

# **Technical Data Sheet**

# EGOTAPE 4000 UNIVERSAL

is a self-adhesive, cross-laminated, thermoplastic, butyl rubber-based sealing tape. The lamination consists of an anthracite-coloured, highly tear-resistant HDPE film that is cross-laminated. Due to the cross lamination, the nail sealing tape has a high tear resistance and thus promises long-lasting sealing even despite drilling, screwing or nailing through. With its properties and components, the nail sealing tape is excellently suited as a joint tape in the field of "sustainable building" and has been verified according to the DGNB, LEED, BREEAM and BNB rating systems.

#### **CHARACTERISTICS**

#### This combination results in optimal product properties:

 $bitumen-compatible \cdot bitumen-free \cdot easy processing \cdot good \ adhesion \ and \ compatibility \ with \ most \ known \ materials \cdot has \ an insulating$ effect · high tear and tear propagation resistance · high water vapour diffusion impermeability · immediately functional even without  $primer \cdot noise-insulating \cdot non-corrosive \cdot non-shrinking \cdot odourless \cdot physiologically \ harmless \cdot plastic \cdot radon-proof according to 6.$ Keller · resistant to ageing, weathering, UV and long-term use · screw-tight · self-adhesive on one side · smooth foil surface · solventfree · water pressure-tight up to 4 bar [on the foil side] · water-proof · water-resistant · when used properly and professionally, EGO Butyl has an almost unlimited service life

### APPLICATION AREAS

EGOTAPE 4000 UNIVERSAL For simple and permanent sealing of construction and connection joints. Furthermore, the universal sealing tape is suitable for radon sealing, especially of building components in contact with the ground and in interior rooms, e.g. to protect against soil moisture and pressing water. A significant area of application for the deadening of noise can be found in the area of window sills. Corrosion protection on pipelines, or installation in the field of air conditioning, ventilation, heating and cooling system construction is another universal feature of the sealing tape.

#### Areas of application:

 $\alpha$  arcade rooflights  $\cdot$  balconies  $\cdot$  concrete construction  $\cdot$  connections  $\alpha$  terminations on the roof  $\cdot$  door connections  $\cdot$  edge terminations garage roofs arcades · loggias · prefabricated concrete construction · skylight domes · smoke & heat extraction systems · terraces underlay webs

### APPLICATION NOTES

The bonding surfaces must be dry, stable, free of dust and de-bonding agents. On porous substrates such as concrete, plaster, etc., adhesion can be increased by pre-treatment with EGO BUTYLPRIMER ECO or EGO BUTYLPRIMER PRO (solvent-free). For increased adhesion, please refer to the primer table. The adhesion build-up on the substrate is purely physical and can be improved by pressing or rolling on the substrate or increases again automatically over time. The temperature behaviour is typically thermoplastic, i.e. with increasing temperature, a higher stickiness with simultaneously softer material consistency is achieved. Cross laying in the roof area should be avoided as there is a risk of being pushed off by snow and ice loads. The adhesive surface of the sealing tape must be at least 20 mm on both sides of the joint [gap] for joint overlays on smooth, non-absorbent substrates and at least 30 mm on porous, absorbent substrates. The necessary pressure is applied with a pressure roller. Avoid folds and creases and roll out with care. Simply dab off butyl residues on the substrates or tools with butyl. Impurities that are difficult to dissolve can be removed mechanically, e.g. with a sharp knife moistened with water, and are best dissolved with cleaning petrol.

Compatibility with other building materials is only guaranteed with the EGO products recommended for this.

Our list of material properties provides you with an overview of all the necessary information and a detailed comparison of our EGO BUTYL products.

#### NORMS AND TESTS

#### EGOTAPE 4000 corresponds to the:

#### **IVD Instruction Sheets:**

■ No. 5, 19-1, 19-2, 24, 25, 29, 31

#### Tests:

- Compatibility with bitumen in accordance with DIN EN 1548
- radon density according to ISO/TS 11665-13
- Watertightness according to DIN EN 1928, method B

#### **Classification report:**

according to building material class E according to DIN EN 13501

#### SUSTAINABILITY

#### VOC emission according to:

- EMICODE EC1Plus
- AgBB
- French VOC Class A+ and CMR-Regulation

#### BMS product verifications:

- LEED Building Design and Construction V4 [2015]
- BNB BN 2015 [quality level 5/5]
- BREEAM International New Construction 2016
- DGNB New Buildings 2018 [quality level 4]

### Listing in baubook:

■ EGOTAPE 4000 is listed in baubook











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## **SUSTAINABILITY**

#### Listing in the DGNB Navigator:

■ EGOTAPE 4000 is listed in the DGNB Navigator

#### Material requirements for QNG / Quality Seal for Sustainable Buildings:

- Adhesives and sealants in interior rooms incl. TGA according to BNB\_BN\_1.1.6, Annex 1, Item 8 and QNG-313, Items 4.1, 4.2
- Adhesives and sealants for creating the airtightness of the façade in accordance with BNB\_BN\_11.6, Annex 1, Item 9 and QNG-313, Item 4.3







### **TECHNICAL DATA**

Product-Properties	Result	in accordance with
Material Basis sealant	butyl rubber, polyisobutylene [PIB]	
Material Basis film	Highly tear-resistant HDPE film anthracite [thickness: 100 µm]	
Application Temperature	+5 °C to +30 °C	
Service Temperature	-40 °C to +90 °C	
Viscosity	stable	DIN EN ISO 7390
Solids Content	> 99 %	DIN EN ISO 10563
μ - Value	approx. 766000	DIN EN ISO 12572
Sd-Value	$Sd = \mu \times d$	d = tape thickness in [m]

Butyl-Properties	Result	in accordance with		
Density	approx. 1.6 g/cm³	DIN EN ISO 1183-1		
Shore Hardness 00	approx. 40	DIN EN ISO 868		
Compressive Strength	> 0.07 N/mm <sup>2</sup>	LAB-01 [based on NF P30-303]		
Penetration butyl [150g, 23°C, 5sec]	approx. 75 [0,1mm]*, Butyl 30x30mm	DIN 51580		
Peel strength butyl	approx. 20 N/25mm*	LAB-06 [based on DIN EN 29862]		
UV, weather and long-term resistance of butyl [after 1000 hrs]	very good no crack formation no breaking no reduction of the tack	DIN EN ISO 4892-2:2013		
Bending resistance of butyl [after 100 hrs at +90°C & 5 hrs at -30°C]	No crack formation No breaking			
Building material class	B2, normal flammability Euro class E	DIN 4102 EN 13501-1		

<sup>\*</sup>Average values, not intended for specification

Film-properties	Result	in accordance with	
Tear strength	approx. 250 N/5cm	DIN EN 12311-2	
Elongation at break	approx. 200 %	DIN EN 12311-2	
Tear Resistance	approx. 75 N	DIN EN 12310-1	









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AVAILABILITY AND STORAGE	Standard Color Butyl	black			
	Standard Color Film	anthracite			
	Standard Dimensions	Thickness x Width	Meters/Roll	Rolls/Box	Meters/Box
		1,0 x 50 mm	10	12	12
		1,0 x 80 mm	10	8	80
		1,0 x 100 mm	10	8	80
		1,0 x 150 mm	10	4	40
		1,0 x 50 mm	30	12	360
		1,0 x 75 mm	30	4	120
		1,0 x 100 mm	30	2	60
		1,0 x 150 mm	30	2	60
		1,0 x 200 mm	30	2	60
		1,0 x 250 mm	30	1	30
		1,0 x 300 mm	30	1	30
		1,0 x 400 mm	30	1	30
		Special sizes on request			
	Storage	Rolls can be stored horizontally, dry and protected from dust:  24 months [at +20°C]  Protect against mechanical damage.			
SAFETY INFORMATION	Complies with	Regulation [EC] No 1907/2006 [REACH]			
	Not hazardous according to	Regulation [EC] No 1272/2008 [CLP]			
	Not subject to labeling according to	Regulation [EC] No 1272/2008 [CLP]			
	Safety instructions	see SDS			

see SDS

**Disposal instructions** 

For warnings see EC safety data sheet. The above information is the result of thorough research; previous information is hereby invalidated. Check for yourself whether the product is suitable for your purposes. Our possible liability is limited to the value of our product as such. We cannot accept any liability for indirect damage, in particular for the use or unusability of the product. No one is authorized to make recommendations or assurances on our behalf that go beyond the content of our information sheets.







