

# **EUROBATEX® PEN/PEAL**

Insulating sheets made of CFC and HCFC free closed-cell flexible elastomeric foam (FEF) in accordance with the European Standard EN 14304.

**Protected by an external PE coating** with a scratch-resistant embossed finishing (in either aluminium or black colour) that guarantees **excellent mechanical resistance**. These insulating sheets are especially suitable for the thermal insulation of refrigeration, air conditioning and heating & plumbing services in commercial, industrial and domestic applications.

#### **APPLICATIONS FIELDS**



Industrial



Air Conditioning

Refrigeration

Building



Heating & Plumbing





#### EUROBATEX® PEN/PEAL

TYPE OF MATERIAL:	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
PRODUCT RANGE:	Sheets in rolls (also available in self-adhesive version) with thicknesses from 6 mm to 50 mm (plus the 3 mm thick covering)
FIELDS OF APPLICATION:	Thermal insulation of refrigeration, air conditioning and heating & plumbing services in commercial, industrial and domestic applications
DIMENSIONAL TOLERANCES:	In accordance with the European Standard EN 14304
ENVIRONMENTAL INFORMATION:	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).
ADDITIONAL INFORMATION:	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
STORAGE CONDITIONS/SHELF LIFE:	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	RESUI	TEST METHOD	
OPERATING TEMPERATURE RANGE*	-45	EN 14706	
THERMAL CONDUCTIVITY	At a mean temperature of 0 °C	$\begin{array}{llllllllllllllllllllllllllllllllllll$	EN 12667
	At a mean temperature of +40 °C	Sheets: <32 mm: $\lambda < 0.037$ W/m.K	
WATER VAPOUR DIFFUSION RESISTANCE FACTOR	µ ≥ 10000		EN 12086
FIRE PERFORMANCE	European Standard Euroclass		EN 13501-1
UV RESISTANCE	PEN	Good	UNI ISO 4892-2
UV RESISTANCE	PEAL	UNI 130 4092-2	
CORROSION RISK	Meets t	EN 13468	

\*NB: for application at lower temperatures please contact our technical department. For self-adhesive sheets and tapes, the maximum operating temperature is +90 °C.

**System 3 C € 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 OBTAIN	TEST METHOD	
DENSITY	29 ± 10 kg/m³	ISO 845	
	Squareness	0,24 MPa	100 1700
TENSILE STRENGTH	Transverse	0,18 MPa	ISO 1798
	Squareness	125%	100 1700
ELONGATION AT BREAK	Transverse	120%	ISO 1798
	10%	15 kPa	
COMPRESSION RESISTANCE	25%	33 kPa	ISO 3386-1
	50%	88 kPa	
COMPRESSION SET 25%	After 0,5h	20%	100 1050
(22h, 23 °C)	After 24h	13%	ISO 1856
COMPRESSION SET 50%	After 0,5h	44%	100 1050
(22h, 23 °C)	After 24h	34%	ISO 1856
DIMENSIONAL STABILITY	100 °C		ISO 2796

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

PHYSICAL PROPERTIES	RESULT C	TEST METHOD	
THICKNESS	35	Internal test	
DENSITY	0,92	Internal test	
TENSILE STRENGTH	MD	23 - 27 MPa	ASTM D882A
TENSILE STRENGTH	TD	18 - 23 MPa	ASTM D662A
ELONGATION AT BREAK	MD	200 - 300%	ASTM D882A
ELONGATION AT BREAK	TD 750- 850%		ASTIVI DOOZA
SOFTENING POINT (Vicat)	90	ASTM D1525	

#### **EUROBATEX® PEN**

Eurobatex sheet coupled with reticulated PE coat covered with black (PEN) embossed film

# **CONTINUOUS ROLLS 1000 mm WIDTH**

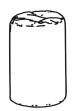
ltem No.	Thickness mm	m²/box
06EUR R PEN S	6 + 3	30
10EUR R PEN S	10 + 3	20
13EUR R PEN S	13 + 3	14
16EUR R PEN S	16 + 3	12
19EUR R PEN S	19 + 3	10
25EUR R PEN S	25 + 3	8
32EUR R PEN S	32 + 3	6

#### **SELF-ADHESIVE**

Item No.	Thickness mm	m²/box
06EUR R PENAD S	6 + 3	30
10EUR R PENAD S	10 + 3	20
13EUR R PENAD S	13 + 3	14
16EUR R PENAD S	16 + 3	12
19EUR R PENAD S	19 + 3	10
25EUR R PENAD S	25 + 3	8
32EUR R PENAD S	32 + 3	6

Different thicknesses available on request Material not in stock, produced on request – lead time 15 workdays

Single packaging:



#### Pallet dimensions:

120 x 210 x 282 cm Volume = 7,10 m<sup>3</sup> Bags/pallet = 20

120 x 210 x 228 cm Volume = 5,74 m<sup>3</sup> Bags/pallet = 16



## PEN SELF-ADHESIVE TAPE

Item No.	Description	pcs/ct
FPE 1,5 PEN 25M	1,5 mm thickness PE foam tape + black colour embossed film: width 50 mm x 25 m length	12



### **EUROBATEX® PEAL**

Eurobatex sheet coupled with reticulated PE coat covered with aluminium colour (PEAL) embossed film

## **CONTINUOUS ROLLS 1000 mm WIDTH**

Item No.	Thickness mm	m²/box
06EUR R PEAL S	6 + 3	30
10EUR R PEAL S	10 + 3	20
13EUR R PEAL S	13 + 3	14
16EUR R PEAL S	16 + 3	12
19EUR R PEAL S	19 + 3	10
25EUR R PEAL S	25 + 3	8
32EUR R PEAL S	32 + 3	6

#### **SELF-ADHESIVE**

ltem No.	Thickness mm	m²/box
06EUR R PEALAD S	6 + 3	30
10EUR R PEALAD S	10 + 3	20
13EUR R PEALAD S	13 + 3	14
16EUR R PEALAD S	16 + 3	12
19EUR R PEALAD S	19 + 3	10
25EUR R PEALAD S	25 + 3	8
32EUR R PEALAD S	32 + 3	6

Different thicknesses available on request Material not in stock, produced on request – lead time 15 workdays



Single packaging:



#### **Pallet dimensions:**

120 x 210 x 282 cm Volume =  $7,10 \text{ m}^3$ Bags/pallet = 20

120 x 210 x 228 cm Volume = 5,74 m<sup>3</sup> Bags/pallet = 16



### **PEAL SELF-ADHESIVE TAPE**

Item No.	Description	pcs/ct
FPE 1,5 PEAL 25M	1,5 mm thickness PE foam tape + aluminium colour embossed film: width 50 mm x 25 m length	12

### **CNX S ADHESIVE**

Item No.	Description	pcs/ct
CNX 850 S	850 g - 1000 ml tin	12
CNX 425 S	425 g - 500 ml tin	24
CNX 200 S	200 g - 225 ml tin including brush	24









#### THERMAL INSULATION PRODUCTS FOR BUILDING EQUIPMENT AND INDUSTRIAL INSTALLATIONS. FACTORY MADE FLEXIBLE ELASTOMERIC FOAM (FEF) PRODUCTS

#### Dimensional tolerances specified by the European product Standard EN 14304

Form of delivery	Length	Width	Thick	ness	Squareness	Inside d	liameter
			Declared	Tolerance		D <sub>i</sub> ≤ 100	D <sub>i</sub> > 100
			d <sub>D</sub> ≤ 8	± 1	3,0 mm		
Tubes	± 1,5%	-	$8 < d_{D} \le 18$	± 1,5		$D_{iD} + 1 \le D_i \le D_{iD} + 4$	$\boldsymbol{D}_{iD} + 1 \leq \boldsymbol{D}_i \leq \boldsymbol{D}_{iD} + 6$
			$18 < d_D \leq 31$	± 2,5		$D_{iD} \neq 1 \leq D_i \leq D_{iD} \neq 4$	
			d <sub>D</sub> > 31	± 3			
			$d_D \le 6$	±1	3,0 mm/m (length/width) 3,0 mm (thickness)		
Sheets	± 1,5%	± 2%	6 < d <sub>D</sub> ≤ 19	± 1,5		-	-
			d <sub>D</sub> > 19	± 2			
	+ 5% - 1.5%		$d_{D} \leq 6$	± 1	3,0 mm/m		
Rolls		± 2%	6 < d <sub>D</sub> ≤ 19	± 1,5	(length/width) 3,0 mm	-	-
			d <sub>D</sub> > 19	± 2	(thickness)		
Tapes	+ 5% - 1.5%	± 2%	d <sub>D</sub> = 3	- 0.1 + 1,5	-	-	-



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