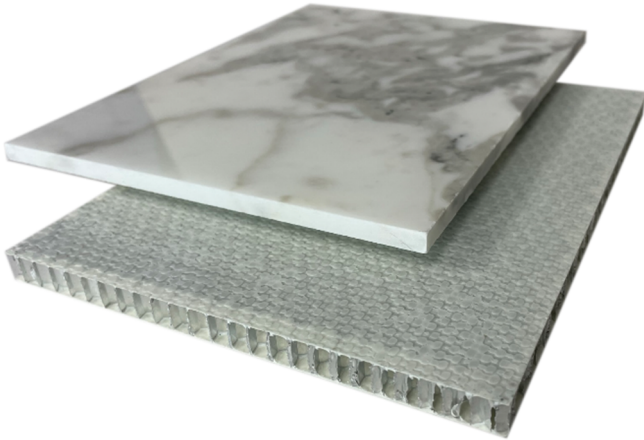


Stonelyte F500AH



MANUFACTURE:

Stonelyte

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PRODUCT DESCRIPTION:

Stonelyte F500AH is a lightweight composite panel, composed of an aluminum honeycomb core with 1/4" cells that is externally coated with two fiberglass skins impregnated with structural epoxy. The panel assembly is then vacuum bagged to a +/-1/4" layer of stone*. This yields an extremely lightweight yet ridged stone composite panel for adhered and mechanically set vertical applications. The back fiberglass skin is rough and uniformly microforated making it an ideal surface for applications where high mechanical performance is required. Stonelyte F500AH panels have been fully ASTM and TCNA tested. Copies of test reports are available upon request.

Uses

- Building: Architectural coverings, cladded walls with natural stone and porcelains.
- Furnishings: Countertops, furniture, reception desks.
- Mosaics: as a support for artistic achievements (mosaics, frescoes, restorations, decorations).
- Elevators: used on elevator walls where weight limitations and buildup are critical.
- Yachts: Marine use on walls and countertops.
- Prefab homes and RV countertops and flooring.

Advantages

- Lightweight; easy to carry, transport, and most importantly install.
- Ridged and impact resistant
- Allows for mechanical or adhered attachment of cladding.
- Double your stone yield by splitting every one slab into two book matched slabs.

Panel Thickness

- 20mm (.79") Includes 1/4" stone.*
 - 25mm (1") Includes 1/4" stone.*
- *Note 3/32" (2.4mm) Tolerance variance may be possible at time of manufacture.**

Assembled weight (includes stone)

- 20mm (.79") 19.82 kg/m² (4.06 lbs/ft²)*
 - 25mm (1") 20.16 kg/m² (4.13 lbs/ft²)*
- *Note weight based on 1/4" Calcatta marble.**

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Max Slab Size

- 3050 x 1580mm (120" x 62")
**Note size restrictions may vary pending stone selection and soundness.*

Suitable Substrates

- Concrete
- Wood or metal studs
- Densshield or DensGlass
- Plywood
- Metal pans

Limitations

- For interior use only
- Not for use in submerged applications
- Do not expose unprotected Stonelyte Panels back side to the sun or weather for more than 30 days.
- Must be covered with stone, ceramic tile, or other hard finish.
- For adhered installs use Laticrete Latapoxy 300, or Loctite PL.
- For mechanical installs we recommend use of Chemical Concepts Deform Nut anchors.

Technical Data

Aluminum Core

- Aluminum Alloy 3003
- Aluminum Cell Thickness 0.05mm (0.002")
- Cell Size 6.35mm (1/4")
- Density 56 kg/m³ (3.5 lb/ft³)
- Type Micro perforated for air evacuation

Fiberglass Skin

- Fiberglass Weight 500 gr/m² (1.64 oz/ft²) per side

- Pre-preg weight 870 gr/m² (2.85 oz/ft²) per side
- Fabric Thickness 0.4mm (0.016")

Technical Panel Details

- Maximum slab size
 - 3050 x 1580mm (120" x 62")
- Panel Weight (without stone)
 - 15mm 2.53 kg/m² (0.52 lbs/ft²)
 - 20mm 2.81 kg/m² (0.58 lbs/ft²)
- Approximate Stone Weight
 - ¼" Marble 17 kg/m² (3.56 lbs per sqft)
 - ¼" Granite 20.65 kg/m² (4.23 lbs per sqft)

Testing

- Flexural Shear Testing ASTM C393
 - 21mm 693 N/mm (693 MPa)
 - 26mm 998 N/mm (998 MPa)
- Compressive Strength ASTM 365
 - 2.1 Mpa (304 psi)
- Climbing Drum Peel Testing ASTM C1781
 - 265 N (195 ft-lb)
- TG Glass transition temperature
 - 105 °C
- Linear Thermal Expansion
 - 0.7x10x°C-1
- Temperature use range
 - -40°C +90°C
- Calorific Value ISO 1716:2010
 - 7.60 MJ/Kg

Specifications are subject to change without notification. Results shown are typical average. Actual field performance may vary depending on installation methods, stone selection, and site conditions.

All test data is available upon request.

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Installation

Walls, Spot bonding Adhered

- Use Loctite PL Premium Polyurethane construction adhesive for spot bonding. All surfaces should be structurally sound, clean, and free of all dirt, oil, grease, paint, and sealers. Apply quarter size spots in a 6" pattern. Use mechanical support for 24 hours while adhesive cures. See Loctite PL Premium Construction adhesive for further details. Bond test exceeds ASTM C482, test data available upon request.

Walls, Full Coverage Adhered

- Use Laticrete Lapoxy 300 where full coverage application is required. All surfaces should be structurally sound, clean, and free of all dirt, oil, grease, paint, and sealers. Use mechanical support for 24 hours while adhesive cures. See Latapoxy 300 Data sheet for further details. Bond test exceeds ASTM C482, test data available upon request.

Walls, Mechanical Fastening

- Stonelyte preferred mechanical fastening system is the Monarch MFSTR-DNCLIP & Rail package. A deform-Nut threaded insert combines mechanical anchoring and structural adhesive to provide strong load bearing threads into the honeycomb. Continuous wall rails are then attached to standard stud walls. The final Stonelyte panel attachment to continuous rail is done with adjustable clips.

Availability and Cost

Availability

Stonelyte Panels are fabricated and stocked in San Carlos, CA. Typical lead time from raw 2cm slab to F500AH panel is 4 to 5 weeks.

For more Information, Call or email:

Telephone 650.632.4000

Email: info@stonelyte.com

Visit: <https://stonelyte.com>

Cost and lead time

Contact Stonelyte Sales Rep

Warranty

Stonelyte Panels come with a (1) year product warranty. (United States and Canada)

Maintenance

With all natural stones routine cleaning and sealing is required to keep your stone looking new and stain free. Caulking should be inspected annually and replaced as necessary.