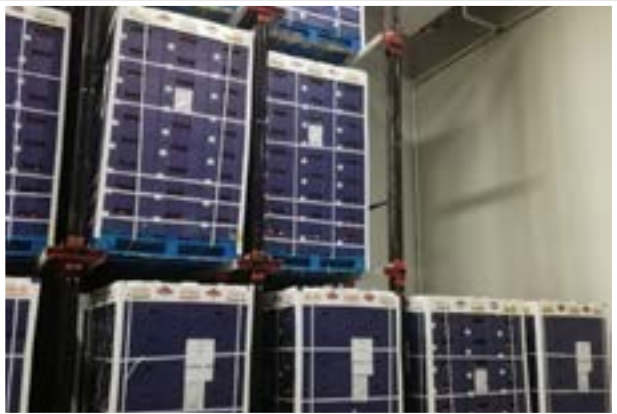


FRESH PRODUCT



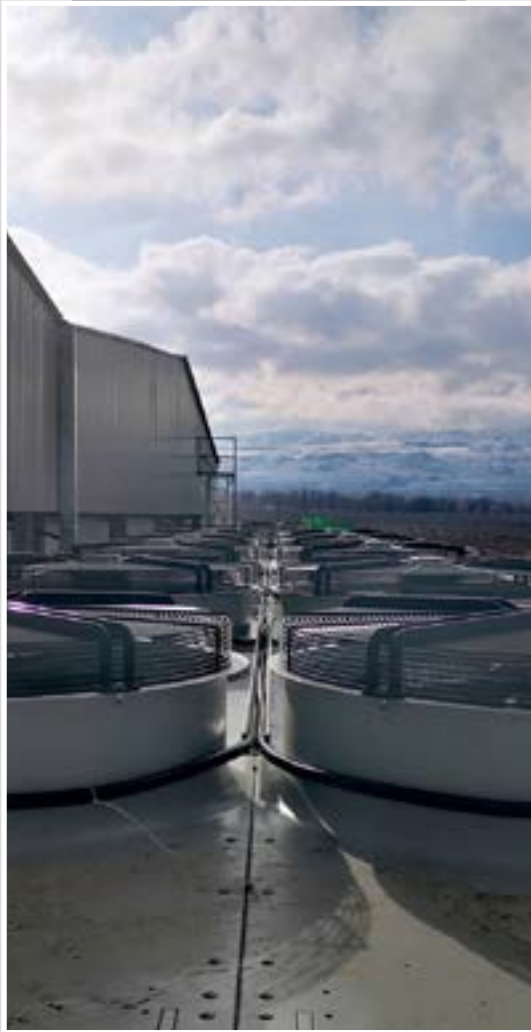


POTATOES & ONION



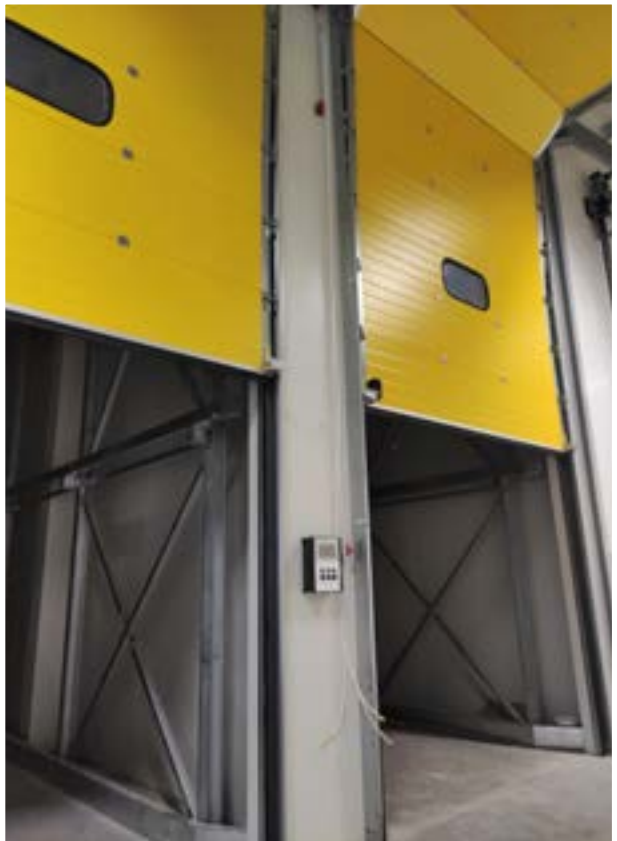


ATMOSPHERE CONTROLLED





BANANA RIPINING



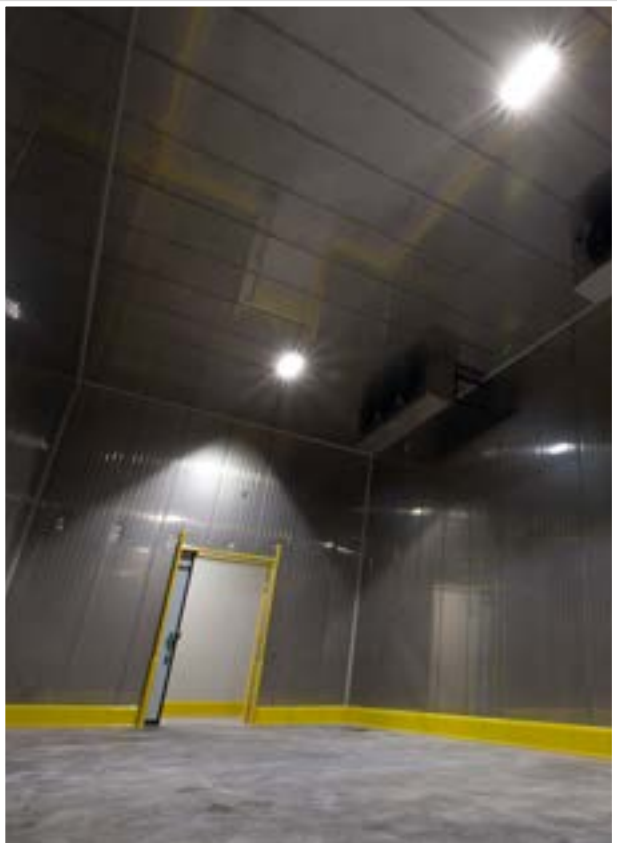


BAKERY





MILK



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INNOVATION IN FOOD SECURITY

HORECA





SNOW PARK



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PLANT FACTORY





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