

### COLD ROOMS and REFRIGERATION UNITS

#### Floor heating

FLEXFLOOR® KYCY - KYCYR

**Entrance floors, few m²:**

KYCYR cables with a power of 20W/m installed at 7 to 10 cm, circa 200w/m², are efficient to prevent ice on the floor surface in the critical area near the door, where air humidity could easily condensate and freeze.

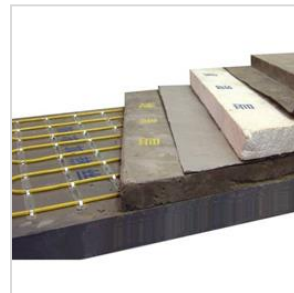
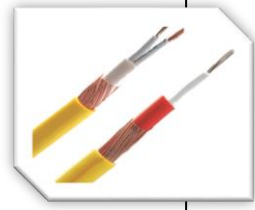
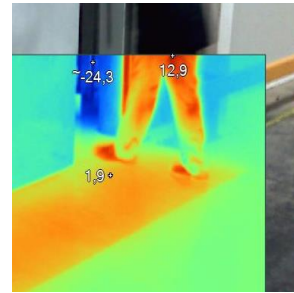
With a minimum of 3cm thick concrete covering inside the upper slab, above the insulation layer, the system protects cold room entrances/exits and loading decks.

This way, it increases the infrastructure lifetime, as any kind of door can work in perfect conditions, without additional friction creating mechanical stress and deformation, or cold air losses to the outside.

**Underfloor, all the cold room surface:**

Frost heave protection: the negative temperature of the room can't impact the underground, as KYCY or KYCYR cable with power 7 to 10W/m, installed each 30 to 50cm maintain a positive barrier under the insulation.

With only 20W/m², the humidity will never be frozen, avoiding its expansion into ice to damage the structure's stability.



#### Evaporators, ventilators, drain pipes & trays, electrical motors

FLEXDRAIN® CSC - CSC2 - CSC2K

FLEXTRACE® FTS0 - FST - FTSM

FLEXMAT® Silicone and aluminium

**Defrost cycle water to flow out**

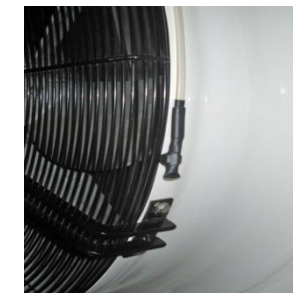
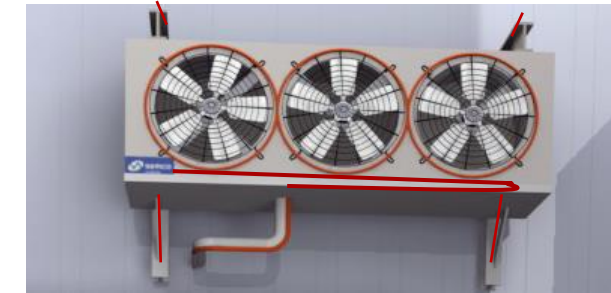
Heating cables or mats are used on trays and pipes, where the water from ice melting of the defrost cycles goes down and must be carried out of the cold area.

Avoiding this way to be blocked by ice, they prevent leakages, reduce maintenance and increase the equipments' lifetime.

Some cables are specially designed to be installed from inside the pipes, others are fixed on the outside and recovered by aluminium adhesive and insulation.

**Mechanical friction reduction and anticondensation protection**

Protecting the ventilators perimeter, the sliding rails of doors or the electrical motors against humidity condensation and icing allows a better availability and durability of these components, together with energy savings.



#### Doors

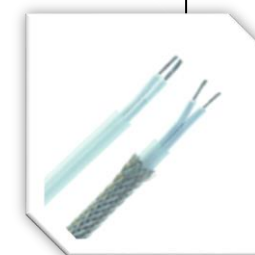
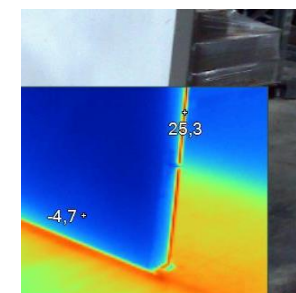
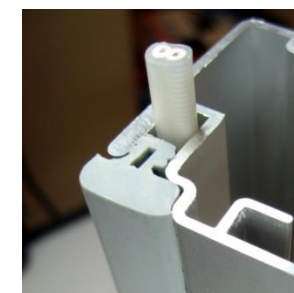
FLEXTRACE® FTS0 - FST - FTSM

**Heat up the door joints and frames to perfect opening and closure movement.**

The heating cable avoids the joint to stick on the frame due to frost.

Power from 10 to 50W/m is determined after real condition test depending on the material (plastic, metallic) and the temperature range of the room.

Constant power or self limiting cable are cut to length for each model, and are available in 230V and other voltages, with braid option for grounding and mechanical resistance to face cutting edges at the corners.



### REFRIGERATED CABINETS

#### Crystal, joints and drains

FLEXUNIT® CS2 - CS1

FLEXTRACE® FTSM

FLEXDRAIN® CSC2K

FLEXMAT® Aluminium

**Avoid humidity to cover transparent crystals.**

**Make mobile part be always clean and water stay liquid until evacuation**

Flexible heating elements adapt to any geometry, available space and length around crystal perimeter or down the trays and drains collecting water.

Aluminium mats can integrate safety thermo switches and local thermostat for energy savings.

