

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:

self-adhesive on one side · easy processing · immediately functional even without primer · resistant to ageing, weathering, UV and long-term use · smooth foil surface · radon-proof according to G. Keller · high tear and tear propagation resistance · screw-tight · water pressure-tight up to 4 bar [on the foil side] · solvent- and bitumen-free · physiologically harmless · odourless · noise-insulating · water-proof and -resistant · high water vapour diffusion impermeability · non-corrosive · has an insulating effect · bitumen-compatible · plastic · non-shrinking · good adhesion and compatibility with most known materials · 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:

connections & terminations on the roof · balconies · concrete construction · prefabricated concrete construction · garage roofs · arcades · arcade rooflights · skylight domes · loggias · edge terminations · smoke & heat extraction systems · terraces · door connections · 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 EC1^{plus}
- 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

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_1.1.6, Annex 1, Item 9 and QNG-313, Item 4.3



*Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ [très faibles émissions] à C [fortes émissions]

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 = µ x d | d = tape thickness in [m] |

| Butyl-Properties | Result | in accordance with |
|---|--|--------------------------------|
| Density | approx. 1,6 g/cm ³ | DIN EN ISO 1183-1 |
| Shore Hardness 00 | approx. 40 | DIN EN ISO 868 |
| Compressive Strength | > 0,07 N/mm ² | 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 ^{2*} | 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 |

*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: <ul style="list-style-type: none"> ■ 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 |
| Disposal instructions | see SDS |

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.