

SINTEF Technical Approval

TG 20976

SINTEF confirms that

Multipanel/Naturepanel

has been found to be fit for use in Norway and to meet the provisions regarding product documentation given in the regulation relating to the marketing of products for construction works (DOK) and regulations on technical requirements for building works (TEK), with the properties, fields of application and conditions for use as stated in this document



1. Holder of the approval

Grant Westfield
Westfield Avenue
Edinburgh, EH 2QH.
www.grantwestfield.co.uk

2. Product description

Multipanel/Naturepanel is a waterproof cladding system, based on core material of fibreboard and high-pressure laminate with a thickness of 0.8 mm on the front. On the back, there is a barrier laminate.

Standard dimension:

Length (mm)	Width (mm)
2400	598
2400	900
2400	1200
2700	598
2700	900
2700	1200

The panel thickness is 11 mm and the density of the panel is 750-850 kg/m³. Dimensional tolerances are shown in Table 1.

The panels come in 2 variants. One with click solution, see Figure 1 and one with smooth side surfaces. A sealing strip must always be used together with sealant at the panel joints when panel without click is chosen. During installation, the panel joints, end joints and connections are sealed with Sealux-N Silicone sealant. The panels are attached to the studs with screws 3.3x28 mm.

Mounting profiles made of extruded aluminium and screws are included as part of the cladding system.

Table 1 Dimensional tolerances for Multipanel/Naturepanel during production.

Property	Test method	Value
Length	EN 324-1	± 1,0 mm
Width		± 0,5 mm
Thickness		± 0,4 mm
Squareness	Diagonalavvik	± 1,0 mm
Edge straightness	EN 324-2	max. 0,8 mm
Tongue and groove edge	-	± 0,15 mm

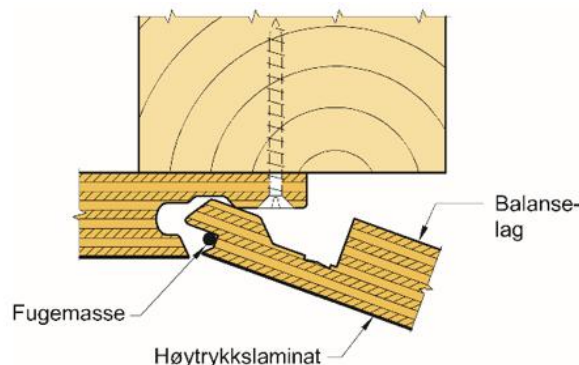


Fig. 1
Multipanel/Naturepanel with self-locking joint system
The sealant is applied during installation

3. Fields of application

Multipanel/Naturepanel can be used in buildings in risk classes 1 – 5 in fire classes 1, 2 and 3 in fire cells up to 200 m². For fire class 1, the product can also be used in fire cells over 200 m². The product cannot be used in escape routes. The panels can be used as a waterproof layer on walls in wet rooms and are suitable for use in changing rooms, laundry rooms, purification plants, laboratories, etc. The panels can be installed directly on timber frames and on existing substrates such as brickwork, concrete, wood panels and building boards, including walls facing the ground.

4. Properties

Material properties

Multipanel/Naturepanel are tested according to European Assessment Document; EAD 030437-00-0503; "Watertight covering kits based on inherently watertight boards for wet room floors and walls".

Characteristics of fire impact

Multipanel/Naturepanel has fire safety class D-s1,d0 according to EN 13501-1.

The classification applies when installed on a substrate with a minimum fire safety class A1 or A2-s1,d0 with a minimum density of 525 kg/m³ and a thickness of 12 mm, with and without underlying cavities. Cavities must be constructed with wooden battens with a minimum fire safety class D-s2,d0 or other material with a minimum fire safety class A1 or A2-s1,d0. The classification applies to board thickness 11 mm, as well as to horizontal and vertical joints.

SINTEF is the Norwegian member of European Organisation for Technical Assessment, EOTA, and European Union of Agrément, UEAtc

Durability

Multipanel/Naturepanel has undergone testing in accordance with EAD 030437-00-0503 and is considered to have satisfactory durability for the applications specified in this approval.

Table 2 Product characteristics for Multipanel/Naturepanel determined by type testing

Property	Value	Test Method
Water vapor resistance, high pressure laminate, sd – value1)	28,0 m	EN 12572:2016
Watertightness after 1.5 bar	Passed	EN 14891 Annex A.7
Watertightness around penetrations	Passed	EAD 030352-00-0503 Annex E
Joint bridging ability	Passed	EAD 030352-00-0503 Annex B
Resistance to scratching	Passed	EAD 030352-00-0503 Annex C
Soft Body impact	Passed	EAD 210005-00-0505

¹⁾ Test conditions: 93 % RH / 50 % RF at 23 °C

²⁾ Penetrations: 15 mm, 46 mm og 110 mm

5. Environmental aspects

Substances hazardous to health and environment

Multipanel/Naturepanel contains no hazardous substances with priority in quantities that pose any increased risk for human health and environment. Chemicals with priority include CMR, PBT or vPvB substances.

Effect on indoor environment

Multipanel/Naturepanel is evaluated according to SINTEF Technical Approval – Health and Environmental Requirements version 09.09.2024. The product is not regarded as emitting any particles, gases or radiation that have a perceptible impact on the indoor climate, or to have any significant impact on health. The product meets the requirements in BREEAM-NOR v6.1, Emissions from building products according to Hea 02 Indoor air quality

Waste treatment/recycling

The product shall be sorted as residual waste and metal. The product shall be delivered to an authorized waste treatment plant for material recycling or energy recycling.

Non dry adhesive is defined as hazardous waste (according to the Norwegian Waste Regulation (Avfallsforskriften)). The product must be sorted as hazardous waste on the building site and be delivered to an authorized treatment plant for hazardous waste. The dried product is not hazardous waste.

6. Special conditions for use and installation

Storage and conditioning

Multipanel/Naturepanel should be stored dry and on a flat surface. The panels must be air-conditioned at room temperature for 3 days in unopened packaging before installation.

Foundation

When installing Multipanel/Naturepanel, the substrate must at least satisfy the requirements for directional and surface deviations for tolerance class PB as specified in NS 3420-1.

Installation on timber frame

Timber-frame walls must have a stud spacing of max. c/c 600 mm. For fastening heavy objects such as washbasins, extra nailing must be added.

The bathroom panel is attached to the studs with screws through the panel's nail lip as shown in Fig. 1, or with Fix ALL High Tack glue. The distance between the attachment points must be a maximum of 200 mm. Fasteners through the nail lip should not be placed closer to the top and bottom edges of the panel than 35 mm.

Installation on brick and concrete

When installing on concrete or masonry, the panels must be attached to vertical battens with a minimum dimension of 23 mm x 48 mm at a distance of c/c 600 mm. The panel can also be mounted on brick or concrete with Fix ALL High Tack.

Wet zones

In wet zones, all vertical joints, and joints between panels and mounting profiles and bottom profile, must be sealed with sealant given in Table 3. Sealing with sealant in vertical joints is carried out as illustrated in Fig. 1. The sealant should flow out into the entire joint when the panels are pressed together. Excess sealant is wiped away. All cut surfaces and bottom edges are sealed with sealant before installation. When filling sealant, it may be appropriate to mask 1-2 mm up on the panels before filling the joint compound between the bottom profile and the masking tape. The bathroom panel should be installed all the way down to the base strip before applying joint compound. Use a plastic/rubber spatula to remove excess. Make sure that not too much sealant is removed so that the sealant has a smooth surface.

Table 3

Sealants with connection to Multipanel/Naturepanel

Fugemasse
Sealux-N Silicone

Vapor barrier

Multipanel/Naturepanel satisfies the requirement for vapour resistance for external walls and walls against rooms without or with limited heating. Any vapour barrier in the exterior walls must be removed before the panels are installed.

Penetrations in wet zones

Waterproofing around penetrations is carried out using the following methods:

- Sanipex manchettes are mounted with sealant for Waterproofing around wall boxes. Sealant should only be applied to the bathroom panel and not on the pipe, see Fig. 2
- For sealing copper pipes and drainpipes, use a sealant listed in Table 3. Sealant is applied between the panel and pipe transit.

Maintenance/Cleaning

When cleaning, a mild detergent without abrasives is used.

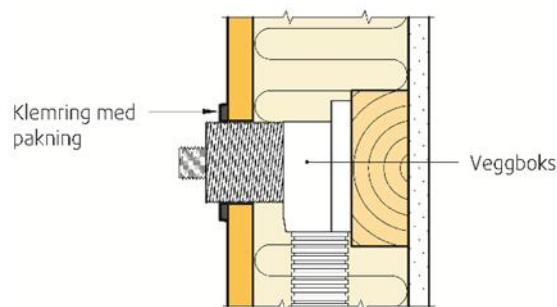


Figure 2

Pipe penetrations when Sanipex manchette is applied.

7. Factory production control

Multipanel/Naturepanel is produced by:
Grant Westfield
Westfield Avenue
Edinburgh
EH11 2QH
Scotland

The holder of the approval is responsible for maintaining the factory production control to ensure that *Multipanel/Naturepanel* is manufactured in compliance with the preconditions upon which this approval is based.

The manufacturing of the product(s) and the manufacturer's system for factory production control (FPC) is subject to continuous surveillance in accordance with the contract regarding SINTEF Technical Approval.

8. Basis for the approval

Multipanel/Naturepanel's characteristics are documented in reports issued by independent bodies. The technical

documentation serves as the basis for SINTEF's product assessment with respect to the guidelines for SINTEF Technical Approval, and recommendations as outlined in SINTEF Building Research Design Guides.

9. Marking

The marking must at least include the manufacturer, product name/quality and date of production. The marking is made directly on the panels.

The approval mark for SINTEF Technical Approval TG 20967 may also be used.

10. Liability

The holder/manufacturer has sole product responsibility according to existing law. Claims can only be made against SINTEF under general law or other special grounds.

for SINTEF



Hans Boye Skogstad
Approval Manager