European Organisation for Technical Approvals
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ETAG 022

GUIDELINE FOR
EUROPEAN TECHNICAL APPROVAL
Of

Watertight covering kits for wet room floors and or walls

- ANNEX D WATERPROOFING IN LIQUID FORM: APPLICABILITY AND THICKNESS OF FINISHED MEMBRANE

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1. Scope

The scope of this method is to determine the applicability and the thickness of waterproofing membranes applied in liquid form. The test for thickness is meant for the finished membrane, i.e. after drying/hardening.

2. Field of application

The method is applicable to all waterproofing membranes intended for use on walls or floors in wet-rooms.

3. References

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4. Definitions

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5. Preparation of test samples

Only one sample is used for the test. The sample is made in the laboratory as a board material on which the waterproofing membrane is applied as described by the supplier. A commonly used board type should be selected as substrate in collaboration with the client, for example gypsum boards. If the applicant specifies nothing else, the membrane is applied on a vertical test specimen.

6. Method of test

6.1 Principle

The waterproofing membrane is applied to a board material. The weight of the applied material and the thickness of the finished and hardened membrane are determined.

On basis of the measured thickness and the amount of material used the thickness in mm/kg may be determined *or* alternatively kg/mm, i.e. the amount of fluid membrane required to obtain 1 mm thickness of the finished membrane.

6.2 Apparatus

A scale with an accuracy of 1 g**.**
A magnifying glass with built in rule.
A conditioning chamber with 23°C ± 2°C and 50 ± 5 % RH.

6.3 Procedure

The waterproofing membrane is applied to a board material that should be at least 1 m^2. The application is performed in accordance with the supplier's description, and should include primer, reinforcement mesh etc. – if so required – the correct number of coats and the required drying/hardening time in between each coat.

The amount of membrane applied is determined by weighing the pot -including the application tool – before and after application.

When the application is finished the test specimen is conditioned at 23 °C and 50 % RH for at least a week to allow drying/hardening of the membrane.

After hardening the board is cut in two halves and the cutted edge is trimmed with a sharp knife in order to get a clean cut through the finished membrane.

Ten points along the cut are chosen randomly. In each of the 10 points the thickness of the finished membrane is measured by means of a magnifying glass with a rule/measure.

The average thickness and the standard deviation are calculated on basis of the individual results.

On basis of the measured thickness and the amount of material used the thickness in mm/kg may be determined *or* alternatively kg/mm, i.e. the amount of fluid membrane required to obtain 1 mm thickness of the finished membrane.

The applicability is assessed subjectively during the application, including whether the membrane flows.

6.4 Expression of results

The result of the test is given either as kg/(mm x m^2) or in (m^2 x mm)/kg.
The result of the assessment of the applicability of the membrane is reported.

7 Test report

The test report should give the following information:

a) Name and address of the testing laboratory
b) Identification number of the test report
c) Name and address of the organisation or the person who ordered the test
d) Purpose of the test
e) Method of sampling and other circumstances (date and person responsible for sampling)
f) Name and address of manufacturer or supplier of the tested material or system.
g) Name or identification marks of the tested product or products
h) Description of the tested object
i) Date of supply of the tested object
j) Date of test
k) Test method

l) Conditioning of the test specimens, environmetal data during the test (temperature, relative humidity etc.)
m) Identification of the test equipment and instruments used
n) Any deviations from the test method
o) Test results
p) Inaccuracy or uncertainty of the test results
q) Date and signature