



WALL  
COLD STORE



### Low temperature - micro-ribbed

FRIMET® BT-LM is a range of self-supporting metal panels with state-of-the-art PUR with a labyrinth joint for the construction of negative temperature cold storage warehouses and rooms.

The FRIMET® BT-LM range has been designed to provide a complete solution to the requirements of the cold storage industry, providing the following benefits:

HIGH THERMAL RESISTANCE, MECHANICAL RESISTANCE, DIMENSIONAL STABILITY, NON-WATER ABSORBENT, LIGHTWEIGHT, AESTHETICALLY PLEASING APPEARANCE, DURABILITY, EASE AND SPEED OF INSTALLATION.

The panels of the FRIMET® BT-LM range are available with self expanding seal joints, cover width 1130 mm, in 120 - 150 - 180 - 200 mm thicknesses.



### Materials specifications

#### Panel sheets specifications

|   |                       |
|---|-----------------------|
| • Polyester primer  | 5 micron              |
| • Non-toxic food-graded STANDARD polyester finish paint, RAL 9010 color | 20 micron             |
| • Back-coat   | 5 micron              |
| • Resistance to saline mist   | ≥ 500 h (ECCA T8)     |
| • Resistance to moisture  | ≥ 1000 h (ASTM D2247) |

#### Panels foam specifications

|                        |                      |
|------------------------|----------------------|
| • Average density      | 38 kg/m <sup>3</sup> |
| • Thermal conductivity | 22 mW/mK             |
| • Temperature range    | -40 +80 °C           |
| • Free from CFC        |                      |

### Table of safe spans

Maximum spans with  $f \leq l/200$

Loads: panel weight + 20 daN/m<sup>2</sup> (due to negative pressure inside building)  
panel weight + 30 daN/m<sup>2</sup> (due to negative pressure inside building)

### steel - steel

| S<br>mm | K                           |                           | Panel weight<br>kg/m <sup>2</sup> |           |           | P<br>p.p. + 20      p.p. + 30 |      |         |       |         |       |       |
|---------|-----------------------------|---------------------------|-----------------------------------|-----------|-----------|-------------------------------|------|---------|-------|---------|-------|-------|
|         | Kcal<br>m <sup>2</sup> h °C | Watt<br>m <sup>2</sup> °C | 0,45+0,45                         | 0,5 + 0,5 | 0,6 + 0,6 | 0,45+0,45                     |      | 0,5+0,5 |       | 0,6+0,6 |       |       |
| 120     | 0,15                        | 0,18                      | 12,23                             | 13,05     | 14,75     | l =                           | 7,35 | 7,80    | 8,20  | 6,70    | 7,10  | 7,50  |
| 150     | 0,12                        | 0,14                      | 13,03                             | 13,85     | 15,49     | l =                           | 8,35 | 9,20    | 9,60  | 7,50    | 8,40  | 8,80  |
| 180     | 0,10                        | 0,12                      | 14,18                             | 15,00     | 16,63     | l =                           | 9,15 | 10,40   | 11,00 | 8,20    | 9,50  | 10,00 |
| 200     | 0,09                        | 0,11                      | 14,94                             | 15,76     | 17,39     | l =                           | 9,65 | 11,20   | 11,90 | 8,65    | 10,20 | 10,80 |

