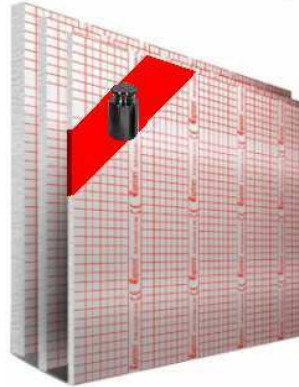


TECHNICAL DATA SHEET (ver. 05/03.2015)

1. Product

Capricorn **STRONG** insulation for underfloor heating systems

2. Product overview

STRONG insulation for underfloor heating consists of ready-to-use insulation panels designed for the construction of the insulation layer laid down under screed in floating floors with the application of surface heating. They ensure perfect thermal insulation which translates into thermal comfort and minimization of heat loss. Very high durability of the styrofoam allows high loading of the floor without limitations on space arrangement and the floor can be used in industrial and special purpose buildings.

3. Product codes

Insulation type	Insulation thickness (mm)	Product code
Insulation for underfloor heating STRONG Duo	20	9-1622-020-61-21-00
	25	9-1622-025-61-21-00
	30	9-1622-030-61-21-00
	50	9-1622-050-61-21-00
Insulation for underfloor heating STRONG Cube	20	9-1622-020-62-21-00
	25	9-1622-025-62-21-00
	30	9-1622-030-62-21-00

4. Packaging options:



STRONG Duo 2 x 1 m panels folded in half and connected with foil, multi-pack: 10 m² (5 packs x 2 m²)



STRONG CUBE insulation for underfloor heating systems : 5 x 1 m panels folded up into a cuboid for easy transportation, multi-pack: 10 m² (2 packs x 5 m² connected with foil)

5. Logistic data

Product code	Individual packaging		Load for a vehicle of a capacity of 120m ³			Load for a vehicle of a capacity of 40m ³			Load for a vehicle of a capacity of 20m ³		
	Number of panels in the	Number of m ² in packaging	Number of packages	Number of m ²	Number of m ³	Number of packages	Number of m ²	Number of m ³	Number of packages	Number of m ²	Number of m ³
9-1622-020-61-21-00	5	10	390	3900	100	144	1440	36	64	640	16
9-1622-025-61-21-00	5	10	390	3900	100	144	1440	36	64	640	16
9-1622-030-61-21-00	5	10	330	3300	100	120	1200	36	53	533	16
9-1622-050-61-21-00	5	10	180	1800	100	72	720	36	32	320	16
9-1622-020-62-21-00	2	10	375	3380	105	129	1286	36	57	571	16
9-1622-025-62-21-00	2	10	375	3380	105	129	1286	36	57	571	16
9-1622-030-62-21-00	2	10	318	2900	105	109	1091	36	48	485	16

6. Construction and applied materials

STRONG insulation for the underfloor heating consists of a layer of expanded polystyrene featuring very high thermal resistance, durability and hardness. Polystyrene panels are 20, 25, 30 or 50 mm thick and provided with a 0.07 mm thick metallic vapour barrier foil that is an advanced two-layer laminate made of BOPP20 (metallic biaxially oriented polypropylene) and LDPE80 (low-density polyethylene) with an interlayer print in the form of solid and dashed lines arranged in a pattern of 10x10 cm squares so as to ensure easy installation of the heating system. BOPP/LDPE are combined by a polyurethane two-component adhesive, highly durable in mechanical terms.

7. Technical specification

Packaging options	Panel dimensions Thickness X Width X Length [mm]	Surface of the panel [m ²]	Declared heat conductivity coefficient [W/(m·K0)]	Thermal resistance [(m ² · K)/W]	Compressive stress levels at 10% relative strain [kPa]	Bending strength levels [kPa]	Reaction to fire performance [Euroclass]
Duo	20x1000x2000	2.0	≤0.034	0.55	≥200	≥250	E
	25x1000x2000			0.70			
	30x1000x2000			0.85			
	50x1000x2000			1.45			
Cube	20x1000x2000	5.0	≤0.034	0.55	≥200	≥250	E
	25x1000x2000			0.70			
	30x1000x2000			0.85			

Thermal insulation of operational loads up to 6 t/m²

8. Standards

PN-EN 13163:2009 Products for thermal insulation in the construction industry. Styrofoam (EPS) products mass-produced. Specification

9. Declaration of Conformity

- Declaration of Conformity No 06/2012 of 21 May 2012

10. Benefits

- Insulation panels are ready for immediate assembly which reduces considerably the assembly time of the heating installations and surface heating
- Efficient thermal performance minimizes heat losses via through the floor and ensures high thermal comfort
- Very high durability and hardness of the styrofoam allows high loading of the floor, without limitations on space arrangements and the floor can be used in industrial and special purpose buildings.
- Insulation layer is covered with metallic vapour barrier with printed raster mesh in order to facilitate the installation of heating pipes
- The foil overlaps, 5 cm wide, protect the styrofoam against the penetration of humidity and batched water from the screed
- Application of a very durable adhesive ensures simple, quick and problem free assembly.

11. Warranty and liability

All the occupational health and safety requirements specified in regulations and building codes must be observed and followed. Capricorn S.A. grants, as from the date of sale, statutory warranty for safety sets designed for central heating and hot water systems, provided that the following conditions are met:

- 1) All products should be used in accordance with their intended purpose
- 2) Correct warehousing and storage, i.e.:
 - a) no exposure to direct sunlight,
 - b) no exposure to direct humidity,
 - c) transport and storage in horizontal position, on an even, flat surface that helps to minimize the risk of deformation and damage;
 - d) protection against mechanical damage during transportation, loading, unloading and storage;
- 3) installation by a properly qualified and licensed person in accordance with the technical guidelines, standards and instructions specified by Capricorn.
- 4) Screed will be poured out and dried, in accordance with current guidelines and standards.

12. Manufacturer: Capricorn S.A.

Ciernie 11, 58-160 Świebodzice, Poland

Phone/fax +48/74/854 05 16

www.capricorn.pl

e-mail: capricorn@capricorn.pl

The products, photographs, drawings, diagrams and descriptions set out in this document are subject to change by Capricorn S.A. without notice and without stating reasons. For the latest news on our products and launches, visit our website at www.capricorn.pl.