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Authorised and notified according
to Article 29 of the Regulation (EU)
No 305/2011 of the European
Parliament and of the Council of 9
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MEMBER OF EOTA



European Technical Assessment ETA-11/0501 of 2023/12/20

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:

Alfix Banemembran Pro Watertight covering kit

Product family to which the above construction product belongs:

Watertight covering kit for wet room floors and walls based on flexible sheets

Manufacturer:

Alfix A/S
H. C. Ørsteds Vej 11-13
DK-6000 Kolding
Telephone +45 75 52 90 11
Internet www.alfix.dk

Manufacturing plant:

Alfix A/S
H. C. Ørsteds Vej 11-13
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This European Technical Assessment contains:

8 pages including 1 annex which form an integral part of the document

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:

EAD 030436-00-0503 for Watertight covering kits based on flexible sheets for wet room floors and/or walls

This version replaces:

The ETA with the same number issued on 2021/11/18

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

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II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of product

Technical description of the product

General

Alfix Banemembran Pro is a flexible sheet Banemembran Pro membrane kit which serves as a watertight covering for wet room floors and walls beneath a wearing surface.

The kit consists of the following components:

Primer

Alfix VådrumsPrimer or PlanMixPrimer which are polymer dispersions for use on moisture sensitive substrates. The primer is intended to have a significant additional function in limiting the water vapour permeability of the kit

Membrane

Alfix Banemembran Pro is a 3-ply waterproof membrane consisting of two outer layers of polypropylene non-wovens and an inner layer of polyethylene. The thickness of the membrane is 0.53 mm, and the weight is 230 g/m².

Reinforcement

The reinforcement Alfix SealStrip, Alfix VT-Rørmanchet, Alfix VT-Hjørner and Alfix VT-Tætningsbånd, are used in connection between the floor and the wall, in corners and around penetrations. For floor gullies the Alfix Afløbsmanchet is used. The reinforcement is not intended to cover the entire floor and wall covering, but is used over joints and in corners and around pipe penetrations and floor gullies

Adhesives

Adhesives covered by this ETA are: Alfix LetFix Universal, LetFix, Letfix Less dust, CombiFix, ProFix, Alfix CombiQuickFix, QuickFix premium, Alfix FlexFix, Alfix ProFix Plus and Alfix LetFix Plus.

The kit is constructed as follows:

- a layer of diluted Alfix VådrumsPrimer or PlanMixPrimer (depending on substrate)
- reinforcement of in- and outgoing corners in walls, over joints or cracks in the substrate, around pipe penetrations, floor gullies and along the connection between floor and wall with reinforcement Alfix Seal Strip, VT-Rørmanchet, VT- Hjørner, VT-Tætningsbånd, Afløbsmanchet or Seal-Mat.

- Alfix Banemembran Pro adhered to the substrate with approx. 0.5 kg/m² Alfix 1K or 2K liquid membrane.
- a layer of ceramic tiles adhered to the kit with cement-based tile adhesive (Alfix LetFix Universal, Alfix LetFix, Alfix CombiFix, Alfix ProFix, Alfix CombiQuickFix, Alfix LetFix less dust, Alfix QuickFix premium, Alfix FlexFix, Alfix ProFix Plus and Alfix LetFix Plus).

2 Specification of the intended use in accordance with the applicable European Assessment Document (hereinafter EAD)

The intended use of the covering kit is:

1. watertight covering for use beneath a wearing surface, normally in the form of tiles, on substrates of wood based panels, gypsum boards, fibre cement boards, cement bonded boards, watertight boards made from a polystyrene core with a cement based glass fibre reinforced covering and concrete, i.e., moisture sensitive substrates, which are flexible and with jointing and susceptible to cracking

The kit can be used with the following types of floor gullies:

Circular and rectangular gullies made from stainless steel or plastic type PE, with flange for adhesion of the membrane or with clamping ring or with collar

2. Indoor applications, where the liquid applied, kit is not exposed to temperatures (i.e., temperature of structure) below 5 °C and above 40 °C, in the following uses:

- Floor and wall surfaces with only occasional direct exposure to water, e.g., at a good distance from shower or bathtub.
- Floors and walls in shower areas or around bathtubs used for a few showers daily, e.g., in ordinary dwellings, multi-family houses and hotels
- Floor and wall surfaces with exposure to water more frequent or of longer duration than normally anticipated in dwellings, e.g., public wet rooms, schools and sport facilities.

The provisions made in this European Technical Assessment are based on an assumed intended working life of the kit of 25 years.

The indications given on the working life cannot be interpreted as a guarantee given by the producer or Assessment Body 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

Characteristic	Assessment of characteristic									
3.2 Safety in case of fire (BWR2)										
Reaction to fire	Euroclass F according to EN 13501-1 and Delegated Regulation (E)U) 2016/364									
3.3 Hygiene, health and the environment (BWR3)										
Content, emission and/or release of dangerous substances ^{*)}	<table><tr><td></td><td>After 3 days [µg/m³]</td><td>After 28 days [µg/m³]</td></tr><tr><td>TVOC</td><td>≤ 750</td><td>≤ 60</td></tr><tr><td>TSVOC</td><td></td><td>≤ 40</td></tr></table> <p>Intended use : IA2, product with indirect contact to indoor air (e.g. covered products) but possible impact on indoor air.</p>		After 3 days [µg/m³]	After 28 days [µg/m³]	TVOC	≤ 750	≤ 60	TSVOC		≤ 40
	After 3 days [µg/m³]	After 28 days [µg/m³]								
TVOC	≤ 750	≤ 60								
TSVOC		≤ 40								
Vapour permeability	<p>The s_d value of the membrane at RH 100 →75 % is 103 m</p> <p>The s_d value of the membrane at RH 93 → 50 % is 85 m</p> <p>The values are for the flexible sheet alone, and the other components of the kit are not considered to have an adverse effect on these values.</p>									
Water tightness	Watertight									
Crack bridging ability	Assessment category 2: Crack width 0,75 mm									
Bond strength	<p>Alfix Banemembran Pro with VådrumsPrimer or PlaneMixPrimer and the following tile adhesives; Alfix LetFix Universal, Alfix CombiFix, Alfix CombiQuickFix, Alfix ProFix, Alfix LetFix less dust, Alfix QuickFix premium, Alfix FlexFix, Alfix ProFix Plus and Alfix LetFix Plus on a concrete substrate all comply with</p> <p>Assessment category 2: Bond strength ≥ 0.3 MPa</p> <p>Alfix VådrumsPrimer with the following tile adhesives; Alfix LetFix Universal, Alfix LetFix, Alfix CombiFix, Alfix ProFix, Alfix LetFix less dust, Alfix QuickFix premium, Alfix FlexFix, Alfix ProFix Plus and Alfix LetFix Plus on substrates of calcium silicate boards, gypsum boards, fibre cement boards, cement based boards and watertight boards made from a polystyrene core with a cement based glass fibre reinforced covering comply with</p> <p>Assessment category 2: Bond strength ≥ 0.3 MPa</p>									
Scratching resistance	No performance assessed									
Joint bridging ability	The kit can bridge joints									
Water tightness around penetrations	Watertight									

Characteristic	Assessment of characteristic
Resistance to temperature	Pass. The tensile strength and the strain at maximum force of a sample of Alfex Banemembran Pro were assessed before and after heat exposure. The deviation before and after ageing was considerably lower than 20% and therefore no further investigations are required to assess that the resistance to temperature.
Resistance to water	Alfex Banemembran Pro with Alfex VådrumsPrimer or PlaneMixPrimer and the following tile adhesives : Alfex LetFix, Alfex LettFix Universal, Alfex CombiFix, Alfex CombiQuickFix, Alfex ProFix, Alfex LetFix less dust, Alfex QuickFix premium, Alfex ProFix Plus and Alfex LetFix Plus on a concrete substrate all comply with Assessment category 2: Bond strength ≥ 0.3 Mpa Alfex VådrumsPrimer with the following tile adhesives; Alfex LetFix, Alfex LettFix Universal, Alfex CombiFix, Alfex CombiQuickFix, Alfex ProFix, Alfex LetFix less dust, Alfex QuickFix premium, Alfex ProFix Plus and Alfex LetFix Plus on substrates of calcium silicate boards, gypsum boards, fibre cement boards, cement based boards and watertight boards made from a polystyrene core with a cement based glass fibre reinforced covering comply with Assessment category 2: Bond strength ≥ 0.3 Mpa
Resistance to alkalinity	Tensile strength MD : 320 N Tensile strength CMD : 205 N
Resistance to mechanical wear	Assessment Category 2: 50 °C for 16 weeks No performance assessed
Joint strength	Joint transverse to MD: 316 N Joint transverse to CMD: 198 N
Flexibility	No cracking or other surface deterioration visible
3.4 Safety in use (BWR4)	
Slipperiness	No performance assessed
Cleanability	No performance assessed
Thickness	The thickness of the Alfex Banemembran Pro is assessed to be 0.53 mm

*) In addition to the specific clauses relating to dangerous substances contained in this European technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g., transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

More information in section 3.9

3.5 Methods of verification

The European Technical Assessment is issued for the product on the basis of agreed data/information, deposited with ETA-Danmark, which identifies the product that has been assessed and judged. Changes to the product or production process, which could result in this deposited data/information being incorrect, should be notified to ETA-Danmark before the changes are introduced. ETA-Danmark will decide whether or not such changes affect the ETA and consequently the validity of the CE marking on the basis of the ETA and if so whether further assessment or alterations to the ETA, shall be necessary.

The performance of the watertight membrane kit results from the characteristic values and categories.

The supplementing statements of the manufacturer stated in the MTD for design and application of the watertight system for creating a watertight covering under wearing surface for floors and walls in indoor wet areas shall be considered.

The performance of the watertight membrane can be assumed only if the following aspects are considered:

- only those components which are specified components of the kit can be used,
- the appropriate tools shall be used and adjuvant, precautions shall be taken,
- inspecting the substrate surface for cleanliness and correct treatment,
- inspection in the process of establishing the kit and of the finished watertight membrane and documentation of the results.

The information as to the handling of waste products shall be observed.

It is the manufacturer's responsibility to make sure that all those who utilize the kit will be appropriately informed about the specific conditions according to this ETA and the not confidential parts of the MTD deposited to this ETA.

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

4.1 AVCP system

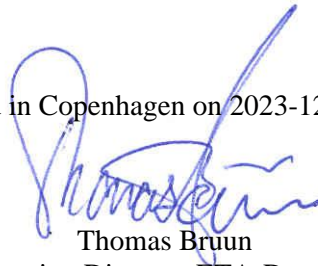
According to the decision 2003/655/EC of the European Commission as amended, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) is 2+.

There is no assessed fire performance, and hence the Decision 2003/655/EC of the European Commission with regard to reaction to fire is not relevant.

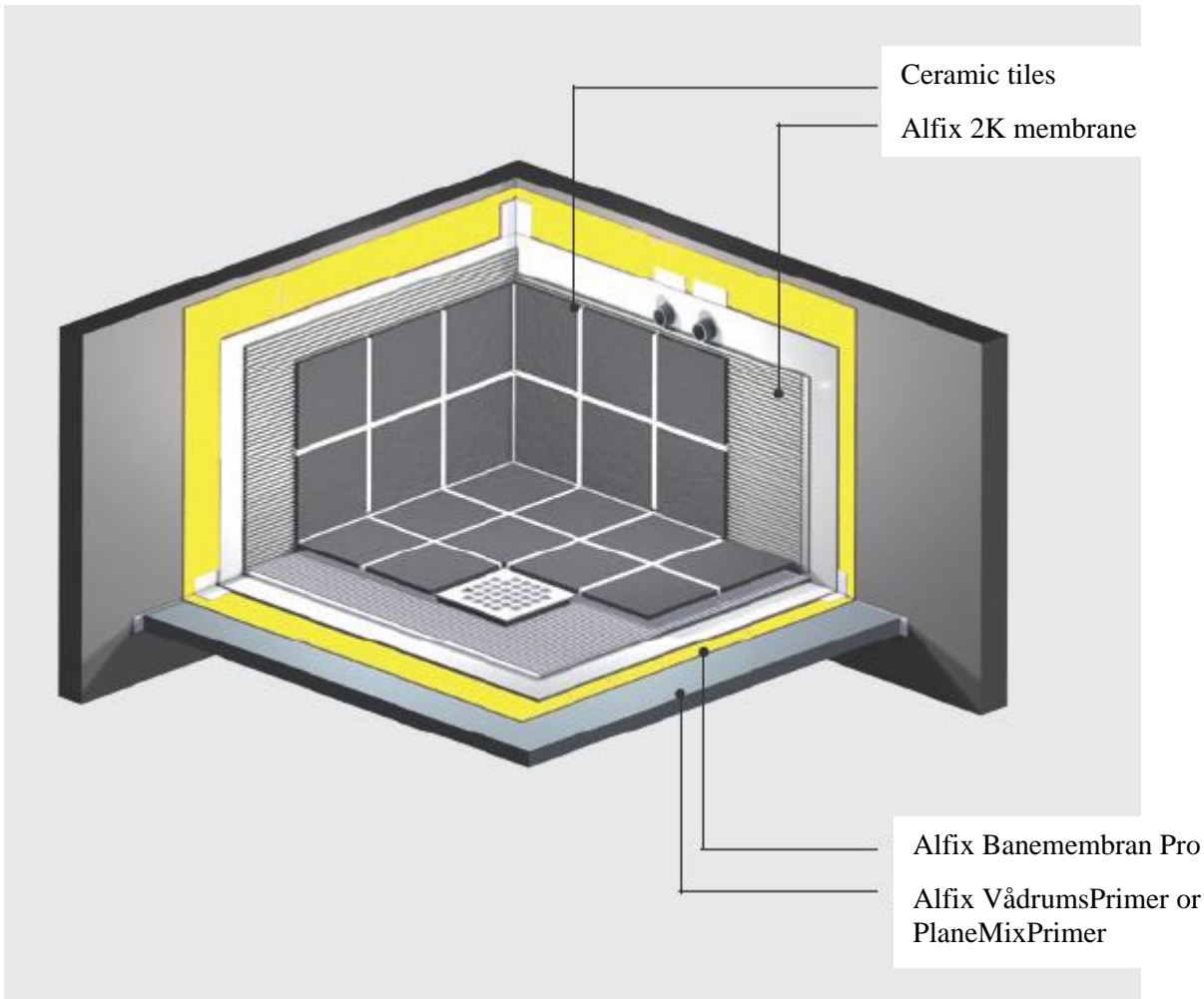
5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark prior to CE marking.

Issued in Copenhagen on 2023-12-20 by



Thomas Bruun
Managing Director, ETA-Danmark



Alfex Banemembran Pro watertight covering kit

Principle build-up of the kit

Annex 1
of European Technical Assessment
ETA-11/0501