

|         | TECHNICAL DATA SHEET                                                                                                      |                    |                                                                                                                                                        |      |      |      |        |      |      |      |      |      |      |      |                         | 16.01.2013    |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|--------|------|------|------|------|------|------|------|-------------------------|---------------|
|                                                                                        | ATYAPI FOAMBOARD<br>TYPE 3500 - D                                                                                         |                    |                                                                                                                                                        |      |      |      |        |      |      |      |      |      |      |      |                         |               |
| Properties                                                                             | Symbol                                                                                                                    | Unit               | Description                                                                                                                                            |      |      |      |        |      |      |      |      |      |      |      | Tolerance               | Standard      |
| Material                                                                               | -                                                                                                                         | -                  | XPS Type 3500 - D                                                                                                                                      |      |      |      |        |      |      |      |      |      |      |      | -                       | TS EN 13164   |
| Edge Profile                                                                           | -                                                                                                                         | -                  | Square, Ship-lap                                                                                                                                       |      |      |      |        |      |      |      |      |      |      |      | -                       | -             |
| Surface                                                                                | -                                                                                                                         | -                  | With skin                                                                                                                                              |      |      |      |        |      |      |      |      |      |      |      | -                       | -             |
| Density                                                                                | ρ                                                                                                                         | kg/m <sup>3</sup>  | min.28                                                                                                                                                 |      |      |      | min.30 |      |      |      |      |      |      |      | -                       | -             |
| Width                                                                                  | b                                                                                                                         | mm                 | 600                                                                                                                                                    |      |      |      |        |      |      |      |      |      |      |      | ±8                      | TS EN 822     |
| Length                                                                                 | l                                                                                                                         | mm                 | 1250                                                                                                                                                   |      |      |      |        |      |      |      |      |      |      |      | ±10                     | TS EN 823     |
| Thickness                                                                              | d                                                                                                                         | mm                 | 20                                                                                                                                                     | 25   | 30   | 40   | 50     | 60   | 70   | 80   | 90   | 100  | 120  | 150  | T2                      | TS EN 823     |
| Reaction to fire                                                                       | -                                                                                                                         | -                  | E                                                                                                                                                      |      |      |      |        |      |      |      |      |      |      |      | -                       | TS EN 13501-1 |
| Thermal Conductivity<br>Declared Value (10 °C) <sup>(3)</sup>                          | λ <sub>D</sub>                                                                                                            | W/mK               | 0,035                                                                                                                                                  |      |      |      |        |      |      |      |      |      |      |      | -                       | TS EN 13164   |
| Thermal Resistance                                                                     | R <sub>D</sub>                                                                                                            | m <sup>2</sup> K/W | 0,55                                                                                                                                                   | 0,70 | 0,85 | 1,10 | 1,40   | 1,70 | 2,00 | 2,25 | 2,55 | 2,85 | 3,40 | 4,25 | -                       | TS EN 13164   |
| Maximum Service<br>Temperature                                                         | -                                                                                                                         | °C                 | -50/+75                                                                                                                                                |      |      |      |        |      |      |      |      |      |      |      | -                       | -             |
| Water Vapor Diffusion<br>Resistance Coefficient                                        | μ                                                                                                                         | -                  | 100                                                                                                                                                    |      |      |      |        |      |      |      |      |      |      |      | MU100                   | TS EN 12086   |
| Tensile Strength<br>Perpendicular to Faces                                             | σ <sub>mt</sub>                                                                                                           | kPa                | min.600                                                                                                                                                |      |      |      |        |      |      |      |      |      |      |      | TR600                   | TS EN 1607    |
| Dimensional Stability<br>Under Specified Thermal<br>and Compressive Load<br>conditions | DS(T+)                                                                                                                    | %                  | max.5 <sup>(2)</sup>                                                                                                                                   |      |      |      |        |      |      |      |      |      |      |      | DLT(1)5<br>DLT(2)5      | TS EN 1605    |
| Dimensional Stability<br>Under Specified Thermal<br>and Humidity Conditions            | DS(TH)                                                                                                                    | %                  | < 5 (at 70+2oC after 48 hours) (3)<br>< 5 (at 70+2oC and % 90+5 relative humidity after 48)(4)<br>< 2 (at 23+2oC % 90+5 relative humidity after 48)(5) |      |      |      |        |      |      |      |      |      |      |      | DS(T+)5<br>DS(TH)5<br>- | TS EN 1604    |
| Compressive Strength                                                                   | σ <sub>10</sub>                                                                                                           | kPa                | min.350                                                                                                                                                |      |      |      |        |      |      |      |      |      |      |      | CS(10/Y)300             | TS EN 826     |
| Compressive Creep                                                                      | σ <sub>c</sub>                                                                                                            | kPa                | 10                                                                                                                                                     |      |      |      |        |      |      |      |      |      |      |      | CC(2/1,5/10)10          | TS EN 1606    |
| Freeze Throw Resistance                                                                | W <sub>V</sub>                                                                                                            | %                  | max.1                                                                                                                                                  |      |      |      |        |      |      |      |      |      |      |      | FT2                     | TS EN 12091   |
| Long Term Water<br>Absorption with Total<br>Immersion                                  | W <sub>lt</sub>                                                                                                           | %                  | max.(0,7)                                                                                                                                              |      |      |      |        |      |      |      |      |      |      |      | WL(T) 0,7               | TS EN 12087   |
| Long Term Water<br>Absorption with Diffusion                                           | W <sub>dV</sub>                                                                                                           | %                  | max.3                                                                                                                                                  |      |      |      |        |      |      |      |      |      |      |      | WD(V)3                  | TS EN 12088   |
| Lineer Shrinkage                                                                       | -                                                                                                                         | mm/m K             | max.(0,07)                                                                                                                                             |      |      |      |        |      |      |      |      |      |      |      | -                       | -             |
| Packaging Material                                                                     | -                                                                                                                         | -                  | PE Film                                                                                                                                                |      |      |      |        |      |      |      |      |      |      |      | -                       | -             |
| Application Area                                                                       | For thermal insulation purposes of external walls from inside and for water insulation purposes of basements under ground |                    |                                                                                                                                                        |      |      |      |        |      |      |      |      |      |      |      |                         |               |
| Remarks                                                                                | There is no ship-lap at 20 mm thickness.                                                                                  |                    |                                                                                                                                                        |      |      |      |        |      |      |      |      |      |      |      |                         |               |

<sup>(1)</sup> TS EN 13164 Annex C: According to average of 25 years aged values λ<sub>(90/90)</sub>

<sup>(2)</sup> TS EN 13164 /Item 4.3.2.3.

<sup>(3)</sup> TS EN 13164 /Item 4.3.2.1.

<sup>(4)</sup> TS EN 13164 /Item 4.3.2.2.

<sup>(5)</sup> TS EN 13164 / Item 4.2.4.