

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-18/1106
of 4 April 2019

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

Aquafin-CJ5

Product family
to which the construction product belongs

Coated metal water stop sheet for construction and
controlled crack joints in waterproof concrete

Manufacturer

SCHOMBURG GmbH & Co. KG
Aquafinstraße 2-8
32760 Detmold
DEUTSCHLAND

Manufacturing plant

Produktionsanlage 32760
Manufacturing plant 32760

This European Technical Assessment
contains

8 pages including 4 annexes which form an integral part
of this assessment

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

EAD 320002-02-0605

This version replaces

ETA-18/1106 issued on 18 December 2018

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Specific part

1 Technical description of the product

The water stop "Aquafin-CJ5" consists of the following components:

- Galvanized metal sheet with the dimensions:
 - $h = 90 \text{ mm}$, $t_0 = 0,75 \text{ mm}$,
 - $h = 100 \text{ mm}$, $t_0 = 0,75 \text{ mm}$,
 - $h = 120 \text{ mm}$, $t_0 = 0,75 \text{ mm}$ or
 - $h = 150 \text{ mm}$, $t_0 = 0,75 \text{ mm}$,
- special coating mineral-based

For installation purposes the water stop could be delivered with "Aquafin-CJ5"-clips for the fixing of overlapping. Furthermore, the water stop could be fixed with Omega-holder. The contact of the "active" coating with the alkaline humidity/fresh concrete provokes a crystallisation and fusion, which ensure the permanent watertightness of the jointing.

There are the following types of products:

"Aquafin-CJ5" without mounting base and "Aquafin-CJ5" with mounting base which are used for construction joints and all controlled crack joints.

Annex A shows the principles and performance of the product and furthermore the different types of products.

2 Specification of the intended use in accordance with the applicable European assessment Document

The water stop is used to seal joints in constructions made of concrete with high resistance to water (watertight concrete) against the penetration of pressing and un-pressing water (e.g. ground water) and to soil moisture.

There are the following classes of intended use:

- Construction joints
- Controlled crack joints for the use in pre-cast elements made of concrete
- Controlled crack joints for the use in in-situ concrete

The performance given in Section 3 is only valid if the water stop is used in compliance with the specifications and conditions given in Annex B.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the water stop of at least 50 years. 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	See Annex A1

3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Watertightness in end use condition	See Annex A1
Bond strength at state of delivery	See Annex A1
Bond strength after heat aging	See Annex A1
Durability	Not relevant for this type of product

3.3 General aspects

The verification of durability and serviceability is part of testing the essential characteristics. Durability and serviceability are only ensured if the specifications of intended use according to Annex B and the specifications of the technical documents of the manufacturer¹ are kept.

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

In accordance with EAD number 320002-02-0605 the applicable legal act is: 1999/90/EC

The system to be applied is: 3

In addition, with regard to reaction to fire for products covered by this EAD the applicable European legal act is: 2001/586/EC

The system to be applied is: 3

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 with Deutsches Institut für Bautechnik.

Issued in Berlin on 18 December 2018 by Deutsches Institut für Bautechnik

BD Dipl.-Ing. Andreas Kummerow
Head of Department

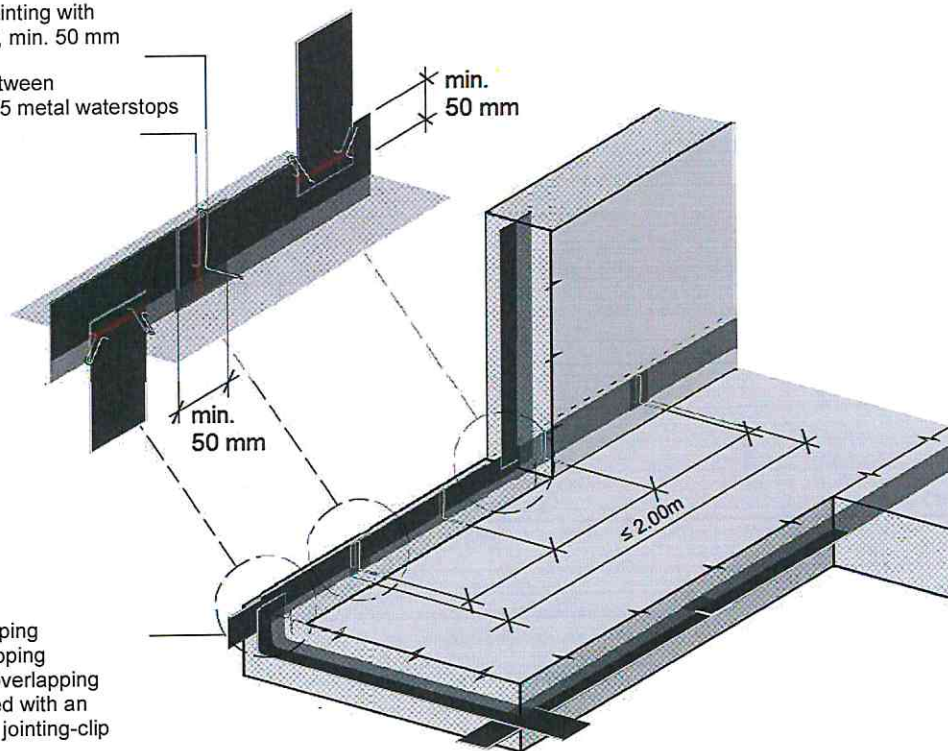
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¹ The manufacturer's technical documents comprises all information necessary for the production and the installation of the product as well as for repair of the roof waterproofing made from that and it is deposited with DIBt.

English translation prepared by DIBt

Aquafin-CJ5 jointing with
Omega-holder, min. 50 mm

Overlaps between
Aquafin-CJ5 metal waterstops



Aquafin-CJ5 overlapping
- min. 50 mm overlapping
- no bonding of the overlapping
- jointing can be faced with an
Omega-holder or a jointing-clip

Performance of the product:

Reaction to fire acc. EN 13501-1	Class E	
	Class a)	Class b) and c)
Watertightness in end use conditions h = 150 mm, t ₁ = 1,25 mm h = 120 mm, t ₁ = 1,25 mm h = 100 mm, t ₁ = 1,25 mm h = 90 mm, t ₁ = 1,25 mm	up to 20 m	up to 4 m
Bond strength at the state of delivery	> 0.8 N/mm ²	
Bond strength after heat aging	pass (< 20 %)	

Class a): construction joints

Class b): Controlled crack joints for application in pre-cast concrete elements

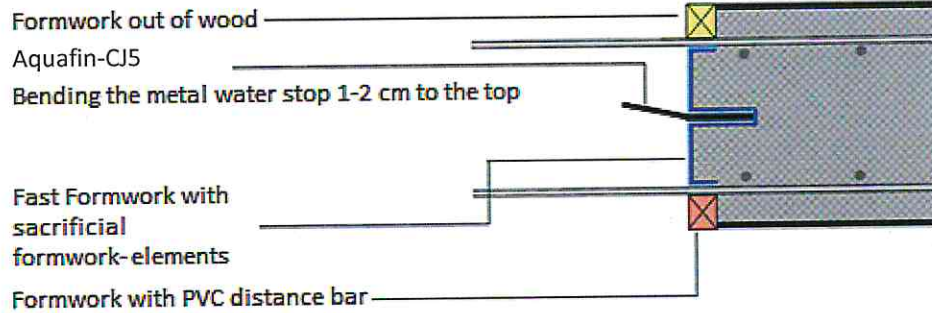
Class c): Controlled crack joints for application in in-situ concrete

Aquafin-CJ5
SCHOMBURG GmbH & Co. KG

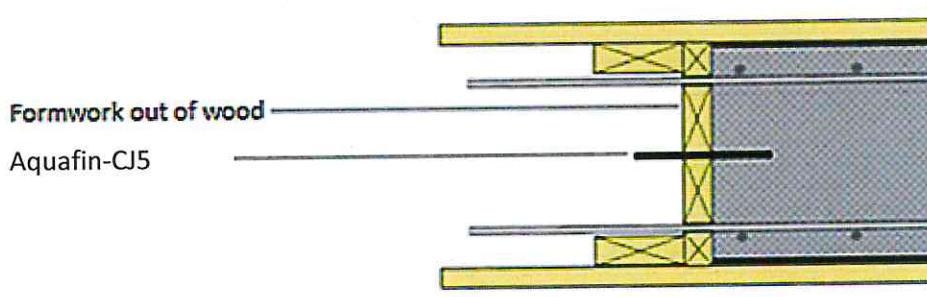
System built-up, use categories and performance of the product

Annex A1

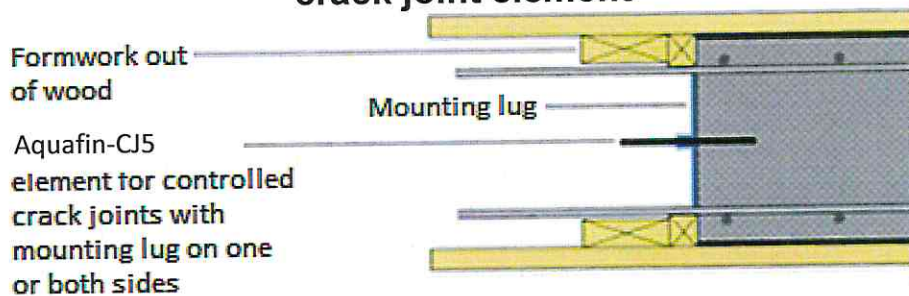
Example baseplate - baseplate



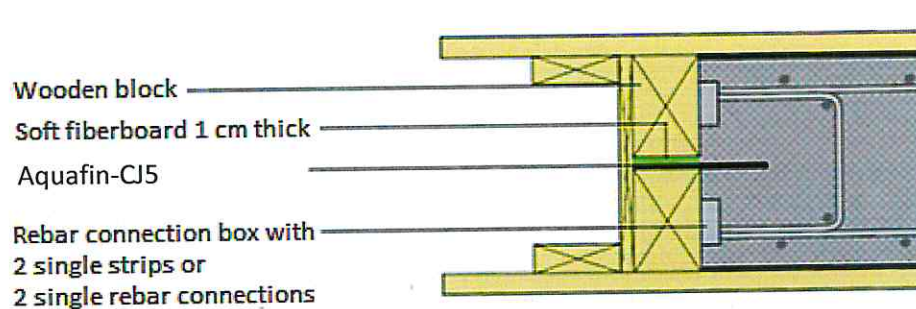
Example wall - wall with hole for reinforcement



Example wall - wall with AQUAFIN-CJ5 controlled crack joint element



Example wall - wall without hole for reinforcement

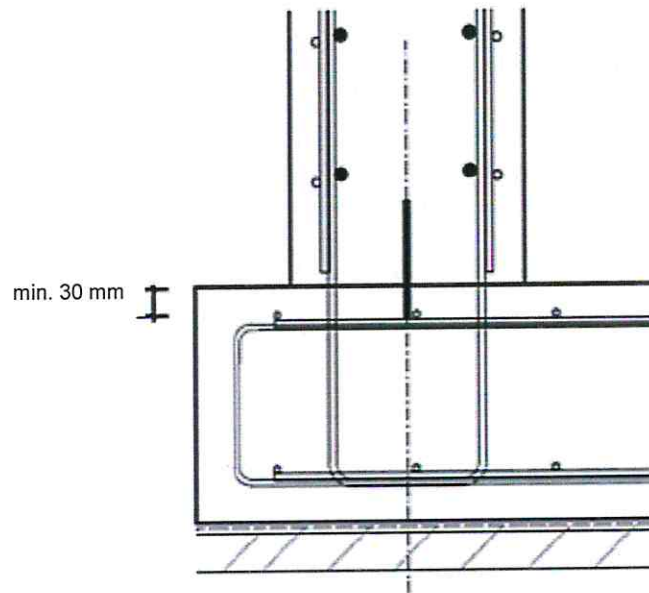


Aquafin-CJ5
SCHOMBURG GmbH & Co. KG

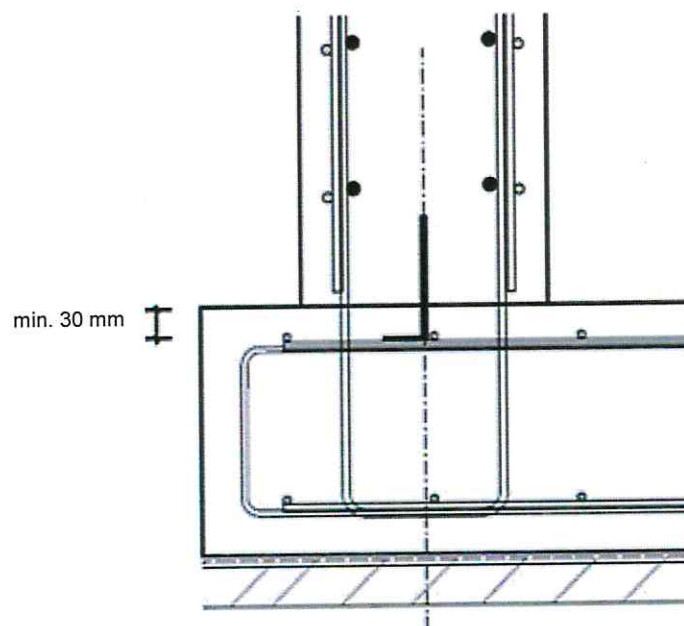
Description of types

Annex A2

Aquafin-CJ5
without mounting base



Aquafin-CJ5
- with mounting base without mounting holes
- with mounting base and mounting holes



Aquafin-CJ5
SCHOMBURG GmbH & Co. KG

Description of types

Annex A3

Installation

The levels of use categories and the performance of the waterproofing product can be assumed only, if the installation is carried out according to the installation instructions stated in the technical documents of the manufacturer, in particular taking account of the following points:

- Installation by appropriately trained personnel
- Installation of only those components which are specified as components of the products
- Installation with the required tools
- Inspecting the substrate surface and the joint surface for cleanliness and correct treatment
- The water stop is generally located in the middle of the construction joints respectively crack control sections
- The embedment in the first concreting step must be at least 30 mm
- The distance between water stop and the edge of the construction element must be at least 50 mm, respectively, at least three times of maximum grain size
- The water stop has to be attached with appropriate Omega-holder or with fixing clip. During concreting the water stop should not move and should not float
- In relation to the admissible water pressure the overlapping between the water stops shall be at least 50 mm at up to 8 m and at least 200 mm at up to 20 m water column
- Inspecting of position and fixing of the water stop during installation and of the finished installed water stop respectively after the 1. concreting step and documentation of the results

Aquafin-CJ5
SCHOMBURG GmbH & Co. KG

Intended use
Specifications

Annex B