



European Technical Assessment

ETA 11/0018 of 03/07/2023

General Part

Technical Assessment Body issuing the ETA

Eurofins Expert Services Oy

Trade name of the construction product

Kiilto Kerafiber Watertight covering kit

Product family to which the construction product belongs

Liquid applied waterproofing kit for wet room floors and walls

Manufacturer

Kiilto Oy
P.O. Box 250
FI-33101 Tampere
Finland

Manufacturing plant

Kiilto Oy
Tampereentie 408
FI-33880 Lempäälä
Finland

This European Technical Assessment contains

6 pages including 2 Annexes 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

European Assessment Document (EAD) 030352-00-0503 - Liquid applied watertight covering kits for wet room floors and/or walls

This version replaces

ETA 11/0018, issued on 26/01/2022

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full (excepted the confidential Annex(es), where relevant).

Specific Parts

1 Technical description of the product

Kiilto Kerafiber is a liquid applied one-component water proofing kit. The kit is used as a watertight covering for wet room floors and walls beneath a wearing surface.

The kits consist of the following components:

Primers

Kiilto Keraprimer and Kiilto PrimerOne are polymer dispersion primers used to improve the adhesion of the waterproofing kit according to the manufacturer's instructions. On different substrates the primers are applied according to the manufacturer's instructions. Wet consumption of primer (when undiluted) is 125 g/m².

Membrane

The Kiilto Kerafiber waterproofing is a one-component liquid applied polymer dispersion. The minimum dry film thickness of the waterproofing on wall is 0,4 mm and on floor 0,5 mm. The dry film thickness on a smooth, non-porous substrate treated with the primer is achieved with two applications and with minimum consumption of 800 g/m² and 1000 g/m² respectively. On porous substrates and when installing reinforcements the wet amount of waterproofing to achieve the minimum dry film thickness increases.

Reinforcements

The reinforcements belonging to the kit and used in floor gully penetrations are:

- Kiilto Lattiakaivovahvike reinforcement sheet (dimensions 30 cm x 30 cm)
- Kiilto Kaivolaippa (dimensions 33 cm x 33 cm or 37 mm x 37 mm), used with Kiilto Masa bonding sealant when appropriate

The reinforcements belonging to the kit and used in joints, connections between floor and wall and in corners are:

- Kiilto Nurkkavahvike tape
- Kiilto Butyltape
- Kiilto KeraSafe sealing tape
- Kiilto Sisänurkkavahvike
- Kiilto Ulkonurkkavahvike

The reinforcements belonging to the kit and used in penetrations of floor and wall pipes are:

- Kiilto Nurkkavahvike tape
- Kiilto Läpivientivahvike 10 - 16 mm (dimensions 9,5 cm x 9,5 cm)
- Kiilto Läpivientivahvike 18 - 34 mm (dimensions 11,2 cm x 11,2 cm)
- Kiilto Läpivientivahvike 34 - 55 mm (dimensions 14,5 cm x 14,5 cm)
- Kiilto Läpivientivahvike 55 - 75 mm (dimensions 17 cm x 17 cm)
- Kiilto Läpivientivahvike 100 - 140 mm (dimensions 26 cm x 26 cm)

Sealant

Kiilto XPU Pro sealant mass for sealing wall and floor penetrations and joints.

Adhesives

Adhesives for tile fixings covered by this ETA are:

- Kiilto Flexfix
- Kiilto Kerapid DF
- Kiilto Superfix DF
- Kiilto Lightfix
- Kiilto Floorfix DF
- Kiilto Floorfix DF Rapid
- Kiilto HighFlex S2 DF
- Kiilto PL 250

2 Specification of the intended uses in accordance with the applicable European Assessment Document, EAD

The intended use of the covering kit is:

1. To act as watertight covering for use beneath a wearing surface, normally in form of ceramic tiles, on substrates of gypsum board, wet room boards made of polystyrene and covered with cement-based glass fibre reinforcement, fibre cement board, cement bonded boards, with cement-based screed smoothed masonry or lightweight concrete and concrete. The substrates may be moisture sensitive, flexible, with joints and susceptible for cracking or not.

The kit can be used with following type of floor gullies

- PP floor gully with clamping ring.
2. Indoor applications, where the in the liquid form applied kit is not exposed to temperatures (i.e. temperature of the structure) below 5 °C or above 40 °C, in the following uses:
 - Floors and walls in ordinary dwellings.
 - Floors and walls in public wet rooms, schools and sport facilities (excluding swimming halls).

The provisions made in this European Technical Assessment are based on an assumed intended working life of the kit of 25 years, provided that they are subject to appropriate installation, use and maintenance. 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

Basic work requirement Essential characteristic	EAD Clause	Performance
BWR 2. Safety in case of fire		
Reaction to fire	2.2.1	No performance assessed
BWR 3. Hygiene, health and the environment		
Content, emission and/or release of dangerous substances	2.2.2	No performance assessed
Vapour permeability	2.2.3	Dry film thickness 0,4 mm: W= 33·10⁻¹² kg/(m²sPa) s_d = 6,0 m Dry film thickness 0,5 mm: W= 30·10⁻¹² kg/(m²sPa) s_d = 6,5 m
Water tightness	2.2.4	Watertight
Crack bridging ability	2.2.5	a) Assessment category 1 , Crack width 0,4 mm: with 800 g/m ² b) Assessment category 2 , Crack width 0,75 mm: with 1000 g/m ² c) Assessment category 3 , Crack width 1,5 mm: - with 2600 g/m ² - with 1400 g/m ² and Kiilto Nurkkavahvike tape
Bond strength	2.2.6	Assessment category 2 : Bond strength > 0,5 MPa on concrete substrate Assessment category 1 : Bond strength ≥ 0,3 MPa with adhesives covered by the ETA on following substrates: - gypsum board - calcium silicate board - fibre cement board - cement-based boards - boards consisting of a polystyrene core and cement-based, glass fibre reinforced coating

Scratching resistance	2.2.7	No performance assessed
Joint bridging ability	2.2.8	Assessment category 2: Watertight
Water tightness around penetrations	2.2.9	Assessment category 2: Watertight With Kiilto reinforcements according to clause 1*
Resistance to temperature	2.2.10	Assessment category 2: Bond strength $\geq 0,5$ MPa on concrete substrate Requirement for crack bridging ability is fulfilled
Resistance to water	2.2.11	Assessment category 2: Bond strength $\geq 0,5$ MPa on a concrete substrate
Resistance to alkalinity	2.2.12	Assessment category 2: Bond strength $\geq 0,5$ MPa on a concrete substrate:
Resistance to mechanical wear	2.2.13	Not relevant
BWR 4. Safety in use		
Slipperiness of floors	2.2.14	No performance assessed
Reparability	2.2.15	Repairable
Thickness	2.2.16	The required amount (wet) of Kiilto Kerafiber waterproofing is $1,9 \text{ kg/m}^2$ per mm. The minimum thickness of the waterproofing shall be 0,4 mm on wall and 0,5 mm on floor.

*The kit has been tested with the following floor gully types: circular PP gullies Oden DN 70 and Merika 75 with Kiilto Kaivolaippa reinforcement and circular PP gully Vieser 75 with Kiilto Lattiakaivovahvike reinforcement.

4 Assessment and verification of constancy of performance (hereinafter AVCP)

According to the decision 2003/655/EC of the European Commission, the system of assessment and verification of constancy of performance is 2+.

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

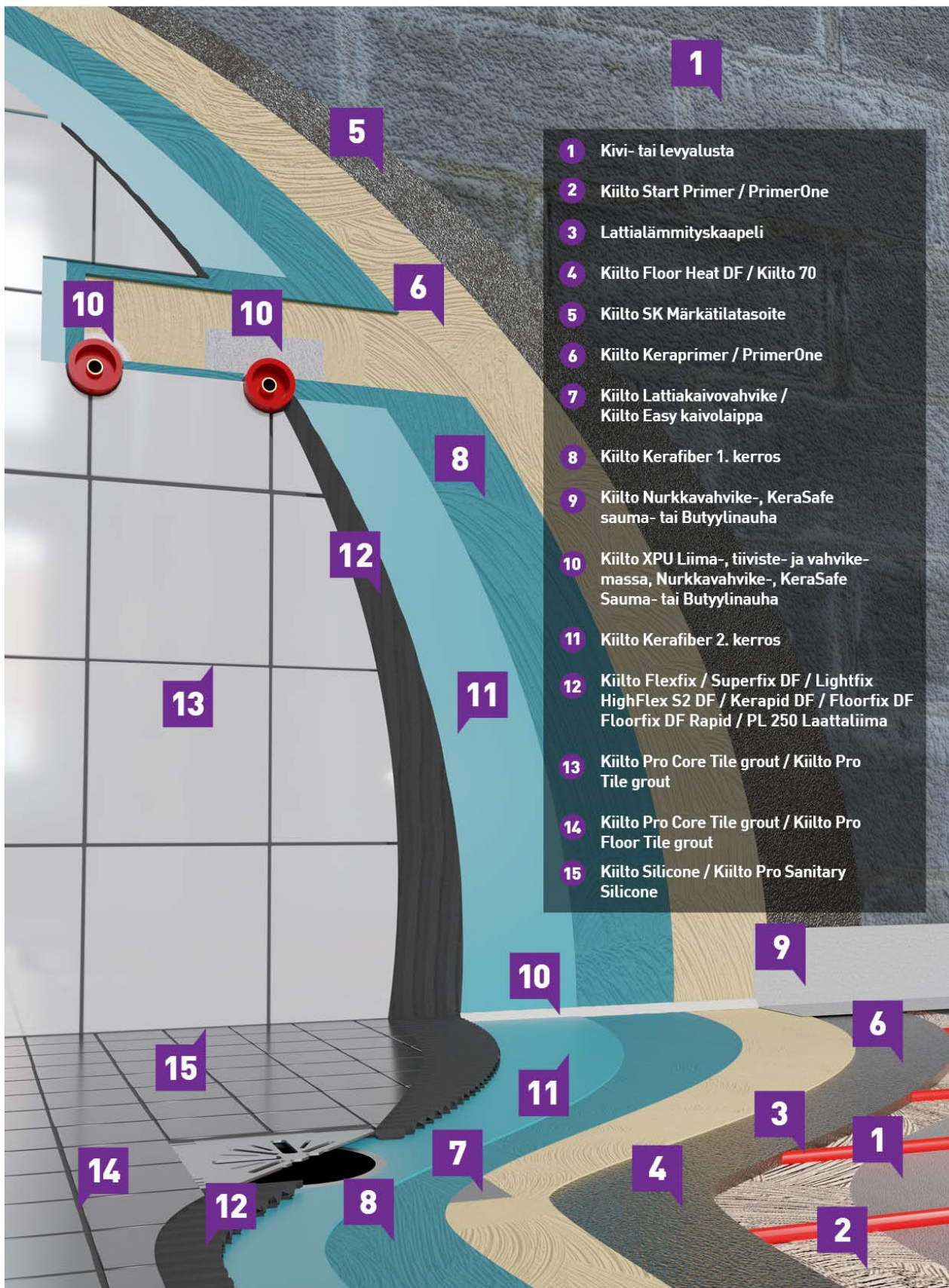
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at Eurofins Expert Services Oy.

Issued in Espoo on 03/07/2023 by Eurofins Expert Services Oy






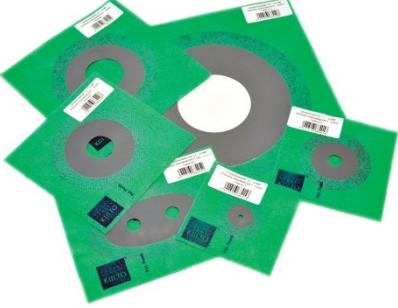



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Principal build-up of Kiilto Kerafiber Watertight covering kit



Kiilto Kerafiber Watertight covering kit reinforcements and sealing components

	<p>Kiilto Nurkkavahvike tape Material polypropylene Width 100 mm</p>																				
	<p>Kiilto KeraSafe sealing tape Core layer modified polyethylene, cover polypropylene Width 100 mm</p>																				
	<p>Kiilto Butyltape Core layer butylgum, cover polypropylene Width 100 mm</p>																				
	<p>Kiilto Kaivolaippa Core layer butylgum, cover polypropylene Dimensions 33 cm x 33 cm or 37 cm x 37 cm</p>																				
	<p>Kiilto Lattiakaivovahvike Material polypropylene Dimensions 300 x 300 mm</p>																				
	<p>Kiilto Läpivientvahvike Core layer PUR, cover polypropylene Dimensions:</p> <table border="1" data-bbox="707 1234 1278 1435"> <thead> <tr> <th rowspan="2">Pipe outer diameter</th> <th colspan="2">Läpivientvahvike</th> </tr> <tr> <th>Dimensions, mm</th> <th>Ø, mm</th> </tr> </thead> <tbody> <tr> <td>10-16 mm</td> <td>95 x 95</td> <td>4</td> </tr> <tr> <td>18-34 mm</td> <td>110 x 110</td> <td>13</td> </tr> <tr> <td>34-55 mm</td> <td>145 x 145</td> <td>28</td> </tr> <tr> <td>55-75 mm</td> <td>170 x 170</td> <td>43</td> </tr> <tr> <td>100-140 mm</td> <td>255 x 255</td> <td>78</td> </tr> </tbody> </table>	Pipe outer diameter	Läpivientvahvike		Dimensions, mm	Ø, mm	10-16 mm	95 x 95	4	18-34 mm	110 x 110	13	34-55 mm	145 x 145	28	55-75 mm	170 x 170	43	100-140 mm	255 x 255	78
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	<p>Kiilto Sisänurkkavahvike Core layer modified polyethylene, cover polypropylene Dimensions 120 mm x 120 mm, height 60 mm</p>																				
	<p>Kiilto Ulkokulmavahvike Core layer modified polyethylene, cover polypropylene Dimensions 164 mm x 164 mm, height 57 mm</p>																				
	<p>Kiilto Pro XPU adhesive sealant</p>																				