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# European Technical Assessment

ETA-17/0124 of 2018-02-21

#### **General Part**

**Technical Assessment Body issuing the European Technical Assessment:** SINTEF

Trade name of the construction product

Product family to which the construction product belongs

Manufacturer Fibo AS

Industriveien 2 NO-4580 Lyngdal

Fibo Bathroom Walls Panels

Norway

Manufacturing plant(s) Fibo AS

Industriveien 2 NO-4580 Lyngdal

Norway

This European Technical Assessment contains

6 pages including 1 Annex which form an integral

Watertight Covering Kits for Wet Room floors and or walls. Kits based on inherently watertight Boards.

part of this assessment

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of ETAG 022, Part 3 used as EAD, 2010 Watertight Covering Kits for Wet Room floors and or walls. Part 3-Kits based on inherently watertight Boards.

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

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### Specific parts

### 1. Technical description of the product

Fibo bathroom panel is a watertight lining system based on plywood panels coated with high-pressure laminate on the front side and a transverse laminate on the rear side. The panels are made from plywood and consist of 7 sheets of wood according to EN 13986, glued with waterproof adhesive. The front of the panels is covered with 0,85 mm high-pressure laminate, and the backside is covered with a 0,73 mm thick transverse laminate.

Standard dimensions are 2400 mm length and 600 mm width. Panel thickness is 10,2 mm. The density is 790 kg/m³. Tolerances are shown in table 1.

The long sides of the panels are profiled as shown in fig. 1, with an integrated locking profile "Aqualock". The short ends have inclined edges.

The bathroom panel system consists of plywood panels, installation profiles from extruded aluminium or PVC and sealing compound, see fig. 2.

Table 1
Tolerances for production of Fibo bathroom panel

Property	Requirement	Test method	
Length	± 1,0 mm	NS-EN 324-1	
Width	± 0,5 mm		
Thickness	± 0,4 mm		
Squareness	≤ 1,0 mm	Diagonal deviation	
Edge straightness	Max 0,8 mm	NS-EN 324-2	
Lipping tongue/groove	≤ 0,15 mm	-	

Table 2 Sealants for use with Fibo bathroom panels

Wet area sealant	Aluminium profiles	PVC-profiles
Fibo Seal	x	х
Soudaseal 215 LM	x	х
Optiform Baderomsplate Montasje	х	х
Casco AquaSeal	x	х
CT1	х	х

# 2. Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

Fibo bathroom panel is used on walls in sanitary rooms as a waterproof lining. The panels can be fixed directly to the wall frames or battens, included walls below ground level. When used on walls from bricks or concrete, battens are required.

The panels are to be used in indoor applications, where the kit is not exposed to temperatures (i.e. temperature of structure) below 5 °C and above 40 °C, in the following uses:

- Wall surfaces with only occasional direct exposure to water, e.g. at a good distance from shower or bathtub.
- Walls in shower areas or around bathtubs used for a few showers daily, e.g. in ordinary dwellings, multi-family houses and hotels
- 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.

## 3. Performance of the product and references to the methods used for its assessment

### 3.1 Essential characteristics and their performance

Table 3 Essential characteristics and their performance

Basic works requirement		Characteristic ETAG/EAD Clause No.	Performance
BWR 1	Mechanical resistance and stability		Not relevant
BWR 2	Safety in case of fire	Reaction to fire 2.4.1	D-s1, d0 EN 13501-1
		Release of dangerous substances 2.4.2	A written statement from the applicant has been provided and the product does not include any substances listed EG 1907/2006 REACH
		Water vapour permeability 2.4.3	s <sub>d</sub> =14 m EN ISO 12592, 93-50 % RH
		Watertightness 2.4.4.1	Watertight 150 kPa / 7 days, EN 14891, A7
		Crack bridging ability 2.4.4.2	No performance assessed
		Bond strength 2.4.4.3	Category 3 > 0,5 MPa, EN 319
BWR 3	Hygiene, health and the environment	Scratching resistance 2.4.4.4	Passed Annex C
		Joint bridging ability 2.4.4.5	Category 2 (watertight) Annex B
		Impermeability at sealings 2.4.4.6	Passed Annex B
		Watertightness around penetrations 2.4.4.7	Category 2 (watertight) Annex E
		Durability 2.4.6	No performance assessed
		Serviceability 2.4.7	No performance assessed

Basic wo	orks requirement	Characteristic ETAG/EAD Clause No.	Performance
BWR 4	Safety and accessibility in	Slipperiness	Not relevant
	use	2.4.5	
BWR 5	Protection against noise		Not relevant
BWR 6	Energy economy and heat retention		Not relevant
BWR 7	Sustainable use of natural		Not relevant
	resources		NOT TELEVALIT

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

According to the decision 2003/655/EC - Commission decision of date 12 September 2003, published in the Official Journal of the European Union (OJEU) L231/12 of 17/09/2003, of the European Commission, the system of assessment and verification of constancy of performance (see Annex V to the regulation (EU) No 305/2011) is 2+.

# 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 at SINTEF.

Issued in Oslo, Norway

Ву

SINTEF AS

Hans Boye Skogstad

Hans Boye Shogston

Approval Manager

#### Annex 1

### Installation

Fibo bathroom wall panels are installed in accordance with manufacturers installation guide.

### Installation on timber framework

The studs spacing shall be max. c/c 0,6 m, and horizontal battens shall have spacing max. c/c 0,8 m. Extra noggings shall be used if heavy objects, for instance washstand, shall be installed. The panels shall be fixed to the studs/battens by zinc coated ring shanked special nails or by screws, spacing c/c 200 mm, nails or screws no closer than 35 mm from the top or bottom of the panel. Power tools must be used with caution not to damage the panels. See Figure 1 and 2.

### Installation on concrete or brick walls

When installed on concrete or brick walls the panels shall be fixed to vertical and horizontal battens with dimensions min. 23 mm x 48 mm. The battens shall be installed c/c 0,8 m with the wide side flat. Distance between battens shall be 0,8 m, as described above for frame work walls. A capillary obstructing layer, for instance strips of tar paper, shall be installed between concrete/brick wall and the battens.

#### Wet areas

For wet areas all vertikal joints and profiles shall be sealed using a wet area sealant. To ensure proper watertightness excess sealant shall be visible along the profile. Excess sealant must be wiped away.

All panel ends are to be sealed with one of the sealants listed in Table 3 prior to assembly.

Sealants approved for use are listed in Table 3. These sealants has been tested with Fibo bathroom panels according to ETAG 022, "Guideline for European Technical Approval of watertight covering kits for wet room floors and or walls", Part 3: Inherently watertight board. The listed sealants comply with present environmental requirements.

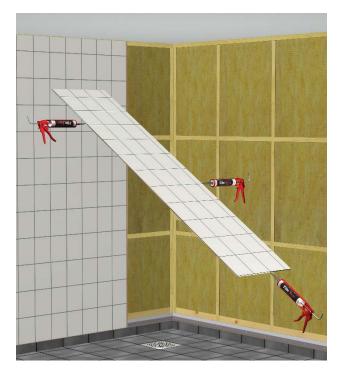
### Penetrations in wet areas

Watertightness around wall boxes are ensured by using one of following methods:

- Sleeve delivered with the wall box is to be attached to the bathroom panel using one of the sealants listed in table 3. See Figure 3.
- Tightening ring and gasket delivered with wall box is installed as illustrated in Figure 4.

### Maintainance/cleaning

Fibo bathroom panels are to be cleaned using a wet cloth or using a mild detergent without rubbing components.



Transverse-laminate

High-pressure laminate

Fig. 1 Fibo bathroom wall panel system

Fig. 2
Fibo bathroom wall panels with Aqualock system

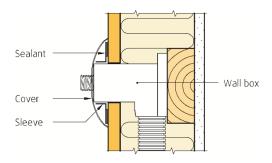


Fig. 3 Installation of wall box with sleeve

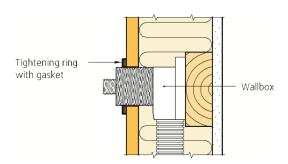


Fig. 4 Installation of wall box with tightening ring and gasket