

# EUROBATEX® PEN/PEAL

<b>TYPE OF MATERIAL:</b>	Black closed-cell flexible elastomeric foam (FEF) coupled with a 3 mm layer of reticulated PE foam and exterior embossed finishing PE film in either black or aluminium colour
<b>PRODUCT RANGE:</b>	Sheets in rolls (also available in self-adhesive version) with thicknesses from 6 mm to 50 mm (plus the 3 mm thick covering)
<b>FIELDS OF APPLICATION:</b>	Thermal insulation of refrigeration, air conditioning and heating & plumbing services in commercial, industrial and domestic applications
<b>DIMENSIONAL TOLERANCES:</b>	In accordance with the European Standard EN 14304
<b>ENVIRONMENTAL INFORMATION:</b>	Flexible and expanded CFC and HCFC-free rubber foam. It does not damage the ozone layer (ODP zero) and does not contribute to the greenhouse effect (GWP zero).
<b>ADDITIONAL INFORMATION:</b>	Self-adhesive material: acrylate based adhesive coating reinforced with mesh structure. Protection liner made of polyolefin foil. Traces of silicon can be found on the foil protecting the self-adhesive coating
<b>STORAGE CONDITIONS/SHELF LIFE:</b>	Store the material in a dry and clean environments at a temperature between 0 °C and 35 °C and a RH between 50% and 70%. Do not expose the material to heat or direct sunlight when stored. Self-adhesive products should not be kept in storage for more than one year

PHYSICAL PROPERTIES	RESULT OBTAINED		TEST METHOD
<b>OPERATING TEMPERATURE RANGE*</b>	-45 °C +110 °C		EN 14706
<b>THERMAL CONDUCTIVITY</b>	At a mean temperature of 0 °C	thk. ≤32 mm: $\lambda \leq 0,033$ W/m·K thk. >32 mm: $\lambda \leq 0,034$ W/m·K	EN 12667
	At a mean temperature of +40 °C	thk. ≤32 mm: $\lambda \leq 0,037$ W/m·K thk. >32 mm: $\lambda \leq 0,038$ W/m·K	
<b>WATER VAPOUR DIFFUSION RESISTANCE FACTOR</b>	$\mu \geq 10000$		EN 12086
<b>FIRE PERFORMANCE</b>	European Standard Euroclass	E	EN 13501-1
<b>UV RESISTANCE</b>		PEN	Excellent
		PEAL	Good
<b>CORROSION RISK</b>	Meets test requirements		EN 13468

\*NB: for application at lower temperatures please contact our technical department.  
For information regarding the chemical resistance of the product please consult the specific technical documentation.  
For self-adhesive sheets and tapes, the maximum operating temperature is +90 °C.

**System 3 CE Marking** in accordance with the European Standard EN 14304.

All the normatives quoted in this document are updated to the latest issued version.  
Union Foam S.p.A. reserves the right to modify any information at any time without prior notice.

# CHARACTERISTICS OF THE PEN/PEAL COVERINGS

## CHARACTERISTICS OF THE COVERING IN RETICULATED PE FOAM, THICKNESS 3 mm

PHYSICAL PROPERTIES	RESULT OBTAINED		TEST METHOD
DENSITY	29 ± 10 kg/m <sup>3</sup>		ISO 845
TENSILE STRENGTH	Squareness	0,24 MPa	ISO 1798
	Transverse	0,18 MPa	
ELONGATION AT BREAK	Squareness	125%	ISO 1798
	Transverse	120%	
COMPRESSION RESISTANCE	10%	15 kPa	ISO 3386-1
	25%	33 kPa	
	50%	88 kPa	
COMPRESSION SET 25% (22h, 23 °C)	After 0,5h	20%	ISO 1856
	After 24h	13%	
COMPRESSION SET 50% (22h, 23 °C)	After 0,5h	44%	ISO 1856
	After 24h	34%	
DIMENSIONAL STABILITY	100 °C		ISO 2796

## CHARACTERISTICS OF THE COVERING IN PE, THICKNESS 35 µm (BLACK OR ALUMINIUM)

PHYSICAL PROPERTIES	RESULT OBTAINED		TEST METHOD
THICKNESS	35 µm		Internal test
DENSITY	0,922 g/m <sup>3</sup>		Internal test
TENSILE STRENGTH	MD	23 - 27 MPa	ASTM D882A
	TD	18 - 23 MPa	
ELONGATION AT BREAK	MD	200 - 300%	ASTM D882A
	TD	750- 850%	
SOFTENING POINT (Vicat)	96 °C		ASTM D1525