

Cyalith

BIOINSPIRED CERAMIC ALTERNATIVE | INDOOR DECORATIVE WALL TILES

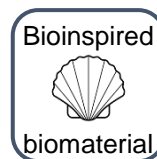
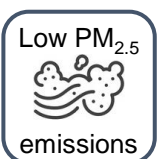
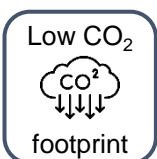


SUMMARY

Cyalith is a sustainable bio-based alternative to decorative ceramic wall tiles.

By avoiding high-energy processing such as firing and glazing, Cyalith has 96% lower CO₂ emissions and a 99% lower air pollution (PM_{2.5}) emissions compared to ordinary ceramic tiles.*

Taking inspiration from natural sea shells, Cyalith is comprised of naturally occurring calcium carbonate and a biopolymer obtained from photosynthetic algae.



*Based on independent Life Cycle Assessment (LCA) analysis



Technical data



Suitability	Internal wall only. Dry environments away from direct sunlight.
Colours	Various shades of blue and green available on request
Texture	Texture variation can be altered on request
Finish	Bio-based gloss, or protective synthetic coating
Care	Clean with mild detergents only. Avoid abrasive cleaning products.

Physical properties†

Test	Standard & Requirement	Result
Length/width deviation	EN10545 – 2 (±0.5%)	Conform
Straightness of sides	EN10545 – 2 (±0.3%)	Conform
Surface flatness	EN10545 – 2 (±0.5%)	Conform
Modulus of rupture	EN14411 – BIII (>12 MPa)	Conform

†Based on internal testing. Other properties TBD

Product format

Size LxW (mm)	Thickness (mm)	Items per box	Box coverage (m ²)	Approx. weight (kg)
100x100	8	100	1	16
100x200	8	50	1	16
200x200	8	25	1	16

Sustainability information‡

Product	Climate change potential (kg CO ₂ e)	Fine particulate matter formation [kg PM _{2.5} eq.]	Freshwater ecotoxicity [x100 kg 1.4-DB eq.]
Ordinary ceramic tile	16.4	201	91.5
Eco tile	7.14 (x2.2)	11.0 (x18.2)	51.9 (x1.76)
Cyalith	0.915 (x17.9)	2.09 (x96.2)	2.26 (x97.5)

‡Based on independent LCA analysis. Relative performance vs. ordinary ceramic tile given in parentheses.

Important information

Since Cyalith is a biomaterial, variation in shade and pattern may occur over the lifetime of the product.