VALTO | ENGINEERED MATERIALS

technical data
7906

GLASBOND® Self Adhered FRP Panels

PRODUCT CODE: GBND

CLASS A + C FIRE RATING PER ASTM E-84 + CAN/ULC-S102-10 TESTED

Patent Pending

PRODUCT

GLASBOND is a self-adhered panel that combines the great features of GLASBORD FRP with a pressure sensitive adhesive prefabricated to the backside. GLASBORD with Surfaseal is made of fiberglass reinforced plastic. GLASBORD is a durable, flexible building material and will not mold, mildew, rot or corrode. It exhibits excellent resistance to mild chemicals and moisture. The panel is available in a Class A or Class C rating for flame spread and smoke development when tested per ASTM E-84.

SURFASEAL FINISH

Surfaseal is a unique surface treatment that, when compared to ordinary FRP, exhibits up to ten times cleanability, six times the stain resistance and twice the abrasion resistance.

PURPOSE

GLASBOND panels are designed for interior wall finishes where a Class A or Class C, sanitary, easy-to-clean panel is desired. GLASBOND enhances these featuers with backing technology that speeds up installation time.

DESIGN PROPERTIES

PRODUCT CODE	PANEL WITH PRESSURE SENSTIVE FOAM BACKING	FIRE RATING	NOMINAL LAMINATED THICKNESS	FINISH	COLOR	AVAILABLE SIZES
GBND	FX	Class A	0.15" | 3.9 mm	Embossed	White | 85	4' x 8' | 4' x 10' 1.2 m x 2.4 m | 1.2 m x 3.0 m
	PWIP	Class C	0.15" | 3.9 mm	Embossed		
	PSIF	Class C	0.14" | 3.6 mm	Smooth		

Additional widths and colors available by quotation. 12,000 sq. ft. per product, weight and colors required to manufacture. Orders from different customers may be batched to obtain manufacturing minimums, however lead time may be affected.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	FX 0.09"	PWIP 0.09"	PSIF 0.075"	TEST METHOD
FLEXURAL STRENGTH	13 x 10^3 psi | 90 MPa	14.4 x 10^3 psi | 99 MPa	15 x 10^3 psi | 103 MPa	ASTM - D790
FLEXURAL MODULUS	0.6 x 10^6 psi | 4137 MPa	0.8 x 10^6 psi | 5515 MPa	0.75 x 10^6 psi | 5171 MPa	ASTM - D790
TENSILE STRENGTH	6.8 x 10^3 psi | 47 MPa	6.6 x 10^3 psi | 46 MPa	8.5 x 10^3 psi | 59 MPa	ASTM - D638
TENSILE MODULUS	0.9 x 10^6 psi | 6205 MPa	1.3 x 10^6 psi | 8963 MPa	1.0 x 10^6 psi | 6895 MPa	ASTM - D638
BARCOL HARDNESS	40	55	40	ASTM - D2583
IZOD IMPACT	15.0 ft-lb/in notched 0.8 J/mm	14.0 ft-lb/in notched 0.75 J/mm	2.8 ft-lb/in notched 0.15 J/mm	ASTM - D256
COEFFICIENT OF LINEAR THERMAL EXPANSION	1.7 x 10^{-5} in/in/°F 31 µm/m/°C	1.7 x 10^{-5} in/in/°F 31 µm/m/°C	2.0 x 10^{-5} in/in/°F 36 µm/m/°C	ASTM - D696
WATER ABSORPTION	0.32%/24hrs @77°F | 25°C	0.16%/24hrs @77°F | 25°C	<0.75%/24hrs @77°F | 25°C	ASTM - D570
R VALUE	0.23 hr•ft2•°F/Btu 0.047 hr•m2•°C/kcal	0.23 hr•ft2•°F/Btu 0.047 hr•m2•°C/kcal	0.23 hr•ft2•°F/Btu 0.047 hr•m2•°C/kcal	ASTM - C1114
SURFACE BURNING CHARACTERISTICS	Class A	Class C	Class C	ASTM - E84
TABER ABRASION RESISTANCE (cs-17 wheels, 1000g. Wt, 25 cycles)	0.02%Max Wt. Loss	0.015%Max Wt. Loss	0.038%Max Wt. Loss	Taber Test
SERVICE TEMPERATURE	-40°F (-40°C) to 130°F (55°C)	-40°F (-40°C) to 130°F (55°C)	-40°F (-40°C) to 130°F (55°C)	

PROPERTY	GLASBOND Adhesive	TEST METHOD
TYPE	Proprietary PSA	
COLOR	Clear	
TVOC	0.051 mg/m³	GREENGUARD Gold
SHELF LIFE	24 Months **	
STATIC SHEAR	>10,000 mins	ASTM D3654/D3654M-02**

*When stored in its original packaging, in accordance with our storage guidelines (see doc#7907).
**24 hour dwell time

SPECIFICATIONS

Valto, Inc. (VALTO) panels are manufactured by a continuous laminating process in lengths as required.

COMPOSITION

Reinforcement: Random chopped fiberglass.
Resin Mix: Polyester/styrene copolymer, inorganic fillers, and pigments.
Backing: Pressure sensitive adhesive with foam carrier, silicone coated release liner

FINISHED PANEL QUALITY

1. Panels shall have a wear side with a pebble-like embossed finish (FX/PWIP) or smooth finish (PSIF). Color shall be uniform throughout as specified. The backside shall be smooth. The backside surface may have some variations which do not affect functional properties and are not cause for rejection.
2. Physical properties shall be as set forth on Page 1.
3. Dimensions shall be as specified on purchase order, subject to the following tolerances:
   WIDTH: ±1/8" (±3.2 mm)
   LENGTH: ±1/8" (±3.2 mm) up to 12' (3.7 m)
   SQUARENESS: ±1/8" (3.2 mm) in 48" (1.2 m) of width
4. Product quality standards and tolerances for panel weight and thickness shall be as set forth in VALTO's Quality Control Procedures/Standards which are available on request.
5. Panels shall be installed in accordance with manufacturer's guidelines as set forth in the VALTO Installation Guide (Form #6876).

CERTIFICATIONS

1. Meets USDA/FSIS requirements.
2. Some products have been tested and meet the requirements FMVSS 302. For a list products that have been tested to this requirement, see our test reports on our website at valtoem.com/testreports.html
3. FRP does not support mold or mildew (per ASTM D3273 and ASTM D3274).
4. FX Meets minimum requirements of major model building codes for Class A interior wall and ceiling finishes of flame spread ≤ 25, smoke developed ≤450 (per ASTM E-84).
5. PWIP and PSIF Meets minimum requirements of major model building codes for Class C interior wall and ceiling finishes of flame spread ≤200, smoke developed ≤450 (per ASTM E-84).
6. Meeting certification requirements for CAN/ULC-S102.
7. HACCP Certified. GLASBORD panels are suitable for use in food and beverage facilities that operate in accordance with a HACCP based Food Safety Program
8. This panel has earned GREENGUARD® Indoor Air Quality Certification (Certificate #1002353585-410) greenguard.org.

HACCP CERTIFICATION REQUIREMENTS FOR INSTALLED APPLICATIONS

Orientation of embossed panels must be installed/run vertically for any areas that require a sanitary finish under HACCP certification.

STORAGE REQUIREMENTS

All VALTO FRP products should be stored indoors.

SERVICEABLE TEMPERATURE RANGE

Panels will perform in temperatures from -40°F (-40°C) to 130°F (55°C). For use in environments beyond this range contact VALTO for recommendations.

FABRICATING RECOMMENDATIONS

NOTE: Protect your eyes with goggles; cover your nose and mouth with a filter mask; cover exposed skin when cutting VALTO panels.
HAND FABRICATING: Drilling—High speed drill bit (60° cutting angle, with 12°-15° clearance) or hole saw.
CUTTING: Sheet metal shears or circular saw with reinforced carborundum or carbide-tipped blade.
PRODUCTION FABRICATING: Use carbide-tipped tools. Straight cuts can be sheared (90° cutting edge with 0.002" [0.05 mm] clearance) or sawed. For irregular cuts, use die punch or band saw.
CLEANING INSTRUCTIONS: Available from VALTO.
SDS: Prior to working with our products, see our most current SDS at valtoem.com/sds.html

LIMITATIONS

Near Heat Source: VALTO panels will discolor when installed behind or near any heat source which radiates temperatures exceeding 130°F (55°C), such as cookers, ovens, and deep fryers. Do not install near a heat source.
Uneven Surface: Installation over uneven concrete block walls may result in areas of delamination and bulging.
Approved Substrates: Adhesive testing preformed on unprimed paper-faced drywall, primed drywall, painted drywall, mold/moisture resistant drywall, untreated plywood, steel, and cement board. VALTO cannot guarantee adhesive performance over alternative substrates.

VALTO TESTING

CLEANABILITY TEST: When GLASBORD with Surfaseal and an ordinary FRP panel are heavily soiled, the GLASBORD panel exhibits up to 10 times more cleanability per MacBeth Computer Colorimeter.
Stain Resistance Test: Prolonged direct contact to concentrated ammonia-based cleaner exhibited no color change per MacBeth Color Colorimeter.

NOTICE

Panels will provide a clean, aesthetically-pleasing finished installation. However, by nature, fiberglass reinforced plastic paneling may occasionally have small areas that are aesthetically unacceptable for use. Panels should be inspected on-site prior to installation. If any portion of material does not provide an acceptable appearance, VALTO should be notified at once. Upon verification of unacceptability, that portion of material will be replaced by VALTO. VALTO's sole responsibility is for the replacement of defective materials but not for labor or other handling or installation expenses.

FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS

The numerical flame spread and smoke development ratings are not intended to reflect alleged hazards presented by VALTO products under actual fire conditions and this product has not been tested by VALTO except as set forth below. These ratings are determined by small-scale tests conducted by Underwriters Laboratories and other independent testing facilities using the American Society for Testing and Materials E-84 test standard (commonly referred to as the "Tunnel Test").
VALTO PROVIDES THESE RATINGS FOR MATERIAL COMPARISON PURPOSES ONLY. Like other organic building materials (e.g. wood), panels made of fiberglass reinforced plastic resins will burn. When ignited, FRP may produce dense smoke very rapidly. All smoke is toxic. Fire safety requires proper design of facilities and fire suppression systems, as well as precautions during construction and occupancy. Local codes, insurance requirements and any special needs of the product user will determine the correct fire-rated interior finish and fire suppression system necessary for a specific installation. We believe all information given is accurate, without guarantee. Since conditions of use are beyond our control, all risks are assumed by the user. Nothing herein shall be construed as a recommendation for uses which infringe on valid patents or as extending a license under valid patents. www.astm.org/Standards/E84.htm.

At Valto, we partner with our customers, and through innovation, deliver advanced materials that enhance everyday environments. We succeed through a culture of collaboration, continuous improvement, and excellence. With integrity at our core, we challenge the status quo and pursue innovative approaches that benefit our customers and associates.

Since 1954, Valto Engineered Materials has provided innovative products and services and is a leading provider of FRP composite panels. Our lightweight composite products deliver unsurpassed strength and durability; and we continue to pioneer next level performance in building materials, recreational vehicles, and transportation.