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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-18/0801 of 2018/09/14

### 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:**

Norgips Våtrumssystem - Foliesystem

**Product family to which the above construction product belongs:**

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

**Manufacturer:**

Norgips Norge A/S  
Postboks 655 Strømsø  
NO-3003 Drammen  
Telephone +47 3378 4800  
Internet [www.norgips.no](http://www.norgips.no)

**Manufacturing plant:**

Norgips Norge A/S Manufacturing Plant II

**This European Technical Assessment contains:**

10 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:**

Guideline for European Technical Approval (ETAG) No 022 Watertight covering kits for wet room floors and/or walls, Part 2: Kits based on flexible sheets, Edition November 2010, used as European Assessment Document (EAD).

**This version replaces:**

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## II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

### 1 Technical description of product

#### Technical description of the product

##### General

Norgips Våtrumfolie is a flexible sheet 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

Norgips Primer, which is a single component synthetic resin dispersion primer. The primer is not intended to have a significant additional function in limiting the water vapour permeability of the kit.

##### Membrane

Norgips Våtrumssystem - foliesystem is a 3-ply waterproof membrane consisting of two outer layers of polypropylene non-woven and an inner layer of polyethylene. The thickness of the membrane is 0,52 mm and the weight is 258 g/m<sup>2</sup>. When the foil is made with 50 mm overlaps in the joint, the overlaps in the foil are adhered with Norgips 2-K Folielim (5+5 kg) or Norgips Folielim 290 ml. When the foil is made with butt joints, the joints are reinforced with Norgips Tätskiktsremsa adhered with Norgips 2-K Folielim (5+5 kg) with Norgips Folielim 290 ml.

##### Reinforcement

The reinforcements are Norgips Tätskiktsremsa 25m, Norgips Brunnsmanschett, Norgips Rörmanschett, Norgips Hörnmanschett (inv) and Norgips Hörnmanschett (udv), which are used in connection between the floor and the wall, in corners and around penetrations. The reinforcements are adhered to the substrate with Norgips 2-K Folielim (5+5 kg) or Norgips Folielim 290 ml. the joints in the membrane are adhered with Norgips 2-K Folielim (5+5 kg) or Norgips Folielim 290 ml. The reinforcements are not intended to cover the entire floor and wall covering, but is used over joints and in corners and around pipe penetrations.

##### Adhesives

Adhesive covered by this ETA is: Norgips Fix Allround.

##### Kit

The kit is constructed as follows:

- a layer of approx. 200 g/m<sup>2</sup> Norgips Primer (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 is Norgips Tätskiktsremsa 25m or Norgips Hörnmanschett (inv) and Norgips Hörnmanschett (utv), which are embedded in a layer of Norgips 2-K Folielim (5+5 kg) or Norgips Folielim 290 ml. Reinforcement around pipe penetrations in floors and wall are established with Norgips Rörmanschett, which are available in various sizes depending on the pipe diameter. For gullies the Norgips Brunnsmanschett is used depending on the working principle and installation principle of the gully
- Norgips Våtrumssystem is adhered to the substrate with approx. approx. 0,6 kg/m<sup>2</sup> Norgips 2-K Folielim (5+5 kg) or 0,5 kg/m<sup>2</sup> Norgips Membrane.
- a layer of ceramic tiles adhered to the kit with cement based tile adhesive.

### 2 Specification of the intended use in accordance with the applicable 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 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
<b>3.2 Safety in case of fire (BWR2)</b>	
Reaction to fire	<b>Euroclass E</b>
<b>3.3 Hygiene, health and the environment (BWR3)</b>	
Dangerous substances	No dangerous materials *)
Vapour permeability	The vapour permeability of the Norgips Våtrumsfolie with primer Norgips Primer when tested at 23°C and RH 93 → 50 % and at 23°C and RH 100 → 75 %:  <b>The <math>s_d</math> value of the membrane at RH 93 → 50 % is 31,9 m, which is <math>g = 7,39 \times 10^{-9} \text{ kg}/(\text{m}^2\text{s})</math></b>  <b>The <math>s_d</math> value of the membrane at RH 100 → 75 % is 68 m</b>
Moisture resistance	
Water tightness	<b>Watertight</b> according to EN 1928 method B
Crack bridging ability	<b>Assessment category 3:</b> Crack width 1,5 mm
Bond strength	Norgips Våtrumsfolie and the tile adhesives mentioned in section 1 of this ETA on a concrete substrate all comply with <b>Assessment category 3:</b> Bond strength > 0,5 MPa
Scratching resistance	No performance assessed
Joint bridging ability	Norgips Våtrumsfolie and 0,5 kg/m <sup>2</sup> Norgips Membran <b>Assesment category 2: Watertight</b>
Water tightness around penetrations	Norgips Primer, Norgips Våtrumsfolie and 0,5 kg/m <sup>2</sup> Norgips Membran Universal and Norgips reinforcements (see II.1) **) comply with <b>Assesment category 2: Watertight</b>

Characteristic	Assessment of characteristic
Joint strength	No performance assessed
Flexibility	No performance assessed
<b>3.7 Sustainable use of natural resources (BWR 7)</b>	No performance assessed
<b>3.8 Related aspects of product performance</b>	
Dimensional stability	The declared values are: <b>Longitudinal direction (MD): <math>\Delta L = 0,4\%</math></b> <b>Transverse direction (CMD): <math>\Delta L = 1,3\%</math></b>
Resistance to temperature	<b>Pass.</b> The tensile strength and the strain at maximum force of a sample of Norgips Våtrumsfolie 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	Norgips Våtrumsfolie with the all thhe listed tile adhesives on a concrete substrate all comply with <b>Assessment category 3:</b> Bond strength > 0,5 MPa
Resistance to alkalinity	<b>Pass.</b> The tensile strength and the strain at maximum force of a sample of Norgips Våtrumsfolie were assessed before and after alkaline 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 alkalinity. <b>Assessment Category 2:</b> 50 °C for 16 weeks
Reparability	No performance assessed
Thickness	The thickness of the Norgips Våtrumsfolie is assessed to be 0,66 mm
Applicability	Applicable

\*) 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). To meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

\*\*) The assessment of the fitness for use of the kit on the generic description of the boards is based on test on the following specified substrates in addition to concrete according to EN 1323; gypsum plasterboard type H in accordance with EN 520

\*\*\*) In accordance with the provisions of ETAG 022 part 1 – Annex A, the kit has been tested with three types of floor gullies; two circular gullies, one made from stainless steel with a flange for floors with a membrane and one in PP plastic with a clamping ring type KL/150, and two rectangular gullies made from stainless steel with a flange for installation in wood based floors structures

### **3.9 General suspects 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+.

## **5 Technical details necessary for the implementation of the AVCP system, as foreseen in the applicable EAD**

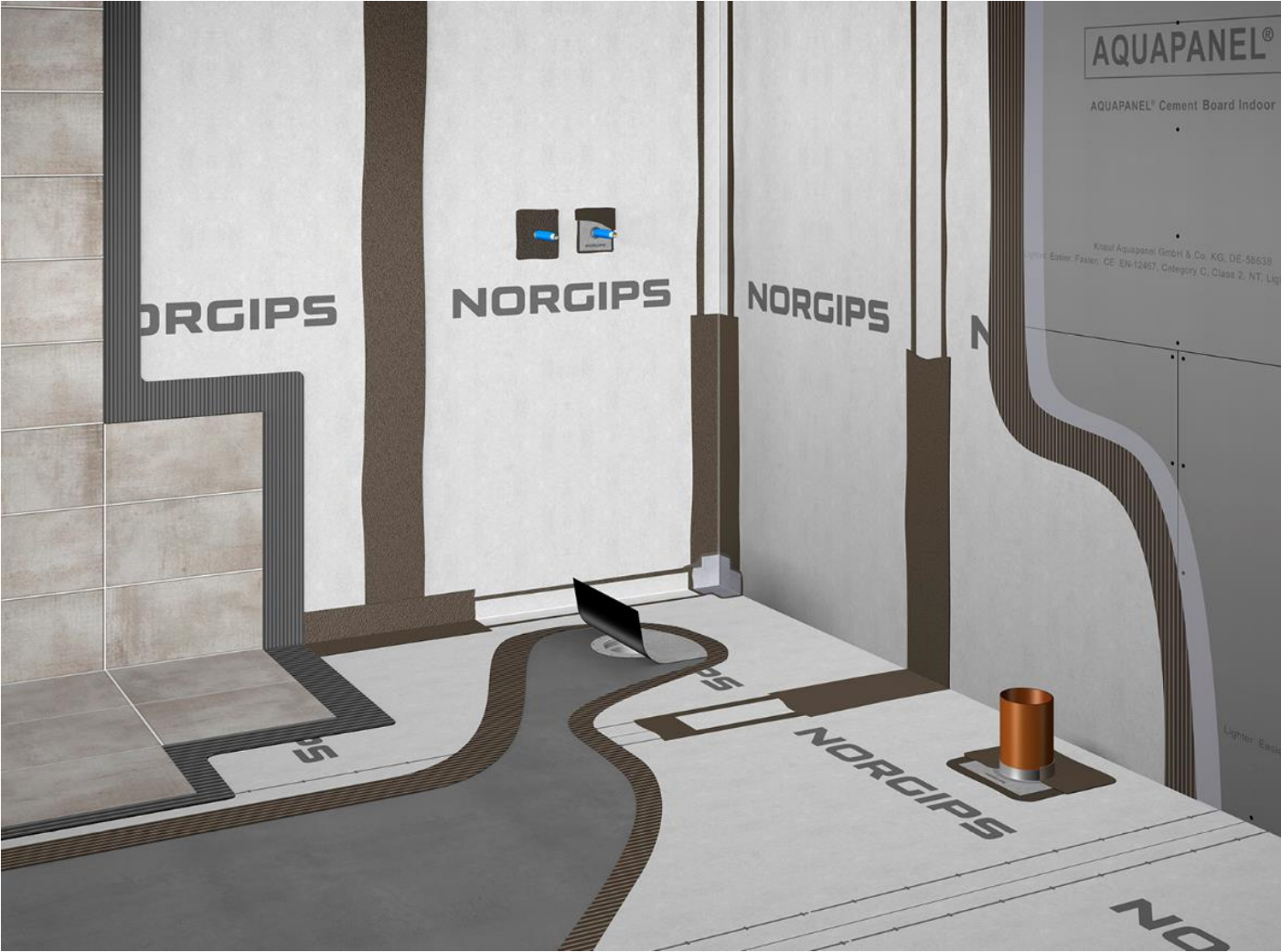
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark prior to CE marking.

Issued in Copenhagen on 2018-09-14 by



Thomas Bruun  
Managing Director, ETA-Danmark





Norgips Våtrumssystem - foliesystem Watertight covering kit	Annex 1
Principle build-up of the kit	of European Technical Assessment ETA-18/0801