

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Trade name of the product: Bekatherm EPS 100

Details of the manufacturer:

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2. DESCRIPTION AND FIELD OF APPLICATION

Bekatherm EPS 100 is a thermal insulation board made of expanded polystyrene without adding any admixture during the production process in accordance with SRPS EN 13163.

It finds its application in civil engineering for thermal insulation in the areas with less loaded horizontal surfaces (lower pedestrian load), in accordance with the mechanical characteristics of the product, as well as for thermal insulation of concrete elements of sloped roofs.

Depending on the mechanical, safety and thermal requirements it can be used as a thermal insulation layer in sandwich panels, sandwich walls, for thermal insulation of indoor walls, ceilings and roofs.

3. COMPOSITION

Chemical composition: Expanded polystyrene (polymer compound).

4. TECHNICAL CHARACTERISTICS

Board dimensions: Dimensions of the boards are 100 x 50 cm, from 2 to 20 cm of thickness. Production of boards of different dimensions is possible at special request by the buyer.

Packaging of boards: Boards are packaged in packages – bales of volume from 0,17m³ to 0,25m³ (depending on the thickness of the packed boards), wrapped with opaque PE foil.

Application temperature: up to 80° C

Product label key: EPS-EN 13163-L2-W2-T1-S2-P5-DS(N)2-DS(70,90)1-CS(10)100-BS150-TR200-DLT(1)5

| Characteristics | Designation | Unit | Declared | Tolerance | Harmonized technical specification |
|---|----------------|------|--------------|-----------|------------------------------------|
| Length | L | mm | L2 | ±2 | EN 822 |
| Width | W | mm | W2 | ±2 | EN 822 |
| Thickness | T | mm | T1 | ±1 | EN 823 |
| Squareness | S | mm/m | S2 | ±2 | EN 824 |
| Planarity | P | mm | P5 | ±5 | EN 825 |
| Dimensional stability | DS(N) | % | DS(N)2 | ±0,2 | EN 1603 |
| Dimensional stability at certain temp. and humidity | DS(70,90) | % | DS(70,90)1 | ≤1 | EN 1604 |
| Compressive strength at 10% deformation | CS(10) | kPa | CS(10)100 | ≥100 | EN 826 |
| Tensile strength perpendicular to the surface | TR | kPa | TR200 | ≥200 | EN 1607 |
| Bend strength | BS | kPa | BS150 | ≥150 | EN 12089 |
| Dimensional stability at certain. pressure load and temp. | DLT(1) | % | DLT(1)5 | ≤5 | EN 1605 |
| Coefficient of thermal conductivity | λ _D | W/mK | 0,035 | / | EN 12667 |
| Fire reactivity | / | / | Euro class E | / | EN 13501-1 |

| Board thickness, mm | d | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 |
|-------------------------------------|------------------|------|------|------|------|------|------|------|------|------|------|
| Lambda/thickness W/m ² K | λ _{D/d} | 1.8 | 1.2 | 0.9 | 0.72 | 0.6 | 0.51 | 0.45 | 0.4 | 0.36 | 0.33 |
| Heat resistance, m ² K/W | R _D | 0.55 | 0.85 | 1.10 | 1.40 | 1.70 | 2.00 | 2.25 | 2.55 | 2.85 | 3.10 |

| Board thickness, mm | d | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|-------------------------------------|------------------|------|------|------|------|------|------|------|------|------|
| Lambda/thickness W/m ² K | λ _{D/d} | 0.3 | 0.28 | 0.26 | 0.24 | 0.23 | 0.21 | 0.2 | 0.19 | 0.18 |
| Heat resistance, m ² K/W | R _D | 3.40 | 3.70 | 4.00 | 4.25 | 4.55 | 4.85 | 5.10 | 5.40 | 5.70 |

5. OTHER CHARACTERISTICS

Appearance: White color, compact material.

Odor: Mild unpleasant odor may appear only when cut with hot tools. The odor and the minimum vapor are non-hazardous.

6. INSTALLATION

Depending on the purpose of use and location in the structure, the thermal insulation boards are installed by bonding, mechanical fastening or free laying. When using adhesives they need to be from the group intended for bonding EPS boards such as BK EPS Kleber, Stirol Fix Base, StirolFix WDVS, StirolFix 1 or StirolFix Special, depending on the characteristics of the substrate and the conditions of exploitation of the building. If the fastening is performed mechanically, it is necessary to use fasteners (special screws, anchors ...) produced for this purpose.

The product, regardless of the choice of the installation technique, is installed according to the generally recognized professional rules.

7. HANDLING AND STORAGE

No special precautions are required when using.

Material should not be accessible to children under seven years of age without supervision.

Store in covered areas, away from heat sources and flames. Do not expose to UV rays. Prevent contact with incompatible chemicals and materials (organic solvents, oil, etc.).

8. PERSONAL PROTECTION

Respiratory protection: Not required

Hand and body protection: In case of repeated skin contact preventive use of protective gloves is recommended.

Eye protection: Does not irritate the eyes even if part of the product gets into contact with the eye. Safety goggles can be used as a preventive measure.

Fire protection: Dry extinguishing agents, light foam and water mist are recommended.

9. ECOTOXICOLOGICAL INFORMATION

Based on experience and existing information, no harmful health effects are known if used properly.

10. DISPOSAL METHOD

In accordance with local / regional / European / national regulations.

11. OTHER INFORMATION

If the contractor notices some aesthetic or application defect during the installation of

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| TECHNICAL DATA SHEET | Issue: 2 | Version: 0 |
| Bekatherm EPS 100 | RZ-TLP-099-04 | Date: 18.07.2023. |

the material, he is obliged to suspend the works and notify the manufacturer thereof, who shall as soon as possible take the complaint into the consideration. Objections in relation with the above characteristics sent to the manufacturer after the installation of the most or the entire quantity of the product, cannot be the subject of complaint.

12. NOTES

Banja Komerc Bekament DOO performs product control through its own laboratories, as well as regular testing in certified laboratories. The Technical Data Sheet is a product of our knowledge and practical experience so far and should serve to all users as a recommendation for best results. If the weather and other conditions are different from those in our instructions, our instructions should be taken as general guidelines, without the warranty for installation.

Banja Komerc Bekament DOO does not assume any responsibility for any damage caused by improper use or incorrect choice of product, as well as for low-quality execution of works. It is assumed that the contractor has mastered the techniques of installation and use of various products.

We shall not be bound by anything written.

This document supersedes all previous versions which are considered void from the date of preparation stated herein.

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Chapters amended: 4.