



## Dow Building Solutions

### Technical Data

# XENERGY™ SL

Extruded polystyrene foam XPS (EN13164) - HFC free - grey color

| Property                                                                          | Standard      | Unit              | Value                                           | EN code                 |
|-----------------------------------------------------------------------------------|---------------|-------------------|-------------------------------------------------|-------------------------|
| Thermal conductivity<br>Declared value <sup>1)</sup>                              |               |                   |                                                 |                         |
| Thickness<br><60 mm                                                               | BS EN 13164   | W/mK              | 0.030                                           | $\lambda_D$             |
| 60-80 mm                                                                          | BS EN 13164   | W/mK              | 0.031                                           | $\lambda_D$             |
| >80 mm                                                                            | BS EN 13164   | W/mK              | 0.032                                           | $\lambda_D$             |
| Mechanical properties                                                             |               |                   |                                                 |                         |
| Compressive strength or compressive stress<br>at 10% deformation (90 days)        | BS EN 826     | kPa               | 300                                             | CS(10\Y)                |
| Compressive creep (design load) max 2%<br>deflection after 50 years <sup>2)</sup> | BS EN 1606    | kPa               | 110                                             | CC(2/1.5/50) $\sigma_c$ |
| Hygrometric properties                                                            |               |                   |                                                 |                         |
| Long term water absorption by immersion (28 days)                                 | BS EN 12087   | Vol-%             | ≤0.7                                            | WL(T)                   |
| Long term water absorption by diffusion<br>dN ≥50 mm to <80 mm                    | BS EN 12088   | Vol-%             | ≤2                                              | WD(V)                   |
| dN ≥80 mm                                                                         | BS EN 12088   | Vol-%             | ≤1                                              | WD(V)                   |
| Freeze/thaw, after 300 cycles                                                     | BS EN 12091   | Vol-%             | ≤1                                              | FTCD                    |
| Dimensions and tolerances                                                         |               |                   |                                                 |                         |
| Thickness                                                                         | BS EN 823     | mm                | 50, 80, 100,<br>120, 140, 160,<br>180, 200, 205 | T                       |
| Width                                                                             | BS EN 822     | mm                | 600                                             | —                       |
| Length                                                                            | BS EN 822     | mm                | 1250                                            | —                       |
| Other properties                                                                  |               |                   |                                                 |                         |
| Reaction to fire                                                                  | BS EN 13501-1 | —                 | E                                               | Euroclass               |
| Linear thermal expansion coefficient                                              | —             | mm/m.K            | 0.07                                            | —                       |
| Maximum service temperature                                                       | —             | °C                | +75                                             | —                       |
| Capillarity                                                                       | —             | —                 | 0                                               | —                       |
| Density                                                                           | BS EN 1602    | kg/m <sup>3</sup> | 34                                              | —                       |
| Surface                                                                           | —             | —                 | skin                                            | —                       |
| Edge profile                                                                      | —             | —                 | shiplap                                         | —                       |

**EN designation code:** T1-CS(10\Y)300-CC(2/1.5/50)110<sup>2)</sup>-WL(T)0.7-WD(V)1,2<sup>3)</sup>-FTCD1-DS(70,90)-DLT(2)5

1) Declared thermal conductivity  $\lambda_D$  according to EN 13164 (§ 4.2.1; Annex A; Annex C.2 and C.4.1)

2) for thickness ≥80mm

3) varies with thickness

| Thickness [mm]                       | 50   | 80   | 100  | 120  | 140  | 160  | 180  | 200  | 205  |
|--------------------------------------|------|------|------|------|------|------|------|------|------|
| R <sub>D</sub> [m <sup>2</sup> .K/W] | 1.65 | 2.60 | 3.15 | 3.75 | 4.35 | 5.00 | 5.60 | 6.25 | 6.40 |