SYNTHOS XPS PRIME 25 (IR)

Extruded polystyrene board

Declaration of Performance
No SK/P25R/2014/01
Date of compilation: 2014-10-01

1. **Unique identification code of the product- type:**
   SYNTHOS XPS Prime 25IR

2. **Intended use:**
   Thermal insulation for buildings

3. **Manufacturer:**
   SYNTHOS XPS Prime 25 (IR)
   Synthos Kralupy a.s.
   O. Wichterleho 810
   278 01 Kralupy nad Vltavou,
   Czech Republic

4. **System of assessment and verification of constancy of performance:**
   System 3

5. Harmonised standard EN 13164:2013

   Notified body: Centrum stavebního inženýrství, a.s., [Centre of Building Construction Engeneering Inc.,] (nr 1390).

6. **Declared performances** - Table No. 1

Essential characteristics	Performance	Harmonized technical specification:
Thermal resistance and thermal conductivity	Table No. 2 below	EN 13164:2013
Stability of thermal resistance under the effect ageing and degradation	(a)	EN 13164:2013
Reaction to fire	Euroclass E	EN 13164:2013
Durability of reaction to fire against heat, weathering, ageing/ degradation	no changes	EN 13164:2013
Reaction to fire of the product in standardized assemblies simulating end-use applications	NPD	EN 13164:2013
Contionus glowing combustion	NPD	EN 13164:2013

SYNTHOS Kralupy a.s.
O.Wichterleho 810, 278 01 Kralupy nad Vltavou,
tel. +420 315 711 111, fax +420 315 723 566
www.synthosgroup.com

Length and width	At nominal length and width ≤ 1500 mm: ± 8 mm > 1500 mm: ± 10 mm	EN 13164:2013
Thickness within T1 thickness tolerance class	20 ÷ 30 mm	EN 13164:2013
Squareness on length and width	5 mm/m	EN 13164:2013
Flatness	At nominal length and width 6 mm/m	EN 13164:2013
Dimensional stability at 70°C and 90% relative humidity	Relative changes in length, width and thickness not exceeding 5%	EN 13164:2013
Deformation under specific conditions of compressive load of 40 kPa and at temperature of 70°C	NPD	EN 13164:2013
Compressive strength	≥250 kPa	EN 13164:2013
Stability of stress in pressure under the effect of ageing and degradation - compressive creep	NPD	EN 13164:2013
Long term water absorption by total immersion	≤ 1.5%	EN 13164:2013
Long term water absorption by diffusion	NPD	EN 13164:2013
Stability of thermal resistance under the effect of heat, weather, ageing and degradation- freeze-thaw resistance after long term water diffusion test	NPD	EN 13164:2013
Stability of thermal resistance under the effect of heat, weather, ageing and degradation - freeze - thaw resistance after long term water absorption by total immersion	NPD	EN 13164:2013
Water vapour diffusion resistance factor	≥ 100	EN 13164:2013
Tensile strength perpendicular to faces	≥ 200 kPa	EN 13164:2013
Release of dangerous substances	NPD	EN 13164:2013
Shear strength	≥ 170 kPa	EN 13164:2013
Bending strength	Table No. 3 below	EN 13164:2013

(a) In conformity with Annex C, EN 13164: 2013, the declared value of thermal resistance given in Table 2 allows for modifications in thermal conductivity of Synthos XPS Prime by the effect of time.

SYNTHOS Kralupy a.s.
O.Wichterleho 810, 278 01 Kralupy nad Vltavou,
tel. +420 315 711 111, fax +420 315 723 566
www.synthosgroup.com

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]
20	≤ 0,032	≥ 0,55
30	≤ 0,033	≥ 0,80

Table No. 3. Bending strength for particular thickness

Thickness [mm]	Bending strength [kPa]
20	≤ 600
30	≤ 500

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

HSE&Q Manager

Norbert Eichler

Chairman of the Board

Jolanta Brudnicka

Kralupy nad Vltavou, 2014-10-01

SYNTHOS Kralupy a.s.
O.Wichterleho 810, 278 01 Kralupy nad Vltavou,
tel. +420 315 711 111, fax +420 315 723 566
www.synthosgroup.com