

KARDO THERMOPANEL S

* * * snow & ice protection of the stairs * * *

TECHNICAL DOCUMENTATION

Product Description:

KARDO Thermopanel S is a system which consists of an Insulation Board and an Angle Board with an XPS core, it is reinforced with a glass fibre mesh and covered with a cement polymer with grooves for heating cable installation.

Application:

KARDO Thermopanel Sp is an Insulation Board and **KARDO Thermopanel Sk** is an Angle Board. Both boards are designed to be used as an insulation material for underfloor heating for outdoor stairs to protect them against snow and ice. **KARDO Thermopanel Sp** can also be used as an insulation material for underfloor heating cables inside rooms. The grooves allow easy and quick heating cable installation.

Product Features:

KARDO Thermopanel S is an exceptionally durable and easy to cut Insulation Board. This system can be installed outdoors and in damp areas and has insulation properties. This system allows to increase the heating efficiency of snow and ice protection systems (the warm-up time is shorter) and decrease the running cost. It can be fixed to tiles or any other kind of floor covering.

Preparing the base:

The building base must be load-bearing, stable, levelled and dust and grease free. Old layers of oil and paints must be removed.

Installation:

To fit a **KARDO Thermopanel S** on the required area according to the shape of stairs, cut off an Insulation Board or an Angle Board and place it on the stairs. The **KARDO Thermopanel S** boards should be held down to the floor base with flexible adhesive on a levelled construction base (concrete or reinforced concrete). The same flexible adhesive must be used to fill up grooves. Then press the heating cable in these grooves. All the joints between the boards must be staggered and sealed by made using a minimum 10 cm width mesh joint tape. The mesh should be held down using flexible adhesive. Floor finishes like tiles, or other floor materials can then be laid directly on top of the boards.

Note: First fill up grooves with adhesive, after that press in the heating cable – it has to be covered with adhesive on all it's surface !!!

Approvals:

Declaration of Performance for XPS Insulation Boards.
Polish Law about building materials of 16 of April 2004
Dz.U. Nr 92 poz 881, art.10

Dimensions: - KARDO Thermopanel Sp:

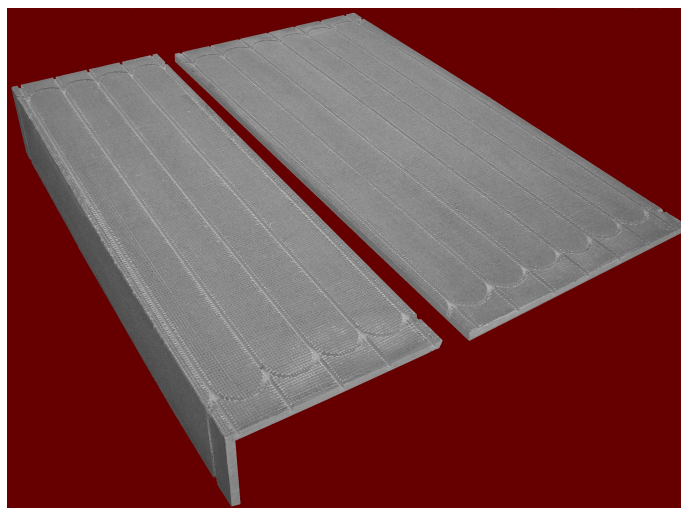
Length x Width:.....1250 x 600 mm (+/-10 mm)
Thickness:.....22 mm (+/-2 mm)
Distance between grooves:.....86 mm (+/-2 mm)

Dimensions: - KARDO Thermopanel Sk:

Length x Height x Width:...250 x 200 x 400 mm (+/-10 mm)
Thickness:.....22 mm (+/-2 mm)
Distance between grooves:.....86 mm (+/-2 mm)

Technical data:

Weight (Thermopanel Sp):.....1,9 kg/pcs (+/-10%)
Weight (Thermopanel Sk):.....1,9 kg/pcs (+/-10%)
Thermal conductivity:.....< 0,034W/mK
Water absorption (24h):.....< 0,1%
Density:.....> 34 kg/m³
Compressive strength at 10% deflection:.....> 300kPa
Reaction to fire:.....Euro class E
Working temperature:.....- 50°C to +75°C



KARDO Thermopanel S
Thermopanel Sk - Angle Board
Thermopanel Sp - Insulation Board

DISTRIBUTOR:

