FOCUS ON

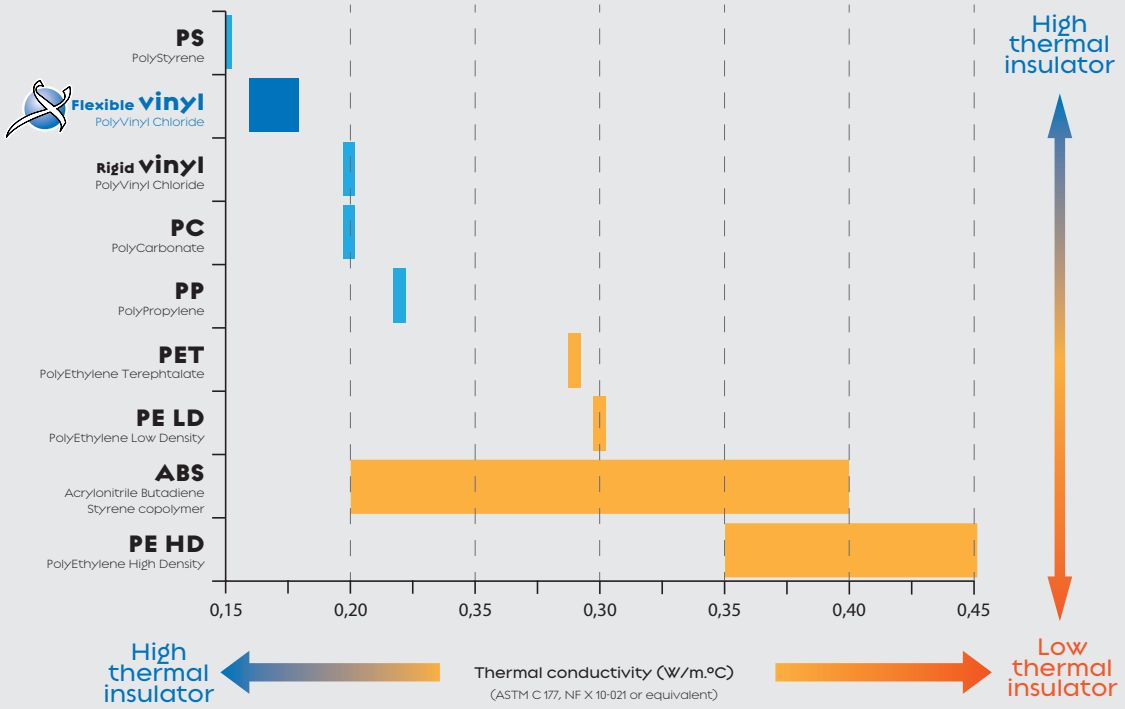
PLASTIC MATERIALS & THERMAL INSULATION

Flexible vinyl is a very strong thermal insulator, one of the best insulating plastics. It is water and air tight, qualities usually required in insulation application. Due to its low thermal conductivity, flexible vinyl leads to high thermal energy savings allowing costs and resources savings and increases people comfort. Making the right material choice is essential in a context where energy prices are growing up faster and faster to levels never met before and where energy resources need to be carefully preserved.

Extruflex help to make the right material choice to maximize energy savings.

PLASTIC MATERIALS THERMAL CONDUCTIVITY

The less conducting, the more insolating the material is.



For information, some non plastic materials thermal conductivity in W/m.°C : Air ≈ 0,026 ; Rock wool ≈ 0,04 ; Glass wool ≈ 0,04 ; Asbestos ≈ 0,17 Wood ≈ 0,12 to 0,23 ; Rubber ≈ 0,4 ; Water ≈ 0,6 ; Glass ≈ 1 to 1,2 ; Stainless steel ≈ 26 ; Steel ≈ 46 ; Iron ≈ 80 ; Aluminium ≈ 237.

How to compare energy flow lost by thermal conduction through different materials?

$$Q = \frac{\lambda \times S \times \Delta T}{Th}$$

Q = Energy flow lost by thermal conductivity (W)
λ = Thermal conductivity (W/m.°C)
S = Surface (m2)
ΔT = Temperature difference (°C)
Th = Thickness (m)

Extruflex flexible vinyl strips & sheets save and preserve earth's natural resources and environment.

extruflex
flexible vinyl extrusion world leader

THERMAL INSULATION