CFLEX BUILDING MATERIAL

Product description

CFlex Material consists of a core of extruded polystyrene with a thin fibreglass reinforcement-mortar on both sides. Fittings, screws and discs are part of the system.

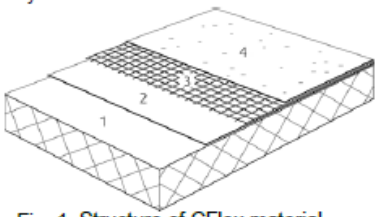

Fig. 1. Structure of CFlex material

1 extruded polystyrene
2 mortar
3 fibreglass reinforcement
4 mortar

Properties

Material properties

Table 1
Material properties of wet seal plates measured by examination

Property	Value	Test method
Water opacity at 1,5 bar pressure for 7 days	Passed	NS-EN 14891, Annex A.7
Water opacity with a penetration in wall [1)]	Passed	ETAGE 022 Annex E
Material extension capacity: - tensile strength - shear strength	 2 mm – passed 2 mm – passed	ETAGE 022, annex B
Moment bending capacity: - 12 mm thick plate - 20 mm thick plate	 101 Nmm/mm 170 Nmm/mm	NS-EN 12089
Bending stiffness, EI: - 12 mm thick plate - 20 mm thick plate	 120 kNmm^2/mm 392 kNmm^2/mm	NS-EN 12089
Adhesion [2)]	0.4 N/mm^2	NS-EN 14891, Annex A 6.2
Adhesion [3)] after 21 days in water at 23 °C	0.3 N/mm^2	NS-EN 14891, Annex A.6.3
Adhesion [3)] after 14 days in water at 70 °C	0.4 N/mm^2	NS-EN 14891, Annex A 6.5
Adhesion [3)] after 7 days in alkaline water (saturated CaOH, pH > 12) at 40 °C	0.3 N/mm^2	NS-EN 14891, Annex A 6.9
Shock resistance [4)]	3 x 120 Nm	ETAGE 003

Table 2
Material data for the core material as measured by examination

Property	Value	Test method
Thermal conductivity	0,036 W/(mK)	EN 13164
Water vapor resistance 20 mm thick plate, sd -	2,5 m	EN 12086
Water absorption by immersion in	< 0,2 vol %	ISO 2896
Compressive strength	300 kN/m^2	DIN 5342

Fire safety

Uncovered wet seal plate's reaction to fire is not determined; class F acc. to NS-EN13501-1. Covered with ceramic tiles the surface is in fire resistance class In1 acc. to NS 3919.

Environmental conditions

Indoor environment

After evaluation it was deemed that the product does not emit particles, gases or radiations that adversely affect the indoor climate, or have any health significance.

Environmental declaration

No environmental declaration in accordance with ISO 21930 has been prepared for the plate. The plates contain no chemical substances listed on the observation list of hazardous substances.

Health and environmentally hazardous chemicals

The product contains no hazardous substances, or other relevant materials in a quantity considered as a health or environmental hazard.

Waste management/ recycling

The product is delivered to an approved waste reception where its energy and materials can be recycled

Conditions for use

Storage and conditioning

The place should be covered during storage and transport in order to prevent e.g. dust and other dirt from the construction site, to reduce the adhesion of the other products to the plates. The plates should not be exposed to flames, other ignition sources or organic solvents. At a long-term storage the product should be sealed from UV light.

Membranes

It is recommended that a waterproofing membrane be applied once installed, before tiling the product.

Installation of CFlex wall inserts on a timber frame

CFlex wall inserts can be mounted directly on the timber frame. They are fastened into the studs with screws and discs associated with the CFlex system.

Installation of CFlex seats and foot rests on concrete

Fasten the foot rests and seats with a cement based adhesive of a minimum of 6 mm tanning, on the concrete surface.

TEKNISK GODKJENNING
SINTEF Certification

The technical approval mark