

Insulating refrigerator panel with high thermal efficiency and good fire behaviour

General considerations for installing HI-F roof panels

Product safety

It is necessary to consider the information given on the Product Safety Sheet.

Precautions

In order to prevent scratches, dents and deformation during installation, rubber footwear must be worn, burs must be eliminated after cutting and any concentrated loads on the panels should be avoided.

Protection film

Even though the panels are symmetrical, during installation the orientation of the panel faces must be respected (the face with blue film and the face with transparent film) so that the intersection of the joints is homogeneous.

In the case that the panel is used as a facade, the face with transparent film will be on the outside, and in the case that the panel has "encasing"/factory overlaps, these will always be on the face with blue film.

The panels are delivered with a label in each package that indicates the coating on the faces of the panel and the colour of the film that identifies each face. Check that the protection film has been completely removed as the panels are secured to the support structure.

Constructive solutions HI-F panel

Recommended sealing

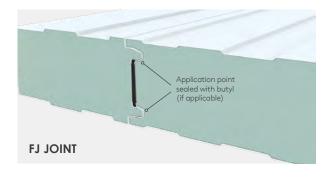
The HI-F panel is available with two types of joints, both with double tongue and groove and flexible polyethylene joint which guarantees the best water tightness with a simple and fast assembly.

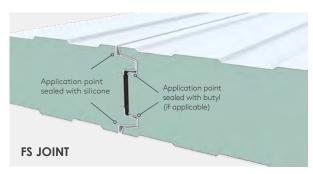
The FJ joint is certified by APPLUS as not requiring additional sealing.

The FS joint has been designed with the aim of adding an additional 3mm silicone external sealing.

Recommended sealing	Positive gradient storage	Negative cold storage o with high hygrometry (Pv>10mmHg)
FJ Joint	-	Butyl in interior joint (*), silicone in exterior joint
FS Joint	Silicone in exterior joint	Butyl in interior joint (*), silicone in exterior joint

(*) In the case of negative temperature or controlled atmosphere chambers, the joints of both types of panels must be sealed with butyl on the highest temperature side of the panel (and optionally sealed on both sides).









Cold storage



Panel joints on the ceiling

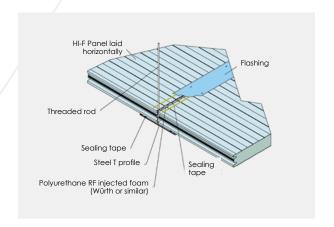
T ceiling profile - steel

The end join of the roof panels can be done using the steel T-profile. Galvanised 1.5 mm thick and 3.5 kg/lm steel profile, white lacquered on its visible face.

Polyurethane foam must be employed to seal the joint between the panel and T profile in order to maintain the cold-storage insulation at all points.

The suspension rods are attached by drilled holes in the T profile (executed on site) every 1.20 m maximum.

As finishing, two sealing cords should be applied (one per panel) and a lid crown to cover the end joint of both panels. This is fixed to the panel by means of stitching or rivets.



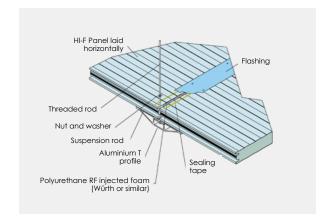
T ceiling rail - aluminium (omega)

Another option for the end join of the roof panels is the RAL9010 white lacquered aluminum profile.

The internal fixing system is designed so that the rod can move inside the profile to the preferred position for its connection to the exterior structure (the profile does not require drilling for fastening to the threaded rod), which significantly facilitates the installation. This intersection must be made by breaking the thermal bridge by means of a nylon threaded rod or bushing or by insulating the nut. This intersection must be made by breaking the thermal bridge by means of a nylon threaded rod or bushing or by insulating the nut.

As finishing, two sealing cords should be applied (one per panel) and a lid crown to cover the end joint of both panels. This is fixed to the panel by means of stitching or rivets.

Polyurethane foam must be employed to seal the joint between the panel and T profile in order to maintain the cold-storage insulation at all points.



Cold storage



Join between walls and between walls and

Positive temperature cold-storage

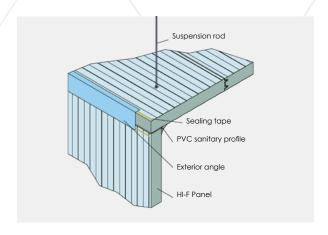
In positive temperature cold-storage, the corner panel joint is resolved with an exterior and an internal angle in 0.6-mm thick steel sheet, with a pre-lacquered finish and which is riveted to the panels.

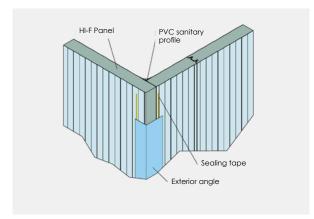
A PVC sanitary profile may be employed on the interior

ceiling

corner of the cold-storage to improve the hygiene conditions of the installation.

The interior part of the joint between the two corner profiles is sealed with polyurethane foam to guarantee insulation.



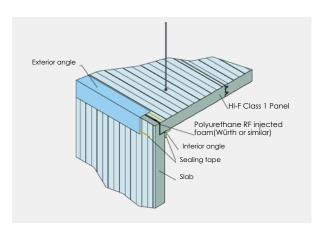


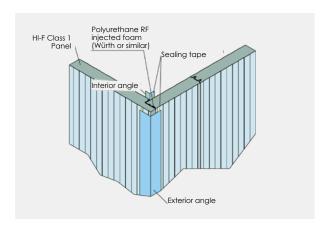
Negative temperature cold-storage

For the corner intersections in negative temperature chambers, a notch is made in one of the panels to fit the adjacent corner panel, thus avoiding the thermal bridge. For wall-wall intersections, the notch is longitudinal in one of the two panels and is made at the installation site. In the case of wall-ceiling intersections, the notch is made on the wall panel in the HUURRE IBERICA production line

(with prior notice) at the desired distance from the end of the panel.

Polyurethane foam must be employed for sealing purposes in order to maintain the cold-storage insulation at all points. The corner is finished with exterior and interior angles of 0.6-mm thick steel sheet, with a pre-lacquered finish and which is riveted to the panels.





Cold storage

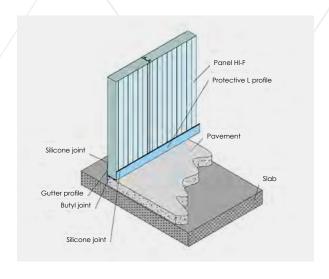


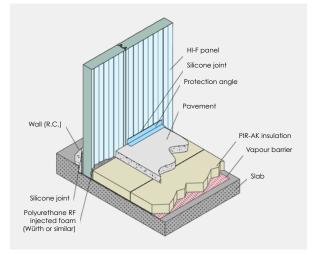
Join between panel and pavement

Positive cold storage

A vapour barrier will be installed between the insulation (PIR-AK panels) and the floor in positive-temperature cold-storage. It is recommended that the lower part of the wall be protected with a smaller wall of concrete to pre-

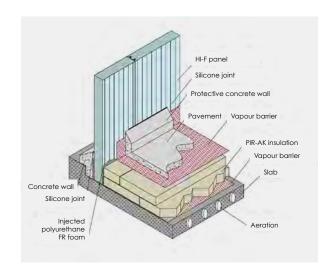
vent panel damage, avoiding contact with the sheet of the panel through the vapour barrier or elastic paint that protects the paint of the panel from the concrete.





Negative cold storage

Negative-temperature cold-storage needs to be insulated from floor humidity by means of a vapour barrier between the floor and the double layer of insulation and another between the insulation and the wearing course floor. The floor must be ventilated, in order to avoid freezing.



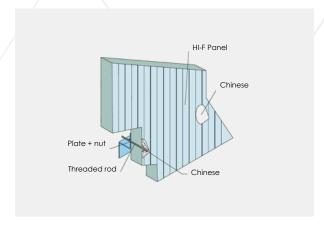
Cold storage

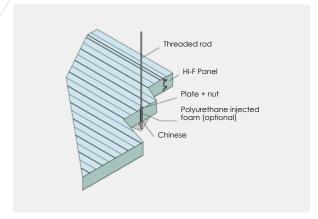


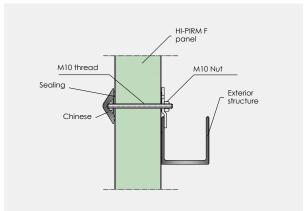
Fastening to structure using threaded rod (walls and ceilings)

The intermediate panel fastening can be carried out using the "Chinese" and "Japanese" accessories. Both fastening solutions can be used to secure the ceiling and wall panels to the load-bearing structure using threaded M10 rods in Z275 galvanised steel.

Both products are particularly designed to guarantee thermal bridge breaking. The "Japanese" cones may be fixed using threaded rod or screw and washer.









GESTIÓN DE LA CALIDAD ISO 9001

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EN EL TRABAJO ISO 45001

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