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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-12/0025 of 2023/09/11

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:

LIP VS 30 Watertight covering kit

Product family to which the above construction product belongs:

Liquid applied watertight covering kit for wet room floors and walls

Manufacturer:

LIP Bygningsartikler A/S
Industrivej 16
5580 Nørre Aaby
Telephone +45 64 42 13 30
Internet www.lip.dk

Manufacturing plant:

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Industrivej 16
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This European Technical Assessment contains:

9 pages including 2 annexes 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 030352-00-0503 Liquid applied watertight covering kits for wet room floors and/or Walls

This version replaces:

The ETA with the same number issued on 2019-04-10

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II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of product

General

LIP VS 30 is a liquid applied one component 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

LIP VS 20 is a polymer dispersion primer with a “tell-tale” colour additive 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

LIP Primer 54, which is a single component water-based primer for various substrates. This primer is not intended to have a significant additional function in limiting the water vapour permeability of the kit.

Membrane

The membrane is a one component system consisting of LIP VS 30 liquid membrane on polymer dispersion base.

Reinforcement

The reinforcement is either LIP “Armeringsvæv” or LIP VT “Remsa” which is used to bridge cracks and joints, in connection between the floor and the wall, in corners, around penetrations and around gullies. LIP VT “Remsa” is glued to the substrate with LIP VS 30 membrane. Alternatively, LIP “Selvklæbende Tætningsbånd” or prefabricated inner and outer corners LIP VT can be used. Sealing of floor gullies can also be made with LIP “Afløbsmanchet”. Sealing around pipe penetrations can alternative be made with LIP “Rørmanchet”. 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 is: LIP Flydeklæb let, LIP Naturstensklæb, LIP Multi Fliseklæb, LIP Multi Fliseklæb Let, LIP Super Trope Fliseklæb, LIP Hurtighærdende Fliseklæb, LIP XXL Storformat, LIP Multi Let 544 or LIP 527 Fliseklæb.

Kit

The kit is constructed as follows:

- where relevant a layer of approx. 0,1 l/m² LIP Primer 54 (depending on substrate) or a layer of minimum 160 g/m² LIP VS 20 Primer (depending on substrate)
- reinforcement with LIP “Armeringsvæv” or LIP VT “Remsa” to bridge joints, and LIP “Selvklæbende Tætningsbånd” in connection between the floor and the wall and in corners. Sealing around pipe penetrations with LIP “rørmanchet” and sealing of floor gullies with LIP “Afløbsmanchet”.
- at least 1000 g/m² one component LIP VS 30 distributed evenly over the surface in at least two applications
- a layer of ceramic tiles adhered to the kit with cement-based tile adhesive (LIP Flydeklæb let, LIP Naturstensklæb, LIP Multi Fliseklæb, LIP Multi Fliseklæb Let, LIP Super Trope Fliseklæb, LIP Hurtighærdende Fliseklæb LIP XXL Storformat, LIP Multi Let 544 or LIP 527 Fliseklæb.).

Note that the above-mentioned amount of LIP VS 30 corresponds to a dry film thickness of 0,58 mm (see section).

2 Specification of the intended use(s) 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, fiber cement boards, cement bonded boards, watertight boards made from a polystyrene core with a cement based fiberglass 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:

a) floor drain, stainless steel, b) Floor drain, PP with clamping ring as screwed connection, c) PP floor drain with clamping ring as screwed connection, d) plastic floor drain with clamping ring as screwed connection and e) plastic floor drain with spring clamping ring.

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	No performance assessed
3.3 Hygiene, health and the environment (BWR3)	
Content, emission and/or release of dangerous substances*	No performance assessed
Vapour permeability	See annex 1
Water tightness	Watertight
Crack bridging ability	Assessment category 2: Crack width 0,75 mm
Bond strength	LIP VS 30 with LIP VS 20 Primer and the following tile adhesives; LIP Flydeklæb let , LIP Naturstensklæb, LIP Multi Fliseklæb, LIP Multi Fliseklæb Let, LIP Super Trope Fliseklæb, LIP Hurtighærdende Fliseklæb, LIP XXL Storformat, LIP Multi Let 544 or LIP 527 Fliseklæb on a concrete substrate all comply with Assessment category 2: Bond strength > 0,5 MPa LIP VS 30 with LIP VS 20 Primer and the following tile adhesives; LIP Flydeklæb let , LIP Naturstensklæb, LIP Multi Fliseklæb, LIP Multi Fliseklæb Let, LIP Super Trope Fliseklæb or LIP Hurtighærdende Fliseklæb 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 1: Bond strength > 0,3 MPa
Scratching resistance	Not relevant
Joint bridging ability	The membrane can join bridges
Water tightness around penetrations	Watertight
Resistance to temperature	Assessment category 2: Bond strength > 0,5 MPa
Resistance to water	Assessment category 2: Bond strength > 0,5 MPa
Resistance to alkalinity	Assessment category 2: Bond strength > 0,5 MPa
Resistance to mechanical wear	Not relevant
3.4 Safety in use (BWR4)	
Slipperiness	Not relevant

Characteristic	Assessment of characteristic
Reparability	No performance assessed
Thickness	The required weight (wet) of the LIP VS 30 membrane is 1,000 kg/m ² pr. mm dry thickness of the layer The minimum thickness of the membrane shall be 0,58 mm.
Durability of paint kits	Not relevant

*) 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 EU Construction Products Directive, these requirements need also to be complied with, when and where they apply. See additional information in section 3.9.

3.9 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 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 Attestation and verification of constancy of performance (AVCP)

4.1 AVCP system

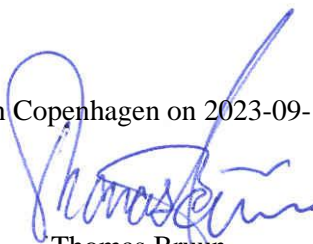
According to the decision 2003/655/EC of the European Commission as amended, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) is 2+.

There is no 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 foreseen 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 2023-09-11 by



Thomas Bruun
Managing Director, ETA-Danmark

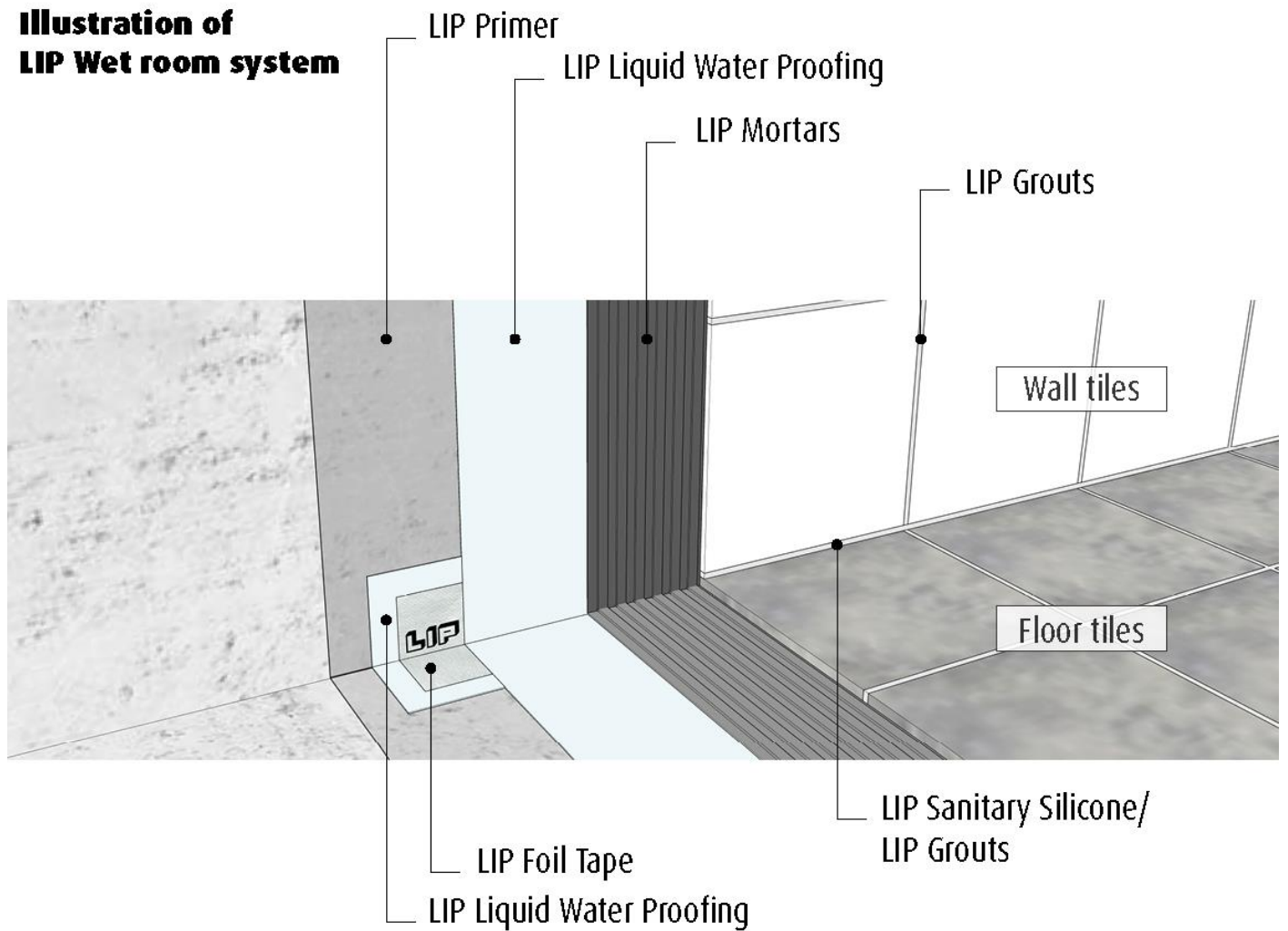
Vapour permeability

A range of tests were performed with different amounts of primer and membrane and applied in various applications. The below table illustrates the various tested combinations and obtained values:

Sample	Z_p [GPa s m²/kg]	Test conditions	Equivalent Z_v [s/m]	Equivalent s_d [m]
1 × 60 g/m ² VS 20 diluted + 1 × 160 g/m ² VS 20 + 1 × 120 g/m ² VS 20 + 2 × 750 g/m ² VS 30	220,1	T _{chamber} 23°C RF _{cup} 100 % RF _{chamber} 75%	1.610.000	43,0
1 × 60 g/m ² VS 20 diluted + 1 × 160 g/m ² VS 20 + 1 × 120 g/m ² VS 20 + 2 × 750 g/m ² VS 30	223,6	T _{chamber} 23°C RF _{cup} 93 % RF _{chamber} 50%	1.636.000	43,7

LIP VS 30 watertight covering kit	Annex 1
Vapour permeability characteristics	of European Technical Assessment ETA-12/0025

**Illustration of
LIP Wet room system**



LIP VS 30 watertight covering kit

Principle build-up of the kit

Annex 2

**of European Technical Assessment
ETA-12/0025**