Biolith® Tile Declaration of Performance

220926 - BMDK - Biolith Tiles

Manufacturer: BioMASON Denmark ApS
c/o Gorrissen Federspiel
Axeltorv 2
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Denmark
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Unique ID: BL-400x200

Intended Use: The tiles are intended to be used as cladding on exterior facades and interior walls, as well as interior and exterior flooring applications.

AVCP System: 3

EAD: EAD 210207-00-0404: Tiles made of aggregate blends and microorganisms

Notified body: Refer to ETA-22/0684

Declared Performance:
Covering a range of product types under the Biolith product line

Characteristic / Data Submitted	Assessment Method	Assessment of Characteristic
Safety in case of fire (BWR 2)		
Reaction to fire	2.2.1	The product has an organic content of less than 1% and therefore classified as class **A1** in accordance with EN 13501-1 and Delegated regulation 2016/364
Facade fire performance	2.2.2	**NPD**
Hygiene, health and the environment (BWR 3)		
Content, emission and/or release of dangerous substances*	2.2.3	**NPD**
Safety and accessibility in use (BWR 4)		
Density	2.2.4	The average apparent density is **2144 kg/m^3** with a tolerance of ± 30%
Configuration	2.2.5	Length, average: **445,5 mm** Width, average: **193,2 mm** Thickness, average: **19,8 mm** Straightness, average: **0,22 mm, max. deviation 0,21 %**

		Rectangularity, average: **0,53 mm, max deviation 0,41 %** Center curvature – length; average: **0,17 mm, max deviation from flatness 0,17 %** Center curvature – width; average: **0,36 mm, max deviation from flatness 0,17 %** Edge curvature – length; average: **0,29 mm, max deviation from flatness 0,19 %** Edge curvature – width; average: **0,17 mm, max deviation from flatness 0,23 %** Warpage – length; average: **-0,78 mm, max deviation from flatness -0,32 %** Warpage – width; average: **-0,05 mm, max deviation from flatness -0,18 %**
Compressive strength	2.2.6	NPD
Bond strength - Shear bond strength	2.2.7	NPD
Bond strength - Tensile bond strength	2.2.7	**1,6 N/mm²** adhered to the substrate with cementitious adhesive type C2TE in accordance with EN 12004-2
Water absorption	2.2.8	The average water absorption is **8%**
Water vapour permeability	2.2.9	**NPD**
Slipperiness (for use in flooring applications)	2.2.10	Slip resistance value: **SRV "wet": 52, SRV "dry": 63**
Resistance to mechanical wear (for use in flooring applications)	2.2.11	The chord lengths for each indentation: 43,5mm, 40,5 mm, 40,0 mm, 40,0 mm, 42,0 mm, 41,0mm; **Average 41,2 mm**
Flexural strength	2.2.12	The average flexural strength is **7,0 MPa** with a standard deviation of 0,6
Aspect of durability linked with the Basic Works Requirements		
Thermal shock resistance (for use in external floorings)	2.2.13.1	The calculated mean change in mass is **0,5 %;** The calculated mean flexural strength after thermal shock is **5,5 MPa** with a standard deviation of 1,4
Impact resistance (for use in external floorings)	2.2.13.2	The fracture work in joules is **230,4 J**

Freeze/thaw resistance	2.2.13.3	The average flexural strength before cycles is 7,2 MPa with a standard deviation of 0,6; The average flexural strength after 25 cycles is 3,5 MPa with a standard deviation of 1,1; The coefficient of freeze/thaw resistance in flexural strength is **48,6**

** In addition to the specific clauses relating to dangerous substances contained in this European technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g., transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.*

The performance of the product identified is in conformity with the declared performances.

This declaration of performance is issued, in accordance with regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.