SYNTHOS XPS PRIME 30 (I, L, N)

Extruded polystyrene board

Declaration of Performance
No SK/P30/2013/01
Date of compilation: 2013-07-01

1. **Unique identification code of the product type:**

   Synthos XPS Prime 30 (I, L, N) 40, 50 mm: XPS - EN 13164 -T1- DS(70,90) - DLT(2)5 - CS(10\Y)300 - WL(T)0,7 - WD(V)3 - FTCD1

   Synthos XPS Prime 30 (I, L, N) 60, 80 mm: XPS - EN 13164 -T1- DS(70,90) - DLT(2)5 - CS(10\Y)300 - WL(T)0,7 - WD(V)2 - FTCD1

   Synthos XPS Prime 30 (I, L, N) 100, 120 mm: XPS - EN 13164 -T1- DS(70,90) - DLT(2)5 - CS(10\Y)300 - WL(T)0,7 - WD(V)1 - FTCD1

2. **Element allowing identification of the construction product::**

   Production date given on the label.

3. **Intended applications of building products with the accordance to harmonized technical specification:**

   - perimeter insulation of walls above and below ground level
   - insulation of floors and floorings
   - insulation of strip footings and slab foundations
   - insulation of inverted and classical flat-roofs
   - insulation of transportation routes and parking lots
   - insulation of plinths and attics
   - insulation of railways and tramways
   - insulation of terraces, loggias and balconies
   - insulation of pitched roofs
   - insulation of elements of agricultural, utility and livestock buildings
   - insulation of places where cold bridges may appear
   - XPS sandwich panels
   - construction panels with XPS core
   - formwork
   - other thermoinsulation application in construction with the accordance to the local regulations and standards

4. **Trade name and contact address of the manufacturer:**

   SYNTHOS XPS PRIME 30 (I, L, N)

   Synthos Kralupy a.s.

   O. Wichterleho 810

   278 01 Kralupy nad Vltavou , Czech Republic

5. **System of assessment and verification of constancy of performance of the construction product:**

   System 3

6. Pursuant to the harmonized standard EN 13164 Centrum stavebního inženýrství, a.s., [Centre of Building Construction Engeneering Inc.,] (nr 1390), conducted initial type test in System 3 and issued test Reports No.: 1390-CPD-0372/13/P.

7. **Declared performance** – Table No. 1

Essential characteristics	Performance	Harmonized technical specification:
Thermal resistance and thermal conductivity	Table No. 2 below	EN 12667:2001
Reaction to fire	Euroclass E	EN 13501-1:2007+A1:2009, EN ISO 11925:2010
Length and width	At nominal length and width ≤ 1500 mm: ± 8 mm > 1500 mm: ± 10 mm	EN 822:1994
Thickness within T1 thickness tolerance class	40 ÷ 120 mm	EN 823: 1994
Squareness on length and width	5 mm/m	EN 824:1994
Flatness	At nominal length and width 6 mm/m	EN 825:1994
Dimensional stability at 70°C and 90% relative humidity	Relative changes in length, width and thickness not exceeding 5%	EN 1604: 1996/A1:2006
Deformation under specific conditions of compressive load of 40 kPa and at temperature of 70°C	≤ 5%	EN 1605:1996/A1:2006
Compressive strength	≥300 kPa	EN 826:1996
Long term water absorption by total immersion	≤ 0.7%	EN 12087:1997/A1:2006
Long term water absorption by diffusion	Table No. 3 below	EN 12088:1997
Freeze- thaw resistance after long term water diffusion test	≤ 1 %	EN 12091:2000

Table No. 2. Heat values for particular thickness

Thickness [mm]	Coefficient of heat conductivity λ_D [W/mK]	Thermal resistance R_D [m^2K/W]
40	≤ 0,033	≥ 1,15
50	≤ 0,034	≥ 1,40
60	≤ 0,034	≥ 1,70
80	≤ 0,036	≥ 2,10
100	≤ 0,037	≥ 2,60
120	≤ 0,038	≥ 3,05

Table No. 3. Long term water absorption by diffusion for particular thickness

Thickness [mm]	Long term water absorption by diffusion [%]
40	≤ 3
50	≤ 3
60	≤ 2
80	≤ 2
100	≤ 1
120	≤ 1

8. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 7.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

HSE&Q Manager	Plant Manager	Chairman of the Board
Norbert Eichler	Andrzej Modrzyk	Zbigniew Warmuz

Kralupy nad Vltavou, 2013-07-01

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