iBMB MPA TU BRAUNSCHWEIG
Institut für Baustoffe, Massivbau und Brandschutz | Materialprüfanstalt für das Bauwesen

General building authority test certificate

-TRANSLATION-

Test certificate number:	P-1202/685/20 MPA-BS
Subject:	**"AQUAFIN-WM12"** for use as waterproofing of components in contact with the ground against pressing water in the transition to water-impermeable components in accordance with the Administrative Provisions – Technical Building Rules, sequential no. C 3.25
Applicant:	Schomburg GmbH & Co. KG Aquafinstraße 2 - 8 32760 Detmold, Germany
Issue date:	07/04/2020
Valid until:	20/03/2024

This general building authority test certificate consists of 8 pages.

This document is not checked by the test laboratory. The legally binding text is the German original version. This translation may not be used in the German building inspection procedure.

A General provisions

(1) This general building authority test certificate demonstrates the usability of the construction product as defined by the German State Building Codes.

(2) The general building authority test certificate does not replace the permits, approvals and certificates required by law for the execution of construction projects.

(3) The general building authority test certificate is granted without prejudice to the rights of third parties, including, but not limited to, private intellectual property rights.

(4) Without prejudice to any further regulations under the "Special provisions" section, manufacturers and distributors of the construction product must provide the user of the construction product with copies of the general building authority test certificate and point out that the general building authority test certificate must be available at the application site. On request, copies of the general building authority test certificate shall be made available to the authorities concerned.

(5) The general building authority test certificate may only be reproduced in full. Publication of excerpts requires the consent of the Braunschweig Civil Engineering Materials Testing Institute (MPA Braunschweig). Texts and drawings of advertising material must not contradict the general building authority test certificate. Translations of the general building authority test certificate must bear the following notice: “This translation of the German original document has not been checked by the MPA Braunschweig”.

(6) The general building authority test certificate may be revoked at any time. The provisions may be supplemented or amended subsequently, especially if this is required due to new technical knowledge.

B Special provisions

1 Subject and field of application

1.1 Subject

The general building authority test certificate applies to the manufacture and use of the "AQUAFIN-WM12" waterproofing sheet by Schomburg GmbH & Co. KG as external waterproofing of components in contact with the ground against pressing water in the transition to water-impermeable components in accordance with the Administrative Provisions – Technical Building Rules, sequential no. C 3.25.

The surface waterproofing sheet also meets the requirements for an external construction waterproofing for the field of application listed under 1.2 below and corresponds to DIN EN 13967 as well as the requirements of DIN SPEC 20000-202, Table 28.

1.2 Field of application

The construction product "AQUAFIN-WM12" may be used as the transition of the construction waterproofing to concrete components with high resistance to water penetration with a maximum joint opening of 1 mm between adjacent components against:

- pressing water up to a maximum water pressure of 0.6 bar (corresponds to water exposure class W2.2-E up to an immersion depth of 6 m in accordance with DIN 18533-1) when the surface waterproofing is laid in combination with fresh concrete (preventing water from running behind in case of perforation; laid without offset of the floor panel).

- standing seepage water up to a maximum water pressure of 0.3 bar (corresponds to water exposure class W2.1-E up to an immersion depth of 3 m in accordance with DIN 18533-1) when the surface waterproofing is fully bonded to the substrate (with primer if required)

The product can also be used as a waterproofing transition in areas of soil moisture and non-standing seepage water (also when surface waterproofing is loosely laid).

2 Provisions for the construction product

2.1 Composition, characteristics and properties

2.1.1 Composition

The waterproofing sheet is a 1.2 mm thick PVC-P sheet which is laminated on one side with a PP fleece (total thickness 1.7 mm).

The waterproofing function in the transition to concrete components with high resistance to water penetration is achieved through the coupling of the PP fleece in the fresh concrete, creating a bond which prevents water from running behind between the hydrated cement of the reinforced concrete component and the exterior "AQUAFIN-WM12" waterproofing sheet. Joints which are created in the bonded area are protected using an MS polymer adhesive with the designation AQUAFIN-CA. The surface waterproofing is connected using the solvent welding process with AQUAFIN-SWA solvent welding material.

2.1.2 Characteristics and properties

The properties and characteristics of the "AQUAFIN-WM12" waterproofing sheet which are verifiable in accordance with DIN EN 13967 were determined by the MPA Braunschweig. The results are provided in the test report 5347/692/13-Lau dated 21/11/2013 issued by MPA Braunschweig.

The waterproofing transition formed with the "AQUAFIN-WM12" waterproofing sheet suffices for the field of application listed in 1.2:

- waterproof to a water pressure of 0.6 bar with a maximum joint opening of 1.0 mm between adjacent components
- firmly bonded to the hardened concrete
- permanently prevents water from running behind
- alkali-resistant

The waterproofing sheet meets the requirements of construction material class *E* in accordance with DIN EN 13501-1 and thereby fulfils the requirements for normally flammable components.

The usability of the product as a transition of the construction waterproofing to concrete components with high resistance to water penetration was verified in accordance with the testing principles for the granting of general building authority test certificates for "Transitions of construction waterproofing to concrete components with a high resistance to water penetration, PG-ÜBB, version September 2010". The results are documented in test reports no. 5107/844/13, no. 1200/470/15 and no. 1200/10/15 by MPA Braunschweig. The properties and characteristic values of the AQUAFIN-CA adhesive are listed in the general building authority test certificate no. P-5014/754/08 dated 09/08/2018 by MPA Braunschweig.

2.2 Manufacture, packaging, transport, storage and marking

2.2.1 Manufacture

The construction product "AQUAFIN-WM12" is factory-produced.

2.2.2 Packaging, transport and storage

Packaging, transport and storage must be carried out in accordance with the manufacturer's instructions.

The information provided on the packaging in relation to requirements arising from other legal areas (e.g. hazardous substances or transport law) must be observed.

2.2.3 Marking of products and components

2.2.3.1 National conformity mark (Ü-Zeichen)

The construction product must be marked with the national conformity mark (Ü-Zeichen) by the manufacturer in accordance with the Conformity Marking Ordinance of the federal states. The mark may only be applied if the requirements in accordance with Section 3 are fulfilled.

The national conformity mark (Ü-Zeichen) with the prescribed information:

- Name of manufacturer
- Number of the general building code test certificate

is to be applied to the packaging or the packing slip. The mark may only be applied if the requirements in accordance with Section 3 are fulfilled.

2.2.3.2 Additional information

The following information must also be included on the packaging of the construction product or the packing slip:

- Product name
- Batch number
- Intended use: manufacture of waterproofing transitions to concrete components with a high resistance to water penetration
- Reference to the associated processing regulations
- Fire behaviour in accordance with DIN 4102-1 or class E in accordance with DIN EN 13501-1 (normally flammable)
- CE marking in accordance with DIN EN 13967, Annex ZA.3
- Marking in accordance with DIN SPEC 20000-202

Individually packaged components must be clearly marked as belonging to the product.

3 Attestation of conformity

3.1 General details

Conformity of the construction product with the provisions of this general building authority test certificate shall be confirmed for every manufacturing plant with a declaration of conformity by the manufacturer on the basis of an initial test of the construction product through a recognised testing laboratory and factory production control in accordance with the following provisions.

3.2 Initial test of the construction product by a recognised testing centre

The initial test of the product can be omitted, as the samples for the tests were taken from current production of the manufacturing plant as part of the usability certification.

If there are changes to the production conditions, a new initial test must be carried out.

3.3 Factory production control

A factory production control system shall be set up and implemented in the manufacturing plant in accordance with DIN 18200.

The factory production control on the waterproofing sheet shall be carried out in accordance with DIN EN 13967, Section 6.3. The results shall meet the requirements of DIN SPEC 20000-202, Table 28. In addition, evidence shall be provided 2x per year

of the adhesion of the concreted sheet once the concrete has aged for at least 21 days in accordance with Table 6.1 of the testing principles (PG-ÜBB), and the requirements shall be met. The AQUAFIN-CA adhesive shall meet the requirements specified in the general building authority test certificate P-5014/754/08 MPA-BS.

If the manufacturer supplies bought-in components together with the sealing material, they must ensure that the properties of the materials comply with provisions. This can either be implemented by the manufacturer's incoming goods inspection or by the supplier of the component submitting a "type 2.2" test certificate in accordance with DIN EN 10204. The characteristics and tolerances specified under 2.1.2 are binding.

If individual components are not delivered to the construction site by the product manufacturer but by third parties, the product manufacturer shall ensure that the provisions of the certificate of compliance in accordance with Section 3 are also adhered to for these components in relation to the characteristics required in accordance with Section 2.1.2.

The results from the factory production control are recorded and evaluated by the manufacturer. The records shall at least include the following information:

- Product designation
- Type of monitoring
- Date of manufacture and test
- Result of monitoring and comparison with requirements
- Signature of the person responsible for factory production control

The records shall be kept for at least five years. On request, they shall be submitted to the testing centre and to the highest-level building authority in case of changes or extensions to the general building authority test certificate.

If the monitoring results are unsatisfactory, the manufacturer shall immediately take the necessary measures to remedy the defect. Construction products which do not meet the requirements shall be handled in such a manner that they cannot be mixed up with compliant products which are free from defects. After the defect has been remedied, the respective check shall be repeated immediately, insofar as technically feasible and verification that the defect has been eliminated is required.

4 National conformity mark

Conformity of the construction product with the provisions of this general building authority test certificate must be provided for every manufacturing plant with a declaration of conformity by the manufacturer on the basis of the initial test and the factory production control in accordance with 3.2 and 3.3. The declaration of conformity shall be provided by the manufacturer by marking the construction product with the national conformity mark (Ü-Zeichen) in accordance with 2.2.3.1.

5 Implementation

The following provisions apply for the structural implementation of the waterproofing transition:

The applicability of the waterproofing can only be assumed if it is processed in accordance with the manufacturer's processing instructions and if the corresponding basic details of DIN 18533 Part 1 and Part 2 are taken into account in the implementation and processing. To this end, the general building authority test certificate and the manufacturer's laying instructions and operating instructions must be available on the construction site. The implementation shall only be carried out by companies instructed by Schomburg GmbH & Co. KG.

The strip-type waterproofing sheet is connected to the water-impermeable concrete component by encasing the waterproofing sheet in concrete during the creation of the water-impermeable concrete component. Here, the waterproofing sheet, with the fleece facing the concrete, shall be bonded in the concrete at a minimum height or width of 20 cm. Joints between the sheets shall be executed in such a way that the sheets are installed in the formwork at a distance of (5±1) mm.

The permanently waterproof connection of the surface waterproofing at the transition is executed in accordance with the manufacturer's laying and work instructions by solvent welding (AQUAFIN-SWA solvent welding material). Once the joining work has been completed, the butt joints of the waterproofing in the water-impermeable concrete component including the adjacent sheet surfaces shall be prepared. They shall be free from loose parts and contamination which can cause damage. The prepared butt joints shall be sealed with AQUAFIN-CA adhesive with a minimum overlap of 10 mm to the sheet material. Here, it shall be ensured that the opening created in the T-joint area through the welding/bonding of the surface waterproofing shall be filled or sealed with AQUAFIN-CA adhesive to a minimum depth of 1 cm.

For the load case "pressing water" (see Section 1.2), the connection of the surface waterproofing shall only be executed without offset of the floor panel to the rising wall. The surface waterproofing shall be bonded into the fresh concrete to ensure it prevents water from running behind.

In case of standing seepage water (see Section 1.2), the surface waterproofing with or without offset to the rising wall shall be bonded to the entire surface of the substrate (using primer if required).

Fresh concrete in accordance with DIN 1045-2 of consistency range F4 to F6 shall be used.

During formwork stripping, the waterproofing sheet of the transition inserted in the formwork shall not be damaged. Full-surface bonding to the concrete must be checked and ensured.

The manufacturer is obligated to consistently incorporate the implementation provisions in their processing instructions.

The general building authority test certificate and the manufacturer's processing instructions shall be available at the place of installation.

6 Legal basis

This general building authority test certificate is granted on the basis of Section 19 of the Lower Saxony Building Code (NBauO) in conjunction with the Administrative Provisions – Technical Building Rules, sequential no. C 3.25.

7 Legal remedies

An objection can be raised against this general building authority test certificate within one month of issue. The objection must be filed in writing or for the record with the management of the Civil Engineering Materials Testing Institute, Beethovenstraße 52, 38106 Braunschweig, Germany. The date of receipt of the notice of objection at the testing centre shall be decisive when determining whether the objection has been made in due time.

i. A.

Dipl.-Min. F. Ehrenberg
Deputy Head of Testing Laboratory

M. Pankalla
Engineer/Official in Charge