



BioBasedTile®

DATA SHEET

June, 2022



PRODUCT DESCRIPTION

BASIC USE

BioBasedTile® is appropriate for exterior and interior use in commercial, institutional, and residential building projects. BioBasedTile® is used in vertical facing assemblies and installed on a support wall with adhesive or mechanical systems, or adhered onto a substrate in horizontal conditions.

COMPOSITION AND MATERIAL

BioBasedTile® tile is manufactured from waste stream aggregate and a biologically generated calcium carbonate biocement® material, resulting in modular units with one or more finished faces. They are formed by vibratory compaction in a semi-dry mix and cured in ambient temperatures, reaching full strength in less than three days.

TOLERANCES

BioBasedTile® is manufactured to dimensions within the following tolerances: dimensions 7.62 cm and under have a +/- 1.59 mm permissible variation, while dimensions over 7.62 cm have a +/- 3.175 mm permissible variation. Products do not shrink during curing. Units are measured with methods outlined in ASTM C67, Section 13, and EN 772-16, Clause 5.3.1. Products are inspected to be free of cracks, chips, and imperfections that would affect strength and serviceability of the product or would detract from appearance when viewed under diffused lighting from a distance of 4.572 m.

LIMITATIONS

BioBasedTile® is intended for above grade applications. Manufactured masonry units, regardless of composition, are inherently absorptive and are not intended for below-grade applications.

COLOURS

Biocement® is translucent white in colour, which reveals the colour of the underlying base aggregate. Variations to aggregate colour and tone are achieved using pigments conforming to ASTM C979, resulting in homogeneous through-body coloration.

TECHNICAL DATA

PERFORMANCE STANDARDS

BioBasedTile® meets and exceeds the physical properties of standard materials for common tests (ASTM and EN). Testing data available upon request.

CERTIFICATIONS

- ILFITM, Declare Red List Free
- Health Product Declaration

ENVIRONMENTAL IMPACT

Biocement® material products are formed in ambient temperatures and without the use of fossil fuels. BioBasedTiles® are comprised of 85% industrial waste stream aggregate (pre-consumer recycled content) and 15% biocement® by mass. Calcium carbonate biocement® contains 44% sequestered carbon dioxide (CO₂) by mass obtained from industrial sources.



DELIVERY

BioBasedTile® prices are ex-works. BioBasedTile® can be shipped upon request to the specified delivery location on standard shipping pallets with a per- pallet weight of less than 1,000 KG

STORAGE

Place a moisture barrier between the ground and pallet to prevent exposure to moisture. Keep tiles at least 3 inches (7.62 cm) above grade for duration of storage.

WORKABILITY

BioBasedTile® tile may be cut using a standard wet saw with a diamond abrasive blade.

INSTALLATION

Install BioBasedTile® tile in accordance with all applicable codes, standards, and any local requirements, as well as our installation manual (available upon request). A solid support system must be provided. Suitable options include wood stud, steel stud, poured concrete, unit masonry (CMU or brick) in vertical assemblies. Reinforced concrete slab is required for horizontal assemblies. Installation on other substrates may be possible. Adhesive attachment methods must be tested and approved for a minimum shear strength of 50 psi in accordance with ASTM C482 or EN 1052-3, Clause 5.3.13. Horizontal applications require compliance with applicable codes regarding coefficient of friction.

Biomason® biocement® material is a calcareous material similar in composition to limestone. Metal components in contact with BioBasedTile® should be non-corrosive to prevent discolouration. Non-magnetic austenitic types 302 and 304 stainless steel may be used without protection according to acceptable industry methods.

AVAILABILITY AND COST

AVAILABILITY

BioBasedTile® manufactured in Denmark is currently available. Delivery times for orders will vary based on the size and complexity of the order. Contact sales@stonecycling.com for further details.

COST

Quoted on a per-project basis.

WARRANTY

Warranty can be provided upon request. Warranty depends on the support system used and is usually issued by the supplier of the support system.

MAINTENANCE

Clean BioBasedTile® in accordance with the cleaning guidelines in the installation manual. Never use acid- based cleaners such as vinegar, citrus-based products, or muriatic acid on BioBasedTile®. Always pre-test cleaning agents and methods on the job-site mock-up or an inconspicuous area of the wall. The consultant and/or owner should approve the test area prior to the start of full-scale cleaning operations.

For questions regarding whether a certain cleaner or cleaning tool is safe, please contact StoneCycling prior to use at sales@stonecycling.com or call us at +31887774200 to speak with a BioBasedTile® specialist.