

RISE Research Institutes of Sweden AB RISE Certifiering Box 553 SE-371 23 Karlskrona Sweden

Tel: +46 10 516 63 00 Web: www.ri.se/eta Mail: certifiering@ri.se





# **European Technical Assessment**

ETA 13/0458 of 14/01/2020

## General Part

Technical Assessment Body issuing the European Technical Assessment:

Trade name of the construction product

Product family to which the construction product belongs

Manufacturer

Manufacturing plant(s)

This European Technical Assessment contains

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

This version replaces\*

RISE Research Institutes of Sweden AB

Illigo Våtrumssystem

Watertight covering kits for wet room floors and or walls

Illigo AB, Karavellgatan 32, SE-531 73 Källby Sweden www.illigo.se

Nitto Europe NV, Genk, Belgium

6 pages including 1 Annex which form an integral part of this assessment.

ETAG 022, Watertight covering kits for wet room floors and or walls,

Part 2: Kits based on flexible sheets, Version November 2010, used as EAD

ETA 13/0458-2013-06-26

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## Specific parts

# 1 Technical description of the product

### General

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

The kit is constructed as follows:

Around the room in the floor angle a primer, should be applied.

Reinforcement of inner and outer corners, around pipe penetrations, floor gullies and along the connection between floor and wall should be done.

Illigo vägg- och golvduk is adhered to the substrate. The jointing is made by mounting the membrane, edge to edge, and sealing the joint with a joint sealing strip.

Ceramic tiles are adhered to the kit with cement-based tile adhesive.

### Membrane

Illigo vägg- och golvduk is a membrane consisting of an inner layer of polyolefine foam with outer layer of acrylic adhesive. The thickness of the membrane intended for floors is 1,0 mm and the thickness of the membrane intended for walls is 1.5 mm.

### Reinforcement

The reinforcements and sealing components belonging to the kit is "Illigo skarvremsa" for joints, "Illigo golv/väggremsor" for the connection between floor and wall, "Illigo Inåtgående horn" for inner corners, "Illigo Utåtgående hörn" for outer corners, "Illigo Rörmanschetter" for pipe penetrations and "Illigo Brunnsmanschett" for floor gullies. The reinforcements are not intended to cover the entire floor and wall covering but are used over joints and in corners and around pipe penetrations. All joints and reinforcement components should be sealed with "Illigo Membran" a liquid applied membrane.

### **Associated components and Adhesives**

Primers covered by this ETA are: Ardex P51 or Weber Floor 4716.

Adhesives covered by this ETA are: Ardex X77, Weber rex fix, all cement-based tile adhesive.

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

Watertight covering of wet room walls and floors with additional wearing surface. The covering may be used on substrates of boards (e.g. gypsum boards, fiber cement boards) or concrete, i.e. moisture sensitive substrates which are flexible and with jointing and susceptible to cracking.

To be used in indoor applications, where the sheet based applied kit is not exposed to temperatures (i.e. temperature of structure) below 5 °C and above 40 °C, in the following uses:

- Wall and floor surfaces with only occasional direct exposure to water, e.g. at a good distance from shower or bathtub.

- Walls and floors in shower areas or around bathtubs used for a few showers daily, e.g. in ordinary dwellings, multi-family houses and hotels
- Wall and floor 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 working life of the Illigo Våtrumssystem 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 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

# 3.1 Safety in case of Fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Acc. To Table in Annex 1

# 3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Vapour permeability	
Water tightness	
Crack bridging ability	
Bond strength	
Scratching resistance	Acc. To Table in Annex 1
Joint bridging ability	
Water tightness around penetrations	
Join strength	
Flexibility	

## 3.2.1 Sustainable use of natural resources (BWR7)

Essential characteristic	Performance
Sustainable use of natural resources	No performance assessed

## 3.3 Related aspects of durability and serviceability

Essential characteristic	Performance
Dimensional stability	
Resistance to temperature	
Resistance to water	
Resistance to chemical agents	
Resistance to biological agents	Acc. To Table in Annex 1
Resistance to mechanical wear	
Cleanability	
Repairability	
Thickness	
Applicability	

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

According to the decision 2003/655/EC of the European Commission 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, 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 RISE.

Issued in Borås on 14.01.2020 By RISE Research Institutes of Sweden AB

> Johan Åkesson Certification Manager

### **ANNEX 1**

## **Product description**

Watertight covering kits for wet room walls and floors.

- Water tight sheet, for walls.
- Water tight sheet, for floors.
- Sealing tape applied as a joint sealer.
- Corner sealing tape.
- Ingoing corner.
- Outgoing corner.
- Gulley sleeve 400 x400 mm.
- Stosset sleeve coupling, pipe sealer. 10 135 mm
- Liquid applied Membrane
- Primer Weber Floor 4716 or Ardex P51.

# Additional wearing surface:

- Ardex X77and Weber rex fix adhesive for the ceramic tiles.
- Ceramic tiles. (Not part of the kit.)

## **Charateristics and performance**

Characteristic	Performance Wall sheet 1,5 mm	Performance Floor sheet 1,0 mm
Reaction to fire	NPA (Class F)	NPA (Class F)
Water vapour permeability (EN ISO 12572 annex E)	1 205 000 s/m S <sub>d</sub> = 32,2 m	1 160 000 s/m S <sub>d</sub> = 30,8 m
Water tightness	Watertight (150kPa/7 Days)	Watertight (150kPa/7 Days)
Crack bridging ability	Category 3	Category 3
Bond strength (additional wearing surface of tiles)	Category 1 (0,1 MPa), Substrate: gypsum wallboard	Category 1 (≥ 0,2 MPa), Substrate: concrete
Joint bridging ability	Category 2 (2 mm)	Category 2 (2 mm)
Water tightness around penetrations	Category 2 Watertight	Category 2 Watertight
Joint strength	58 N/50mm	58 N/50mm
Flexibility	No cracks or other damage	No cracks or other damage
Dimensional stability	MD -1,09%	MD -1,11%
	CD -0,51 %	CD -0,13 %
Resistance to temperature	Pass (<20% change)	Pass (<20% change)
Resistance to water	Category 1 (≥ 0,2 MPa)	Category 1 (≥ 0,2 MPa)
Resistance to alkalinity	Category 2	Category 2
Resistance to chemical agents	NPA	NPA
Repairability	NPA	NPA
Thickness	Mean 1,51 mm	Mean 1,07 mm
Applicability	Applicable	Applicable
Sustainable use of natural resources	NPA	NPA