

Joramark Oy

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Testing of water tightness

Test Object

2 pieces of **Joramark Box300** including front plates, service plates and countersunk M4 screws.

Watertight covering kit based on flexible sheet designated **Weber Tec Foliesystem**.

The Box300 and accessories were sent by the commissioner and arrived at RISE Research Institutes of Sweden on October 14, 2020.

The watertight covering kit was brought to RISE by Weber in connection with the installation of the test samples on November 4, 2020.



Image 1 – Joramark Box300 including front plate and service plate. The service plate used in this test did not have any hole.

Commission

Testing if it is possible to make a watertight installation of Joramark Box300 in combination with a watertight covering kit based on flexible sheet from Weber, Saint-Gobain Sweden AB.

The test is performed according to EAD 030352-00-0503 Annex F *Water tightness around penetrations and other details in wet room walls with flexible substrate*.

Summary

No leakage could be detected. The installation was found water tight.

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Test preparation

The box 300 was mounted between two wall studs. The studs were covered by a 13 mm plasterboard (500 x 600 mm). The hole in the plasterboard was 304 x 304 mm making a gap of 2 mm around Box 300. The box was mounted so that the front plate of Box300 was flush with the surface of the plasterboard.



Image 2 - Mounting of Joramark Box300 in a plasterboard

The stainless steel of the front plate was cleaned with T-Röd (denaturated alcohol).

The water tight foil **Webertec Folie** was then glued to the stainless steel with and to the plasterboard with **Webertec folie- och skarvlim**.



Image 3 – Webertec folie- och skarvlim applied on the front plate and on the plasterboard



Image 4 – Webertec folie applied and the edges sealed with Webertec folie- och skarvlim

After the foil had been applied the edges were sealed with a layer of Webertec folie- och skarvlim. The panels were allowed to dry for approximately 40 minutes before a second layer of Webertec folie- och skarvlim was applied on the sealed edges.

Approximately 600 g/m² was used to glue the foil.

Test

Two panels were prepared by Weber. The panels were stored for seven days in standard test climate (23 ±2 °C / 50 ±5 % R.H.) to harden/dry.

From the back side of the panel, a moisture indicating powder was sprinkled in the gap between the Box300 and the plasterboard. The gap was then completely sealed with tape.

The panels were then subjected to 2 x 1 500 cycles of water spray (3 ±0,5 l/min).

One cycle is four minutes long and consists of the following phases:

- One minute spray with water at 60 ±3°C
- One minute pause
- One minute spray with water at 10 ±3°C
- One minute pause

The results reported are only valid for the objects subjected to the test

Results

When the test was finished the panels were removed from the test equipment.

The tape was removed from the back and the gap was inspected for colour change of the moisture indicating powder. The foil was removed to uncover the plasterboard and the plasterboard was inspected for any signs of leakage.

No indication of leakage could be detected on any of the panels.



Image 5 – Webertec folie has been removed for inspection of leakage

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