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European Technical Assessment **ETA-14/0361** of October 31, 2014

I General Part

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

VTT Expert Services LTD

Trade name of the construction product

Hey'di K10
Hey'di Smöremembran pro

Product family to which the construction product belongs

(PAC 3): Liquid applied water proofing kit

Manufacturer

Hey'di Oy
P.O. Box 17
FI-08501 LOHJA AS
Finland

Manufacturing plant

Hey'di Oy
Kaivurinkatu 1
FI-08200 LOHJA
Finland

This European Technical Assessment contains

7 pages including 1 Annex 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

Guideline for European Technical Approval. ETAG No 022-1, Watertight covering kits for wet room floors and/or walls. Part 1: Liquid applied coverings with or without wearing surface. Edition April 2007 used as European Assessment Document (EAD)

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II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESMENT

1 Technical description of the product

Hey'di K10 and Hey'di Smöremembran pro are liquid applied one component membrane kits which serve as watertight covering for wet room floors and walls beneath a wearing surface.

The kits consist of the following components:

Primer

The primers, Hey'di primer and Hey'di fuktspërre, are one component rubber dispersions which are used for all substrates. The primer improves adhesion between membrane and substrate. A total consumption of the primer is about 0,1 kg/m² (tight surfaces) and 0,3 kg/m² (porous surfaces).

Membrane

The membranes, Hey'di K10 and Hey'di smöremembran pro, are one component rubber dispersions, which contain also reinforcing fibres. The dry film thickness of the membrane is 0,5 mm. The dry film thickness is usually achieved with a consumption of 1,35 kg/m². At least two applications are needed to achieve mentioned dry film thicknesses.

Reinforcement

The reinforcements belonging to the kit and used in connections between floor and wall, in and out going corners and in joints are, Hey'di safestrip and Hey'di flexband. In corners Hey'di external angle and Hey'di internal angle, which are elastic corner pieces, can also be used.

The reinforcements belonging to the kit and used in penetrations of floor and wall pipes are Hey'di universal collar and Hey'di pipe collars.

The reinforcements belonging to the kit and used in floor gully penetrations are Hey'di gully collar and Hey'di universal collar.

Adhesives

The tile adhesive covered by this ETA is Hey'di Semfix, which is a cement based adhesive.

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

2.1 Intended uses

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, fibre cement board, cement bonded boards, with cement based screed smoothed masonry or light weight concrete and concrete.

The kit can be used with following type of floor gullies

- plastic type PP with clamping ring (Serres floor gully)
- plastic type PP with clamping ring attached with screws (Joti K-sluk gully)

- stainless steel with flange for attaching of collar/membrane (Blücher floor gully).

The water tightness of the connection between gully and waterproofing is ensured for all gullies with Hey'di floor gully collar and Hey'di universal collar.

2. Indoor applications, where the in the liquid form applied kit is not exposed to temperatures (i.e. temperature of the structure) below 10 °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).

2.2 Working life

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 requirement Essential characteristics	ETAG/ EAD Clause No.	Assessment of characteristic
BWR 1. Mechanical resistance and stability		Not relevant
BWR 2. Safety in case of fire		
Reaction to fire	2.4.1	Euroclass F
BWR 3. Hygiene, health and the environment		
Release of dangerous substances	2.4.2	Statement by applicant*)
Vapour permeability	2.4.3	The vapour permeability of the membrane with primer when tested at 23°C and RH 50%/ 94% W= 30 x 10⁻¹² (kg/m² Pa) for kits with 100 g/m ² primer and 1350 g/m ² membrane (equivalent thickness 0,5 mm)
Water tightness	2.4.4.1	Watertight according to EN 14891
Crack bridging ability	2.4.4.2	Primer 100 g/m ² and membrane 1350 g/m ² Assessment category 1 , crack width 0,4 mm
Bond strength	2.4.4.3	Membrane with primer and adhesive Assessment category 2: Bond strength ≥ 0,5 MPa
Scratching resistance	2.4.4.4	No performance determined
Joint bridging ability	2.4.4.5	Membrane with primer, Hey'di flexband and Hey'di safestrip Assessment category 2: Watertight

Water tightness around penetrations	2.4.4.6 Annex F	Membrane with primer and with Hey'di universal collar and Hey'di pipe collars or Hey'di flexband and Hey'di safestrip around pipe penetrations.
	Annex A	Hey'di gully collar and Hey'di universal collar around Joti K-sluk gully, Serres floor gully and Blücher floor gully. Hey'di pipe collar around floor pipe penetrations. Hey'di flexband and Hey'di safestrip in floor wall joints and wall joints. Corner pieces in corners. Assessment category 2: Watertight
BWR 4. Safety and accessibility in use		
Slipperiness of floors	2.4.5	No performance determined
BWR 5. Protection against noise		Not relevant
BWR 6. Energy economy and heat retention		Not relevant
BWR 7. Sustainable use of natural resources		Not relevant
General aspects relating to the performances of the construction product		
Aspects of durability and serviceability:		Membrane with primer and adhesive
Resistance to temperature	2.4.6.1	Assessment category 2: Bond strength $\geq 0,5$ MPa
Resistance to water	2.4.6.2	Assessment category 2: Bond strength $\geq 0,5$ MPa
Resistance to alkalinity	2.4.6.3	Assessment category 1: Bond strength $\geq 0,3$ MPa
Resistance to mechanical wear	2.4.6.6	Not relevant
Cleanability	2.4.7.1	Not relevant
Reparability	2.4.7.2	Repairable
Thickness	2.4.7.3	The minimum thickness of the membrane shall be 0,5 mm. This is normally achieved with total wet consumption of 1350 g/m ² .
Applicability	2.4.7.4	Applicable

*In accordance with <http://europa.eu.int-comm/enterprise/construction/internal/dangsub/danfmain.htm>. In addition to specific clauses relating to dangerous substances contained in this European Technical Assessment, there may be other requirements applicable to the product 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 compiled with, when and where they apply.

Aspects related to the performance of the product

The European Technical Assessment is issued for the product on the basis of agreed data/information, deposited with VTT Expert Services Ltd, which identifies the product that has been assessed and judged. Changes to the product or production process, which could result in this assessment deposited data/ information being incorrect, should be notified VTT Expert Services Ltd before the changes are introduced. VTT Expert Services 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 whether further assessment or alterations to the ETA, shall be necessary.

The performance of the watertight 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 shall be used
- the appropriate tools shall be used and adjuvant precautions shall be taken
- inspecting the substrate surface for cleanliness and firmness and correct treatment
- inspection in the process of establishing the kit and of the finished watertight membrane and documentation of the results

The information for handling 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 MDT deposited to this ETA.

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

According to the Decision 1999/454/EC of the European Commission¹, the system of assessment and verification of constancy of performance (see Annex V to the regulation (EU) No 305/2011) is 2+.


There is no declared 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.

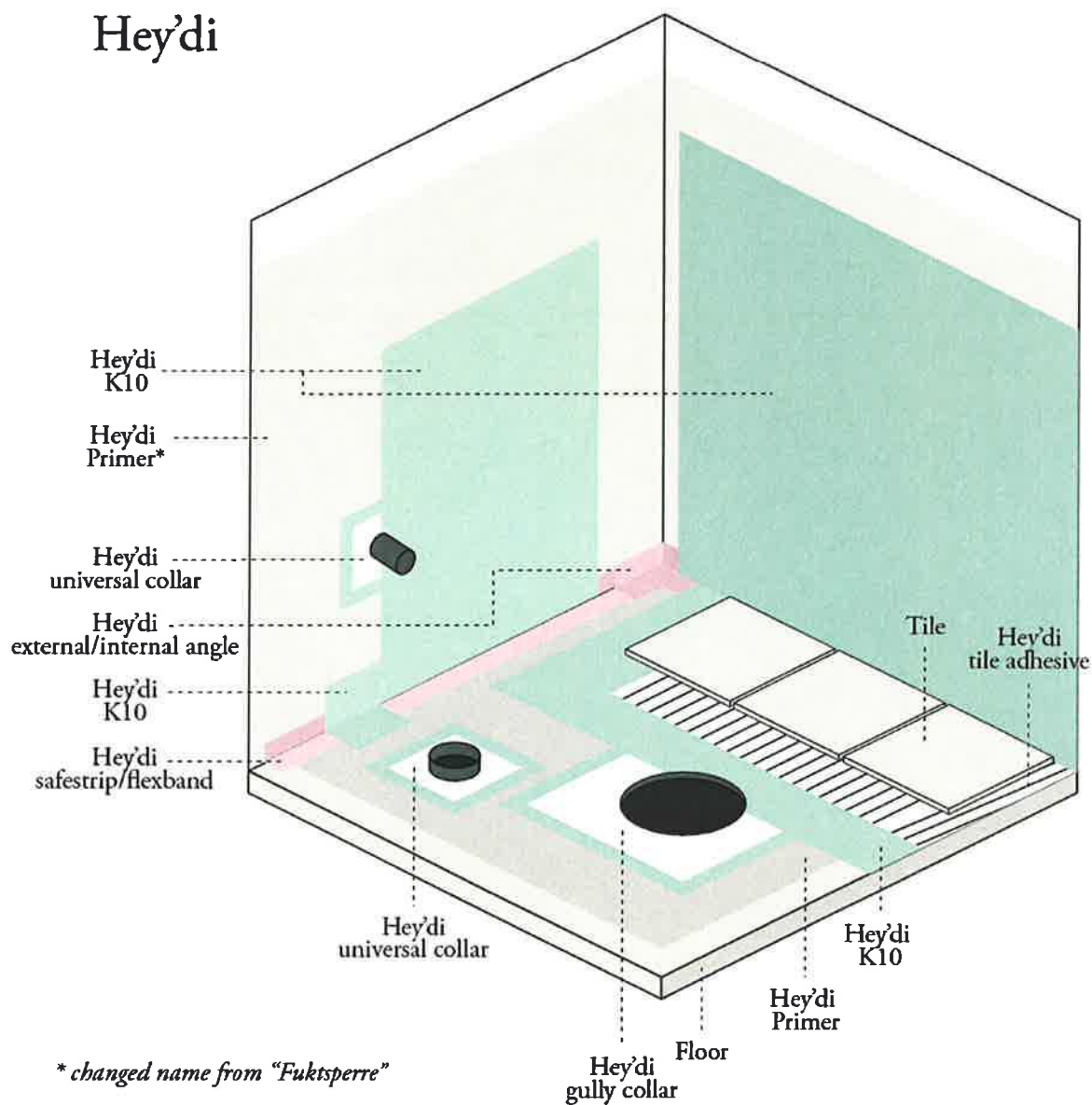
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at VTT Expert Services Ltd.

Issued in Espoo on October 31, 2014
by VTT Expert Services Ltd


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Principal build-up of liquid applied waterproofing kit



Hey'di Smøremembran

