GLASBORD® Embossed Panels

CLASS A FIRE RATING PER ASTM E-84

PRODUCT CODE: FX

PRODUCT

Fire-X Glasbord with Surfaseal is made of fiberglass reinforced plastic, and is a durable, flexible building material that will not mold, mildew, rot or corrode. It exhibits excellent resistance to mild chemicals and moisture. The panel has a Class A fire 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

Fire-X Glasbord with Surfaseal embossed panels are designed for interior wall finishes where a Class A, sanitary, easy-to-clean panel is desired.

DESIGN PROPERTIES

PRODUCT CODE	NOMINAL THICKNESS	FINISH	COLOR	AVAILABLE SIZES
FX	0.060" | 1.5 mm 0.075" | 2.0 mm 0.090" | 2.3 mm 0.10" | 2.5 mm 0.12" | 3.0 mm	Embossed	White | 85 **ADDITIONAL COLORS FOR 0.06" + 0.09" ONLY** Ivory | 84 Beige | 70 Silver | 66 Pearl Gray | 48 Colonial White | 83	**COIL OPTIONS:** 45" to 50" x 5' x 700' 1.1 m to 1.2 m x 1.5 m x 213 m **WALL PANELS:** 4' x 8' | 4' x 9' | 4' x 10' | 4' x 12' 1.2 m x 2.4 m | 1.2 m x 2.7 m | 1.2 m x 3.0 m | 1.2 m x 3.7 m **CEILING PANELS:** 2' x 2' | 2' x 4' (0.6 m x 0.6 m | 0.6 m x 1.2 m)
FXR	0.090" | 2.3 mm	Embossed	Black | 97	4' x 8' | 4' x 10' 1.2 m x 2.4 m | 1.2 m x 3.0 m

Additional lengths, 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	0.060"	0.075"	0.090"	0.10"	0.12"	TEST METHOD
FLEXURAL STRENGTH	12.2 x 10³ psi 84 MPa	12.8 x 10³ psi 88 MPa	13 x 10³ psi 90 MPa	14.1 x 10³ psi 97 MPa	13.7 x 10³ psi 94 MPa	ASTM - D790
FLEXURAL MODULUS	0.5 x 10⁶ psi 2758 MPa	0.6 x 10⁶ psi 4137 MPa	0.6 x 10⁶ psi 4137 MPa	0.6 x 10⁶ psi 4137 MPa	0.64 x 10⁶ psi 4413 MPa	ASTM - D790
TENSILE STRENGTH	6.1 x 10³ psi 42 MPa	6.5 x 10³ psi 45 MPa	6.8 x 10³ psi 47 MPa	7.4 x 10³ psi 51 MPa	7.6 x 10³ psi 52 MPa	ASTM - D638
TENSILE MODULUS	0.84 x 10⁶ psi 5792 MPa	0.88 x 10⁶ psi 6067 MPa	0.9 x 10⁶ psi 6205 MPa	0.9 x 10⁶ psi 6205 MPa	0.9 x 10⁶ psi 6205 MPa	ASTM - D638
BARCOL HARDNESS	20	30	40	40	40	ASTM - D2583
IZOD IMPACT	16 ft-lb/in notched 0.85 J/mm	15 ft-lb/in notched 0.80 J/mm	15 ft-lb/in notched 0.80 J/mm	14.6 ft-lb/in notched 0.78 J/mm	12 ft-lb/in notched 0.64 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	1.7 x 10⁻⁵ in/in/°F 31 µm/m/°C	1.7 x 10⁻⁵ in/in/°F 31 µm/m/°C	1.7 x 10⁻⁵ in/in/°F 31 µm/m/°C	ASTM - D696
R VALUE	0.15 hr·ft2·°F/Btu 0.031 hr·m2·°C/kcal	0.17 hr·ft2·°F/Btu 0.042 hr·m2·°C/kcal	0.23 hr·ft2·°F/Btu 0.047 hr·m2·°C/kcal	0.25 hr·ft2·°F/Btu 0.051 hr·m2·°C/kcal	0.30 hr·ft2·°F/Btu 0.061 hr·m2·°C/kcal	ASTM - C1114
WATER ABSORPTION	0.35%/24hrs @77°F | 25°C	0.32%/24hrs @77°F | 25°C	0.32%/24hrs @77°F | 25°C	0.32%/24hrs @77°F | 25°C	0.32%/24hrs @77°F | 25°C	ASTM - D570
SURFACE BURNING CHARACTERISTICS	Class A	Class A	Class A	Class A	Class A	ASTM - E84
TABER ABRASION RESISTANCE (cs-17 wheels, 1000g. Wt, 25 cycles)	0.09% Max Wt. Loss	0.02% Max Wt. Loss	0.02% Max Wt. Loss	0.02% Max Wt. Loss	0.02% Max Wt. Loss	Taber Test
LIGHT REFLECTANCE VALUE (Y-VALUE)	56.91% LTR	56.91% LTR	56.91% LTR	56.91% LTR	56.91% LTR	ASTM C609-20

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.

FINISHED PANEL QUALITY
1. Panels shall have a wear side with a pebble-like embossed finish. 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 www.valtoem.com/testreports.html
3. FRP does not support mold or mildew (per ASTM D3273 and ASTM D3274).
4. 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. Meeting certification requirements for CAN/ULC-S102.
6. HACCP Certified. Glasbord panels are suitable for use in food and beverage facilities that operate in accordance with a HACCP based Food Safety Program
7. MEA Certified. MEA 16-85M. VOL. II
8. This panel has earned GREENGUARD® Indoor Air Quality Certification (Certificate #16349-410, 16364-410, 16351-410) greenguard.org. (Certificate #15955-410) greenguard.org.

HACCP INTERNATIONAL
FOOD SAFETY — PROGRAMME
CERTIFICATION

UL
GREENGUARD
PRODUCT CERTIFIED FOR
LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818
GOLD

IDENTIFICATION
Product identified by 2 red and 1 blue thread on the back.

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.

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 unacceptablity, 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.

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.

VALTOfrp.com | 1.800.435.0080 | sales@valtoem.com
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