

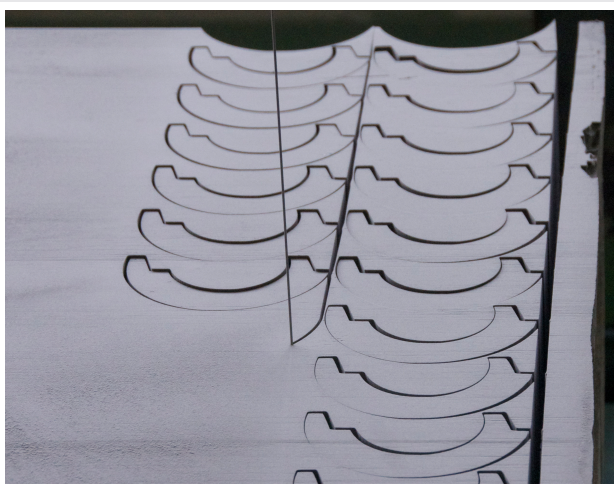
TECHNICAL DATA SHEET

Phenolic foam technical insulation

supercel[®]
PIPING INSULATION



PRODUCT DETAILS



SUPERCEL[®] #2.5 is a high performance rigid closed cell thermoset designed for pipework, especially those requiring non-fibrous material. It is manufactured in blocks, with a rectangular cross-section and a thickness not significantly smaller than the width. It can be cut by specific machinery to all dimensions and forms necessary for optimal insulation, such as slabs, jacketing and curved or spherical segments.

The blocks are available in the following **dimensions**:

Small format

Real dimensions 28 x 38,2 x 42,9 in.

Yielded dimension 26(width) x 36,5(length) x 41(height) in.

Large format

Real dimensions 42,52 x 42,52 x 40,55 in.

Yielded dimensions 41(width) x 41(length) x 39(height) in.

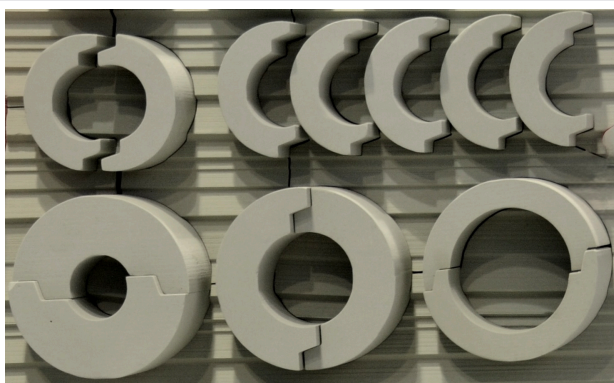
THERMAL CONDUCTIVITY λ_D

0.16 BTU·in/h·ft²·°F at 50°F mean temperature

SUGGESTED APPLICATIONS

Insulation for industrial and commercial pipework

ITEM SPECIFICATION



Thermal insulation performed using **SUPERCEL[®] #2.5** - a closed cell phenolic foam block, CE marked according to the EN14314 standard, EPD verified (Environmental Product Declaration), having a thermal conductivity $\lambda=0.16$ BTU·in/h·ft²·°F, a reaction to fire Euroclass C-s₁,d₀ according to EN13501-1 or Flame spread / smoke developed indices: $\leq 25/50$ according to ASTM E84; with compressive strength ≥ 20 psi, for the insulation of industrial and commercial pipework (...)*.

*it is advisable to complete the specifications by indicating the most relevant characteristics and performances for the specific application

TECHNICAL CHARACTERISTICS (typical values)

Harmonized product standard

EN 14314:2008+A1:2013 - Thermal insulation for building equipment or industrial installations - Factory made phenolic foam
ASTM C1126 Type III - Standard specification for faced or unfaced rigid cellular phenolic thermal insulation

PROPERTIES	NORMS	UNITS	VALUES	CODE/CLASS
Thermal Conductivity at 50°F	EN 12667 ASTM C518 eq.	W/mK BTU·in/h·ft²·°F	0,022 0.16	-
Apparent mass	EN 1602 ASTM D1622 eq.	kg/m³ lb/ft³	40 2.5	AD
Operating temperature range	-	°C °F	-180 / +120 -297 / +257	ST(-) / ST(+)
Compressive strength	EN 826 ASTM C1621 eq.	kPa psi	≥ 150 Parallel ≥ 30 Perpendicular ≥ 20	CS(Y)
Closed cell content	EN ISO 4590 ASTM D6226 eq.	%	≥ 95	CV
Reaction to fire Surface burning @3" thick	EN 13501-1 ASTM E84	SBC	C s₁ d₀ FSI 25 / SDI 50*	RtF
Water vapor permeability and transmission	EN 12086 ASTM E96 eq.	μ perm-in (ng/Pa-s-m)	40 2.15 (3.10)	MU

INDICATIONS FOR USE

When using pipe sections from the **SUPERCEL® Piping Insulation** product range, in phenolic foam, it is advisable to keep in mind the following good practices:

- The blocks or segments must be stored, even when on site, indoors or protected by waterproof sheets, in their original packaging, dry and protected from bad weather;
- The blocks or segments must not be bonded to degraded supports;
- The blocks or segments must not be used if damaged or deteriorated;
- The blocks or segments were not designed with the intention of providing a finished covering;
- The blocks or segments must be cut using mechanical cutting.

Any small void areas in the foam may originate from the production cycle. These areas do not affect the physical-mechanical properties of the products in any way.

NOTES

*This numerical flame spread data is not intended to reflect hazards presented by this or any other material under actual fire conditions.

The blocks or segments of the **SUPERCEL® Piping Insulation** product range, in expanded phenolic foam, are considered articles with reference to the European regulations (Reg. 1906/2007/EC - REACH), therefore they do not require safety data sheets.

When using the product, it is advisable to wear protective gloves and glasses and to comply with the workplace safety regulations.

The information and instructions reported above, although corresponding to our best knowledge, are to be considered, in any case, purely indicative; therefore, before using the product, anyone who intends to use it is required to establish whether or not it is suitable for the intended use, and in any case, assumes any responsibility that may arise from its use.

The most updated technical data sheet is available on the website at the following address: www.resineisolanti.com.