

## KNAUF Therm Tech Facade $\lambda$ 42 (EPS S)



KNAUF Therm Tech Facade  $\lambda$  42 polystyrene panels are designated by the following code according to EN standard

EN 13163:2012+A1:2015

**EPS EN 13163 T(1)-L(2)-W(2)-S(2)-P(5)-BS75-DS(N)2-DS (70,-)1-TR80**

KNAUF Therm Tech Facade  $\lambda$  42 polystyrene panels are manufactured by a double foaming polystyrene method. Thanks to this method product has excellent insulation properties and better performance. Panels are designated for thermal insulation of walls in old and new buildings. Panels are available in seamed and no-seamed versions.

### PURPOSE

KNAUF Therm Tech Facade  $\lambda$  42 polystyrene panels are designated by the following code according to EN standard 13163:2012+A1:2015. The main purpose is:

- exterior thermal insulation made using ETICS the „light wet” method
- exterior thermal insulation made using ETICS the „light dry” method
- Thermal insulation:
  - on skeleton wall surface
  - in closed gap of tri-layer wall
  - in ventilated gap of tri-layer wall
  - of balcony loggias
  - of tie beams, window reveals and lintels
- filling of expansion joints

### GUIDELINES FOR FASTENING KNAUF THERM TECH FACADE $\lambda$ 42

Before commencing installation of KNAUF Therm Tech Facade  $\lambda$  42 panels, check the condition of the substrate. The substrate must be load-bearing, clean and degreased. Loose fragments poorly bound to the substrate should be removed before gluing polystyrene panels. The substrate for KNAUF Therm Tech Facade  $\lambda$  42 should be primed with KNAUF Tieffengrund.

Universal KNAUF FIBER-REINFORCED GLUE or KNAUF STYROPHORM GLUE is recommended for gluing of KNAUF Therm Tech Facade  $\lambda$  42 panels.

We recommend using KNAUF FIBER-REINFORCED GLUE and KNAUF REINFORCING MESH to make the reinforced layer.

Shielding facade meshes should be used during work. Protect KNAUF Therm Tech Facade  $\lambda$  42 panels glued to the facade against the direct sunlight and weather, with facade meshes on scaffolding.

KNAUF Therm Tech Facade  $\lambda$  42 has elevated resistance to UV radiation, however long-term, direct exposure to UV radiation may cause a yellowish tarnish on a panel's surface. This tarnish must be removed before applying of the reinforcing layer.

**ATTENTION**

Protect panels against direct contact with substances damaging polystyrene, e.g. organic solvents (acetone, nitroglycerin, benzene, etc.)

**TECHNICAL DATA**

| $\lambda_D$ Thermal conductivity coefficient W/(mK)                     | $\leq 0.042$                                    |
|-------------------------------------------------------------------------|-------------------------------------------------|
| Edge shape                                                              | rectangular / seamed                            |
| Dimensions                                                              | 1000 x 500 mm<br>max. dimensions 4000 x 1200 mm |
| Self-extinguishing capacity                                             | SELF-EXTINGUISHING                              |
| Class of reaction to fire                                               | E                                               |
| Bending strength (kPa)                                                  | BS 75 ( $\geq 75$ )                             |
| Tensile strength (force applied perpendicularly to face surfaces) [kPa] | TR 80 ( $\geq 80$ )                             |

**PACKAGING, STORAGE, TRANSPORT**

KNAUF Therm Tech Facade  $\lambda$  42 polystyrene panels are solely delivered in the manufacturer's, i.e. KNAUF Industries, original packaging. A product's packaging contains information concerning: product name, name of manufacturer, production date, Polish Standard no. EN 13163:2012+A1:2015, code according to standard, and declared technical parameters.

KNAUF Therm Tech Facade  $\lambda$  42 should be stored in a manner that protects them against mechanical damage and the weather conditions.

| Packaging            |                                     | Thermal resistance          | Standard format 1000*500 [mm]    |                                | Seamed panels 990*490 [mm]       |                                |
|----------------------|-------------------------------------|-----------------------------|----------------------------------|--------------------------------|----------------------------------|--------------------------------|
| Panel thickness [mm] | Number of panels per package [szt.] | $R_D$ [m <sup>2</sup> *K/W] | Package volume [m <sup>3</sup> ] | Covered area [m <sup>2</sup> ] | Package volume [m <sup>3</sup> ] | Covered area [m <sup>2</sup> ] |
| 10                   | 56                                  | 0,20                        | 0,28                             | 28                             | –                                | -                              |
| 20                   | 30                                  | 0,45                        | 0,3                              | 15                             | –                                | -                              |
| 30                   | 20                                  | 0,65                        | 0,3                              | 10                             | –                                | -                              |
| 40                   | 15                                  | 0,90                        | 0,3                              | 7,5                            | –                                | -                              |
| 50                   | 12                                  | 1,15                        | 0,3                              | 6                              | 0,292                            | 5,820                          |
| 60                   | 10                                  | 1,35                        | 0,3                              | 5                              | 0,291                            | 4,850                          |
| 70                   | 8                                   | 1,60                        | 0,28                             | 4                              | 0,272                            | 3,880                          |
| 80                   | 7                                   | 1,80                        | 0,28                             | 3,5                            | 0,272                            | 3,395                          |
| 90                   | 6                                   | 2,05                        | 0,27                             | 3                              | 0,262                            | 2,910                          |
| 100                  | 6                                   | 2,30                        | 0,3                              | 3                              | 0,291                            | 2,910                          |
| 110                  | 5                                   | 2,50                        | 0,275                            | 2,5                            | 0,267                            | 2,425                          |
| 120                  | 5                                   | 2,75                        | 0,3                              | 2,5                            | 0,291                            | 2,425                          |
| 130                  | 4                                   | 3,00                        | 0,26                             | 2                              | 0,252                            | 1,940                          |
| 140                  | 4                                   | 3,20                        | 0,28                             | 2                              | 0,272                            | 1,940                          |
| 150                  | 4                                   | 3,45                        | 0,3                              | 2                              | 0,291                            | 1,940                          |
| 160                  | 3                                   | 3,85                        | 0,24                             | 1,5                            | 0,233                            | 1,455                          |
| 170                  | 3                                   | 3,90                        | 0,255                            | 1,5                            | 0,248                            | 1,455                          |
| 180                  | 3                                   | 4,15                        | 0,27                             | 1,5                            | 0,262                            | 1,455                          |
| 190                  | 3                                   | 4,35                        | 0,285                            | 1,5                            | 0,277                            | 1,455                          |
| 200                  | 3                                   | 4,60                        | 0,3                              | 1,5                            | 0,291                            | 1,455                          |
| 210                  | 2                                   | 5,05                        | 0,21                             | 1                              | 0,204                            | 0,970                          |
| 220                  | 2                                   | 5,05                        | 0,22                             | 1                              | 0,213                            | 0,970                          |
| 230                  | 2                                   | 5,30                        | 0,23                             | 1                              | 0,223                            | 0,970                          |
| 240                  | 2                                   | 5,50                        | 0,24                             | 1                              | 0,233                            | 0,970                          |
| 250                  | 2                                   | 5,75                        | 0,25                             | 1                              | 0,243                            | 0,970                          |
| 260                  | 2                                   | 6,00                        | 0,26                             | 1                              | 0,252                            | 0,970                          |
| 270                  | 2                                   | 6,20                        | 0,27                             | 1                              | 0,262                            | 0,970                          |
| 280                  | 2                                   | 6,45                        | 0,28                             | 1                              | 0,272                            | 0,970                          |
| 290                  | 2                                   | 6,65                        | 0,29                             | 1                              | 0,281                            | 0,970                          |
| 300                  | 2                                   | 6,90                        | 0,3                              | 1                              | 0,291                            | 0,970                          |