Deutsches Institut für Bautechnik

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Approval body for construction products and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and Laender Governments

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European Technical Assessment

ETA-19/0078 of 10 March 2020

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the European Technical Assessment:	Deutsches Institut für Bautechnik
Trade name of the construction product	"WIBRO EPS Perimeterdämmplatte", "WIBRO Perimeterdämm- und Drainplatte" and "WIBRO WDV Perimeter- und Sockeldämmplatte"
Product family to which the construction product belongs	Expanded polystyrene (EPS) foam boards as thermal insulation outside the waterproofing
Manufacturer	Wilhelm Brohlburg Kunststoff- und Kaschierwerke GmbH & Co. KG Obere Löhrstraße 6 56626 Andernach DEUTSCHLAND
Manufacturing plant	Wilhelm Brohlburg Kunststoff- und Kaschierwerke GmbH & Co. KG Obere Löhrstraße 6 56626 Andernach DEUTSCHLAND
This European Technical Assessment contains	6 pages which form an integral part of this assessment
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of	EAD 040773-00-1201
This version replaces	ETA-19/0078 issued on 17 April 2019

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Specific Part

1 Technical description of the product

This European Technical Assessment applies to the thermal insulation boards of expanded polystyrene (EPS) with the designations:

"WIBRO EPS Perimeterdämmplatte", "WIBRO Perimeterdämm- und Drainplatte" and "WIBRO WDV Perimeter- und Sockeldämmplatte"

This European Technical Assessment applies to thermal insulation boards with a nominal thickness from 60 mm to 200 mm.

The thermal insulation boards "WIBRO EPS Perimeterdämmplatte" and "WIBRO Perimeterdämm- und Drainplatte" have a grooved ambossment on one side (depth 5 mm).

The thermal insulation boards "WIBRO Perimeterdämm- und Drainplatte" are coated with a filter fleece.

The thermal insulation boards "WIBRO WDV Perimeter- und Sockeldämmplatte" have a moulded surface.

The thermal insulation boards do not contain Hexabromocyclododecane (HBCD).

The European Technical Assessment has been issued for the product on the basis of agreed data/information, deposited with Deutsches Institut für Bautechnik, which identifies the product that has been assessed. The European Technical Assessment applies only to products corresponding to this agreed data/information.

2 Specification of the intended use in accordance with the applicable European Assessment Document

The thermal insulation boards are intended to be used as external horizontal and vertical thermal insulation of in-ground constructions outside the waterproofing (non-structural application) not constantly exposed to groundwater or to long-term backwater.

The performance according to section 3 only applies if the thermal insulation boards are installed according to the manufacture's installation instructions and if they are protected from precipitation, wetting or weathering during transport and storage before installation.

Concerning the application of the thermal insulation boards, also the respective national regulations shall be observed.

Where the thermal insulation boards are fixed by using adhesives, only such adhesions shall be used, which are suitable for this purpose. The assessment of these fixings is not subject of this European Technical Assessment.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the expanded polystyrene foam boards of at least 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

For sampling, conditioning and testing the provisions of the EAD No 040773-00-1201 apply.

3.1 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire test acc. to EN ISO 11925-2:2010	Class E acc. to EN 13501-1:2018

3.2 Energy economy and heat retention (BWR 6)

Essential characteristic	Performance
Thermal conductivity at a reference temperature of 10 °C test acc. to EN 12667:2001 in accordance with EN 13163:2012+A1:2015	Declared value:[1] λ_D = 0,034 W/(m · K)
Moisture conversion coefficient	No performance assessed
Water absorption long term water absorption by total immersion test acc. to EN 12087:2013 (method 2A) with deviating drip-off time of max. 10 seconds at all nominal thicknesses at all nominal thicknesses	 WIBRO EPS Perimeterdämmplatte and WIBRO Perimeterdämm- und Drainplatte ≤ 3 Vol.-% WIBRO WDV Perimeter- und Sockeldämmplatte ≤ 5 Vol.-%
long term water absorption by diffusion test acc. to EN 12088:2013 at all nominal thicknesses at all nominal thicknesses	 WIBRO EPS Perimeterdämmplatte and WIBRO Perimeterdämm- und Drainplatte ≤ 5 Vol.-% (WD(V)5 acc. to EN 13163) WIBRO WDV Perimeter- and Sockeldämmplatte ≤ 10 Vol.-% (WD(V)10 acc. to EN 13163)

[1] The declared value is representive for at least 90 % of the production with a confidence level of 90 % and applies to the density range mentioned in section 3.

Essential characteristic	Performance
Freeze-thaw resistance test acc. to EN 12091:2013 at all nominal thicknesses	 WIBRO EPS Perimeterdämmplatte and WIBRO Perimeterdämm- und Drainplatte ≤ 10 Vol.-%[2] (FTCD10 acc. to EN 13163) WIBRO WDV Perimeter- and Sockeldämmplatte ≤ 15 Vol.-%[3] (FTCD15 acc. to EN 13163)
Water vapour diffusion resistance factor	No performance assessed
Geometrical properties thickness test acc. to EN 823:2013 length, width test acc. to EN 822:2013 Squareness on length and width test acc. to EN 824:2013 flatness test acc. to EN 825:2013 profiling and volume loss	Toleranz ± 2 mm (T(2) acc. to EN 13163) ± 0,6 % oder ± 3 mm [4] (L(3) bzw. W(3) acc. to EN 13163) 5 mm/m (S(5) acc. to EN 13163) 5 mm (P(5) acc. to EN 13163) no performance assessed
Deformation under specified compressive load and temperature conditions test acc. to EN 1605:2013 load: 40 kPa, temperature: (70 ± 1) °C time: (168 ± 1) h	≤ 5 % (DLT(2)5 acc. to EN 13163)
Dimensional stability under constant normal laboratory conditions test acc. to EN 1603:2013	DS(N)2 acc. to EN 13163
Dimensional stability under specified conditions test acc. to EN 1604:2013	DS(70,-)3 acc. to EN 13163
Tensile strength perpendicular to faces	no performance assessed
Bending strength test acc. to EN 12089:2013 (method B)	≥ 200 kPa (BS200 acc. to EN 13163)

[2] The water absorption after freeze-thaw cycling shall not be increased by more than 10 Vol.-% and the reduction in compressive stress at 10 % deformation of the re-dried specimens, when tested in accordance with EN 826, shall not exceed 10 % of the initial value.

[3] The water absorption after freeze-thaw cycling shall not be increased by more than 15 Vol.-% and the reduction in compressive stress at 10 % deformation of the re-dried specimens, when tested in accordance with EN 826, shall not exceed 10 % of the initial value.

[4] Whichever gives the biggest numerical tolerance

Essential characteristic	Performance
Density test acc. to EN 1602:2013	27 kg/m³ bis 35 kg/m³
Compressive stress at 10 % deformation test acc. to EN 826:2013	≥ 150 kPa (CS(10)150 acc. to EN 13163)
Compressive creep	no performance assessed

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with EAD No. 040773-00-1201, the applicable European legal act is: 1999/91/EC.

The system to be applied is:

System 3

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 10 March 2020 by Deutsches Institut für Bautechnik

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beglaubigt:
Meyer