

Approval body for construction products  
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and  
Laender Governments



## European Technical Assessment

ETA-23/0244  
of 4 March 2024

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

Qboard waterproofing system

Product family  
to which the construction product belongs

Watertight covering kits based on inherently watertight  
boards for wet room floors and/or walls

Manufacturer

Jackon Insulation GmbH  
Ritzlebener Straße 1  
39619 Arendsee  
DEUTSCHLAND

Manufacturing plant

Jackon Insulation GmbH  
Ritzlebener Straße 1  
39619 Arendsee  
DEUTSCHLAND

This European Technical Assessment  
contains

11 pages including 5 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 030437-00-0503

**European Technical Assessment**

**ETA-23/0244**

English translation prepared by DIBt

Page 2 of 11 | 4 March 2024

The European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction shall be identified as such.

This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 25(3) of Regulation (EU) No 305/2011.

## Specific part

### 1 Technical description of the product

The "Qboard waterproofing system" is a watertight covering kit based on inherently watertight boards for wet room floors and walls.

The kit consists of the following components:

- Watertight boards "Qboard basiq" for walls and floors on the basis of extruded polystyrene foam (XPS). The boards are reinforced on both sides with a fiberglass mesh and coated with a special cementitious mortar. They have the following main dimensions:

Length [mm]: 1200 - 2600

Width [mm]: 600 - 1200

Thickness [mm]: 4 - 80

- Watertight shower elements "Qboard liquid" for floors on the basis of extruded polystyrene foam (XPS). The shower elements are reinforced on both sides with a fiberglass mesh and coated with a special cementitious mortar. They have an integrated flange or a drainage channel for connecting a floor drain and are sloped towards the floor drain. In certain cases, the floor drains are installed at manufacturing plant. The drain is not part of the kit.

The shower elements are manufactured in various shapes and geometries and have the following main dimensions:

Length [mm]: 900 - 2600

Width [mm]: 900 - 1500

Thickness [mm]: 20 - 80

- Sealing collars 120 x 120 mm, 150 x 150 mm, 350 x 350 mm, 400 x 400 mm (without hole) for sealing of pipe penetrations and floor drains.
- "Qboard sealing set 2-k" for sealing the panel joints, penetrations and details consists of two-component mineral sealing slurry, sealing tape and ingoing corners. If necessary, "Qboard outgoing corners" can also be used.
- "BOARD-FIX adhesive and sealing agent" for bonding and sealing of panel joints, penetrations and sealing details.
- Following tile adhesives according to EN 12004<sup>1</sup> for adhering the watertight boards or shower elements onto the substrate as well as adhering the tiles onto the waterproofing:

"Ardex X 77"

"MAPEI Keraflex Maxi S1"

"Saint-Gobain Weber webercol flex"

"MAPEI Ultralite S1"

"PCI Flexmörtel S1"

"VPI Colliflex Premium 2 V 410"

"Schönox Q6"

"Schönox CF Design"

"Sopro's No. 1 schnell Flexkleber No. 1 404"

"Saint-Gobain Weber weber.xerm 852"

<sup>1</sup> EN 12004:2007+A1:2012 Adhesives for tiles - Requirements, evaluation of conformity, classification and designation

English translation prepared by DIBt

The kit is intended to be used under a wearing surface, e.g., tiles. The wearing surface and its jointing material are not part of the kit, but are considered during the assessment of the intended use of the product.

Annexes A1, A3 and A4 show the system build-up, examples of the watertight boards and shower elements and the other components for sealing of details.

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

The intended use of the watertight covering kit under a wearing surface is to create a floor and wall watertight covering for indoor wet areas at possible operating temperature of 5 °C to 40 °C.

The following uses are intended:

- Floor and/or wall surfaces with only occasional direct exposure to water, e.g., at a good distance from shower or bathtub;
- Floor and/or wall in shower areas or around bathtubs used for a few showers daily, e.g., in ordinary dwellings, multifamily houses and hotels;
- Floor and/or 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 watertight covering kit is intended to be used on flexible substrates, e.g., plywood, chipboard, gypsum, anhydrite or similar material vulnerable to water and on rigid substrates, e.g., masonry or concrete.

The product is used in connection with floor drains made of stainless steel or plastics – PE, PP or ABS – with adhesive flange for the collar/sealing layer or with clamping ring and collar.

The drains are not part of the kit. It is up to the responsibility of the user to use suitable products of the given type.

The performances given in Section 3 are only valid if the watertight covering kit is used in compliance with the specifications and conditions given in Annex B and the installation instructions of the manufacturer stated in the technical documents<sup>2</sup>.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the watertight covering kit of at least 25 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 A2 |

<sup>2</sup> The manufacturer's technical documents comprise 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.

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

| Essential characteristic                                 | Performance  |
|--|--------------|
| Content, emission and/or release of dangerous substances | see Annex A2 |
| Vapour permeability                                      | see Annex A2 |
| Water tightness  | see Annex A2 |
| Crack bridging ability                                   | see Annex A2 |
| Bond strength  | see Annex A2 |
| Scratching resistance                                    | see Annex A2 |
| Joint bridging ability                                   | see Annex A2 |
| Impermeability at sealings                               | see Annex A2 |
| Dimensional stability                                    | see Annex A2 |
| Water tightness around penetration                       | see Annex A2 |
| Resistance to temperature                                | see Annex A2 |
| Resistance to mechanical wear                            | see Annex A2 |
| Resistance to alkalinity                                 | see Annex A2 |

### 3.3 Safety and accessibility (BWR 4)

| Essential characteristic | Performance  |
|--------------------------|--------------|
| Slipperiness             | see Annex A2 |
| Cleanability             | see Annex A2 |
| Thickness                | see Annex A2 |

### 3.4 General aspects

The verification of durability and serviceability is only ensured if the specifications of intended use according to Annex B and the specifications of the technical file of the manufacturer are kept.

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

In accordance with EAD 030437-00-0503, the applicable European legal act is: 2003/665/EC.

The system to be applied is: 2+

In addition, with regard to reaction to fire for products covered by this EAD the system to be applied is: 3

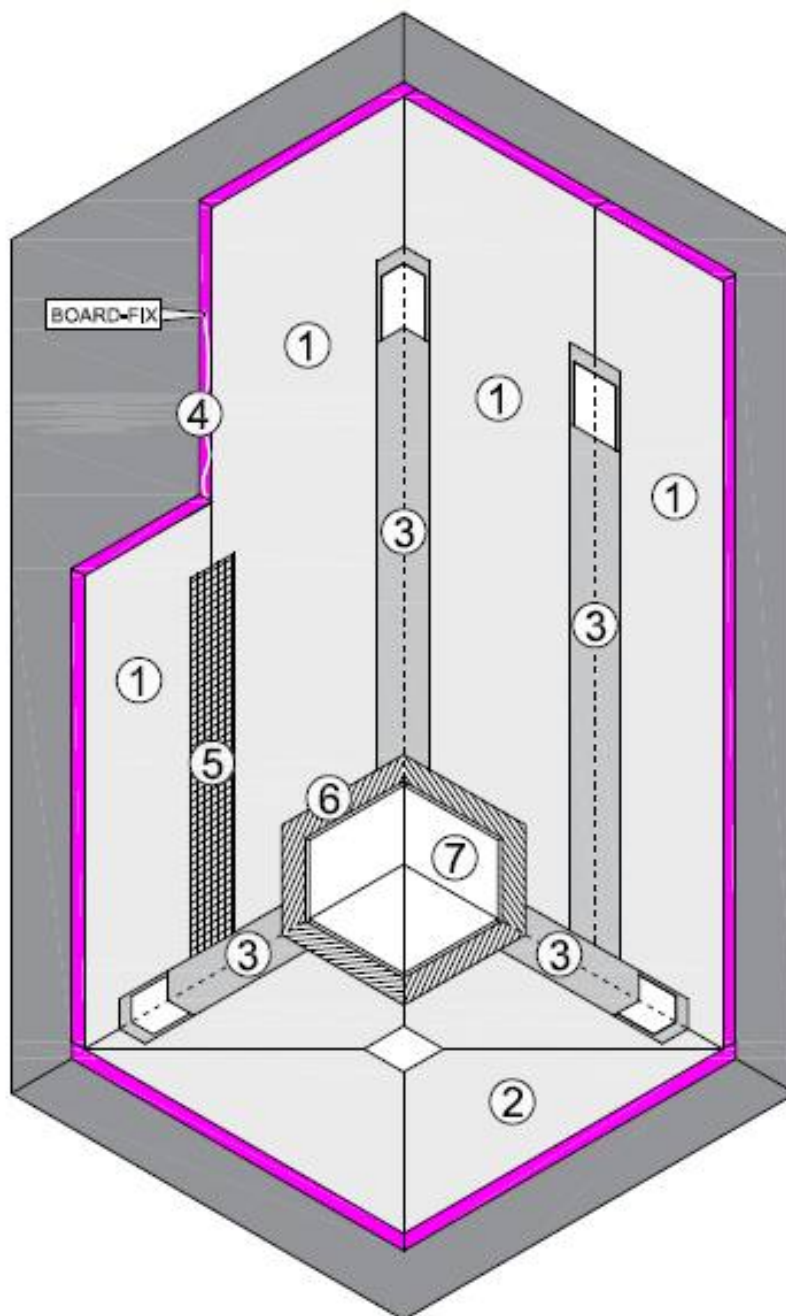
**5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD**

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 4 March 2024 by Deutsches Institut für Bautechnik

Jürgen Banzer  
Head of Section (acting)

*beglaubigt:*  
Hannoun



1. "Qboard basiq" - Waterproofing Board
2. "Qboard liquid" - Shower element (or "Qboard basiq" - Waterproofing Board)
3. "Qboard sealing set 2-k" (mineral sealing slurry, sealing tape and ingoing corners)
4. "BOARD-FIX adhesive and sealing"
5. "Qboard glass fibre tape" (not part of the waterproofing system)
6. Tile adhesives
7. Wearing layer (tiles)

**Qboard waterproofing system**  
Jackson Insulation GmbH

**System build-up**

Annex A1

|  |   |
|--|---|
| <b>Working life</b>  | 25 years  |
| <b>Essential characteristic</b>  | <b>Performance</b>  |
| <b>Reaction to fire</b> EN 13501-1   | Class E   |
| <b>Content, emission and/or release of dangerous substances<sup>a)</sup></b>   |   |
| Component: Tile adhesive (CE-marked)   | According to EN 12004   |
| All other components:  |   |
| Substances, classified as Carc. 1A/1B <sup>b)</sup>  | None of these raw materials are actively used in the manufacture of the construction product <sup>c) d)</sup> |
| Substances, classified as Muta. 1A/1B <sup>b)</sup>  |   |
| Substances, classified as Acute Tox. 1, 2, 3; Repr. 1A/1B; STOT SE 1 and STOT RE 1 <sup>b)</sup>   |   |
| SVOC and VOC   |   |
| No performance assessed  |   |
| <b>Vapour permeability</b>   |   |
| d = 4 mm   | s <sub>d</sub> = 0.43 m   |
| d = 40 mm  | s <sub>d</sub> = 2.70 m   |
| d = 80 mm  | s <sub>d</sub> = 5.23 m   |
| <b>Water tightness</b>   | Watertight  |
| <b>Crack bridging ability</b>  | Category 1: Crack width 0.4 mm  |
| <b>Bond strength</b> using the tile adhesives:   |   |
| "Ardex X 77"; "MAPEI Keraflex Maxi S1";<br>"Saint-Gobain Weber webercol flex"; "MAPEI Ultralite S1"  | Category 2: Bond strength ≥ 0.3 MPa   |
| "PCI Flexmörtel S1"; "VPI Colliflex Premium 2 V 410"; "Schönox Q6";<br>"Schönox CF Design"; "Sopro's No. 1 schnell Flexkleber No. 1 404";<br>"Saint-Gobain Weber weber.xerm 852"   | Category 3: Bond strength ≥ 0.5 MPa   |
| <b>Scratching resistance</b>   | No performance assessed (not relevant)  |
| <b>Joint bridging ability</b>  | Can bridge joints<br>(watertight, joint width 2 mm)   |
| <b>Impermeability at sealings</b>  | Watertight  |
| <b>Dimensional stability</b>   | 0.2 % - 0.9 % (all directions)  |
| <b>Water tightness around penetrations</b><br>(Tests according to Annex A <sup>e)</sup> and Annex E <sup>f)</sup> of EAD 030352-00-0503)   | Watertight<br>(on flexible and rigid substrates)  |
| <b>Resistance to temperature</b><br>(8 weeks at 50° C)   | ± 17 % stiffness;<br>(Bond strength ≥ 0.3 MPa)  |
| <b>Resistance to mechanical wear</b>   | No performance assessed (not relevant)  |
| <b>Resistance to alkalinity</b>  | Category 2: Bond strength ≥ 0.3 MPa   |
| <b>Slipperiness</b>  | No performance assessed   |
| <b>Cleanability</b>  | No performance assessed (not relevant)  |
| <b>Thickness</b>   |   |
| Watertight boards "Qboard basiq"   | 4 - 80 mm   |
| Watertight shower elements "Qboard liquid"   | 20 - 80 mm  |
| <p><sup>a)</sup> Release scenarios regarding BWR 3: IA 2.<br/> <sup>b)</sup> In accordance with Regulation (EC) No 1272/2008.<br/> <sup>c)</sup> Active use is the targeted use of substances to achieve specific product properties. Substances that are present as impurities and/or as a secondary component in the product are therefore not to be regarded as "actively used".<br/> <sup>d)</sup> Assessment based on the detailed manufacturers' statements on dangerous substances.<br/> <sup>e)</sup> Floor test: Water tightness of whole waterproofing system in end use conditions on flexible substrates (floor), including floor penetrations, drains, board joints and other details.<br/> <sup>f)</sup> Wall test: Water tightness and resistance to moisture of whole waterproofing system in end use conditions on flexible substrates (wall), including wall penetrations, board joints and other details.</p> |   |
| <b>Qboard waterproofing system</b><br>Jackon Insulation GmbH   | Annex A2  |
| <b>Performances of the product</b>   |   |





"Qboard basic" – watertight board



"Qboard liquid" - watertight shower element



"Qboard liquid" (line) - watertight shower element

**Qboard waterproofing system**  
Jackson Insulation GmbH

**Example of watertight boards and shower elements**

Annex A3



"Qboard outgoing corner"



"Qboard sealing set 2-k", ingoing corner



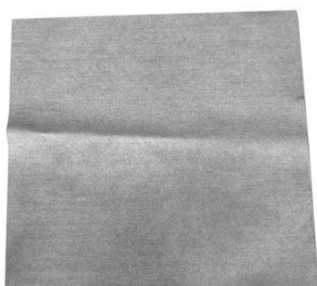
"Qboard sealing set 2-k",  
sealing tape



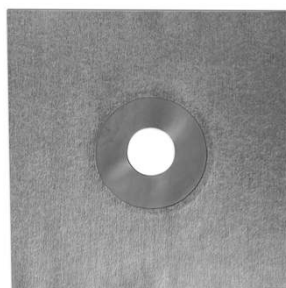
"Qboard sealing set 2-k",  
mineral sealing slurry, comp. A  
(powder-component)



"Qboard sealing set 2-k",  
mineral sealing slurry, comp. B  
(liquid component)



Sealing collar



Expansion zone sealing collar



"BOARD-FIX adhesive and  
sealing agent"

**Qboard waterproofing system**  
Jackson Insulation GmbH

**Components**

Annex A4

### Installation

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

- installation by appropriately trained personnel
- installation of only those components which are specified components of the kit
- installation with the required tools and adjuvant
- precautions during installation
- inspecting the substrate surface for cleanliness and correct treatment
- inspecting during installation and of the finished watertight membrane and documentation of the results

|   |         |
|---|---------|
| <b>Qboard waterproofing system</b><br>Jackson Insulation GmbH | Annex B |
| <b>Intended use</b><br>Specifications for the Installation    |         |