

ceramITex®

 elemex®

Architectural Facade Systems

PRODUCT SPEC SHEETS

SOLSTex®

alUMITex®

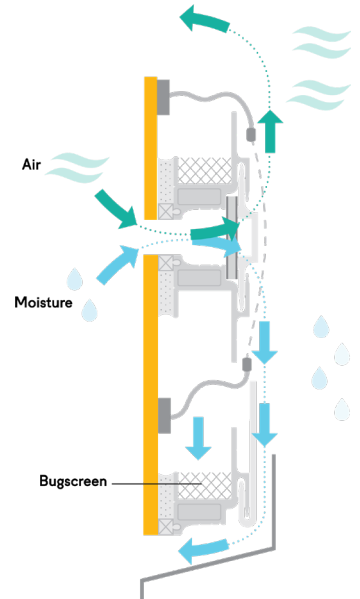


Scan for more!

Design-driven. Performance-proven.



Assembly Drawings



Composition and Materials

Solstex[®] Solar Panels consist of crystalline silicone technology encapsulated between 2 sheets of heat-strengthened glass, adhered to our proprietary Unity[®] Attachment Technology.

Finish

O-Series - 5/32" (4 mm) Tempered Low-Iron Glass with a Tempered Glass back.

Watts/Panel

Solstex[®] O-Series - Up to 295 W

Size

Solstex[®] O-Series - 39 3/8" x 67" (1000 mm x 1700 mm)
Solstex[®] O-Series - 39 3/8" x 78 3/4" (1000 mm x 2000 mm)

Warranty and Life Cycle

10-year panel manufacturer warranty against any defect in material or manufacture.

Product Finish: 10-year panel manufacturer warranty against any defect in material or manufacture.

Materials & Workmanship: 1-year system manufacturer warranty against defects or deficiencies from date of substantial completion.

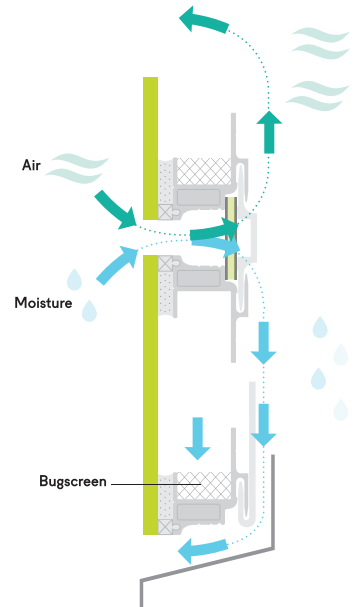
Power Production: 25-year manufacturer warranty ensuring power production is at 80% or higher after 25 years from date of electrical connection to local use, storage, or grid.

Maintenance

Solstex[®] – Solar Facade System has a surface that is easily cleaned with soap and water. As the panels are UV-resistant, they maintain their appearance over time. The recommended cleaning schedule is twice per year.



Assembly Drawings



Composition and Materials

CeramITex[®] is a high-strength sintered ceramic facade system featuring fiberglass-reinforced backing and our proprietary Unity[®] Attachment Technology.

Finish

CeramITex[®] surfaces are available in a variety of finishes and textures. Please visit our website elemex.com for all product finish.

Size

Panels are available in sizes up to:
5' x 10.5' (1500 mm x 3200 mm) with a 6 mm (1/4") thickness
4.5' x 10.5' (1440 mm x 3200 mm) with an 8 mm (5/16") thickness.
Additional thickness available in 12 mm (1/2").
Nominal system depth 50 mm (2").

Warranty and Life Cycle

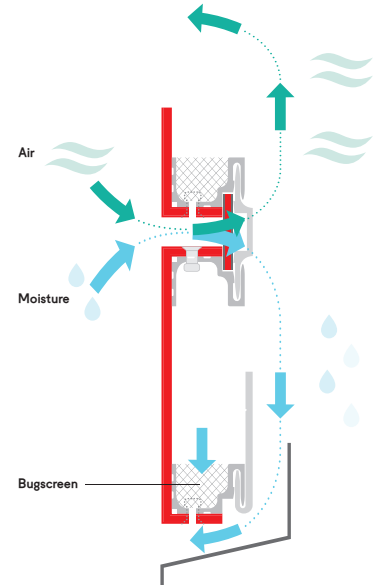
A 10-year finish material warranty (except on polished). Sintered Ceramic Panels have a 50+ year life expectancy.

Maintenance

CeramITex Sintered Ceramic Facade panels have a surface that repels dirt, is graffiti-proof and is easily cleaned with soap and water. As the panels are UV- and impact-resistant, they maintain their appearance over time.



Assembly Drawings



Composition and Materials

Aluminum Composite Material (ACM) consists of two aluminum sheets sandwiching a solid core of extruded thermoplastic material, completed in a continuous process with no glues or adhesives between dissimilar materials. The pre-painted coils ensure color consistency and improve lead times. A protective film is applied to protect the material from fabrication to install. Alumitex[®] ACM offers a finish warranty of 10-30 years (varies by finish)

Finish

ACM coil coated finishes are available in a 2 coat solid or mica finish, as well as 3 coat metallic colors. All of the finishes contain a minimum of 70% Kynar 500[®]/Hylar 5000[®] polyvinylidene fluoride (PVdF) resins. Alumitex carries over 30 standard colors in the stock program and meet the AAMA 2605-98 specification requirements. Minimum quantities may apply to producing standard colors.

Size

Top: 0.5 mm (0.020") aluminum skin coated with a PVdF roll-coated finish containing a minimum of 70% Kynar 500[®]/Hylar 5000[®] resins.

Core: Mineral-based fire rated (FR) core.

Bottom: 0.5 mm (0.020") aluminum skin coated with either a chrome or polyester finish.

System: Nominal thickness 40 mm (1.5").

Warranty and Life Cycle

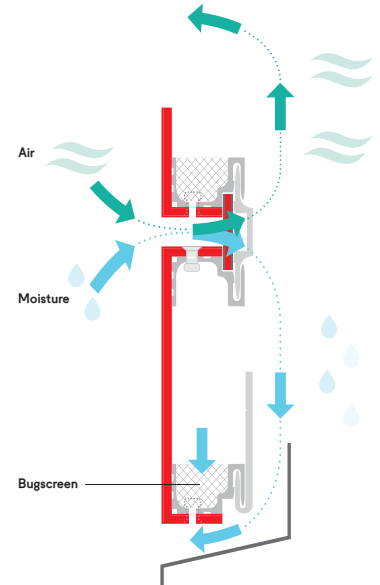
1-year manufacturer (10-30-year finish)

Maintenance

The high performance PVdF finish coating requires virtually no maintenance. Cleaning the panels, with water and a mild detergent, on a regular basis will enhance the look of the panels. Instructions on cleaning methods are available from the manufacturer.



Assembly Drawings



Composition and Materials-

Solid 3mm (1/8") aluminum alloy (3003-H14 paint quality or 5005-H34 anodizing quality tensioned leveled sheet) is used to fabricate all Elemex plate projects. Other thicknesses and alloys are available. The corners are finished with the Elemex® Tru-90®Edge precision route & return fabrication.

Finish

The following aluminum finishes are offered as standard by Elemex Painted Finishes: PPG Duranar® flourocarbon coatings contain Kynar 500® resins in a wide range of architectural colours.

Size

46" x 94" (1168mm x 2387mm)
 46" x 118" (1168mm x 2997mm)
 46" x 142" (1168mm x 3606mm)
 58" x 94" (1473mm x 2387mm)
 58" x 118" (1473mm x 2997mm)
 58" x 142" (1473mm x 3606mm)
 A standard thickness of 3mm (1/8") is recommended, although other thickness are available.

Warranty and Life Cycle

1-year manufacturer (20-year finish)

Maintenance

To keep aluminum architectural components attractive, a maintenance manual is available upon completion of the project. The frequency of cleaning will depend on environmental conditions, pollution levels, and the accumulation of debris on the aluminum finish caused by weathering.

Cleaning Methods:

Duranar Finishes: Duranar coatings require very little maintenance. Most surface residue may be removed using conventional detergents or solvents. Harsh chemicals or solvents and abrasive materials must not be used on Duranar coatings. Minor scratches can be touched up with a specially formulated air-dry flourocarbon coating system - Duranar A.D. (contact a PPG industrial Product Sales Office for further information).

Anodized finishes: Wash with clean warm water; dry with a soft cloth. Wash with mild soap or detergent and water; scrub with a stiff bristle brush; rinse and dry.

Apply solvent-type cleaner (kerosene, turpentine); rinse to avoid streaks and dry.

Use a proprietary polish cleaner as directed by the manufacturer; rinse to avoid streaks and dry.

Apply a mild abrasive cleaner with a damp cloth (jute is very effective) or soft brush; rinse with soap and water, then with clean water.

Note: Before attempting cleaning consult Elemex for a suggestion on the proper means of action.

Refer to the appropriate AAMA literature for more detailed cleaning data i.e.. suggested frequency of cleaning etc

Testing & Certification Coverage by Product

Standard / Certification	ceramITeX [®]	SOLSTeX [®]	aLUMITeX [®] PLATE	aLUMITeX [®] ACM
Fire Tests & Reaction/Propagation				
NFPA 285 / NFPA 285-23 Evaluation of fire propagation characteristics of exterior non-load-bearing wall assemblies containing combustible components.	✓	✓		✓
CAN/ULC S134 / CAN/ULC S-134 / CAN/ULC S134-92 Standard method of fire test of exterior wall assemblies (Canada; commonly used for ACM FR and similar systems).	✓			✓
ASTM E84 / ASTM E84-16a Surface burning characteristics of building materials (tunnel test: flame spread/smoke).	✓			✓
CAN/ULC S102.2-10 Surface burning characteristics—specific to certain materials/configurations (Canada).	✓			
CAN/ULC S114-05 / CAN/ULCS114:2018 Determination of non-combustibility in building materials.	✓		✓	
UL 1703 (legacy; now superseded by UL 61730/IEC 61730 for PV) Fire and safety standard for flat-plate photovoltaic modules and panels (noting 1000 V listing).		✓		
Structural, Air & Water (Curtain Walls / Windows / Rainscreens)				
ASTM E330 / E330M / E330/E330M-14 (TAS 202-94) Structural performance by uniform static air pressure difference.	✓		✓	✓
ASTM E1233 Structural performance by cyclic static air pressure differential.	✓			
ASTM E283 / E283-04(2012) (TAS 202-94) Rate of air leakage through exterior windows, curtain walls, and doors.	✓			✓
ASTM E331 / E331-00(2009) (TAS 202-94) Water penetration by uniform (static) air pressure difference.	✓			✓
ASTM E330	✓			✓

Testing & Certification Coverage by Product

Standard / Certification	ceramITeX [®]	SOLSTeX [®]	aLUMITeX [®] PLATE	aLUMITeX [®] ACM
Structural, Air & Water (Curtain Walls / Windows / Rainscreens)				
ASTM E283	✓		✓	✓
ASTM E331	✓		✓	✓
AAMA 508-07 Pressure equalized rainscreen wall cladding systems—pressure equalization behaviour & water penetration resistance.	✓			✓
AAMA 2605 High-performance organic coatings on aluminium extrusions/panels—performance & test procedures.				
BS EN 14019:2004 Curtain walling—impact resistance—performance requirements.	✓			
Impact & Missile / Extreme Events				
ASTM E1886-13a (TAS 203-94) Missile impact and cyclic pressure for windborne debris regions (hurricane).	✓			
ASTM E695-2003 (R2009) Relative resistance of wall construction to impact loading.	✓			
BS EN 14019:2004 Curtain wall impact resistance.	✓			

Testing & Certification Coverage by Product

Standard / Certification	ceramITeX [®]	SOLSTeX [®]	aLUMITeX [®] PLATE	aLUMITeX [®] ACM
Materials & Mechanics (Adhesion, Peel, Tension, Sandwich Constructions)				
ASTM E8 Tension testing of metallic materials.				✓
ASTM D1781 Climbing drum peel for adhesives.				✓
ASTM C794 / Modified ASTM C794 Adhesion-in-peel of elastomeric structural silicone	✓	✓		
ASTM C273 Shear properties of sandwich core materials.				✓
ASTM C297 Tensile strength of sandwich constructions (flatwise).				✓
ASTM C393 Flexural properties of sandwich constructions.				✓
Thermal & Environmental Durability / Material Properties				
ASTM C518 Steady-state thermal transmission (k, R,) by heat flow meter apparatus.				✓
ASTM D648 Deflection temperature of plastics under flexural load (HDT).				✓
ASTM D696 Coefficient of linear thermal expansion (CTE) of plastics (-30 °C to 30 °C) with a vitreous silica dilatometer.				✓
ASTM C1026-10 Resistance to freeze-thaw cycling.	✓			

Testing & Certification Coverage by Product

Standard / Certification	ceramITeX [®]	SOLSTeX [®]	aLUMITeX [®] PLATE	aLUMITeX [®] ACM
Corrosion / Environmental Exposure (Non-Fire)				
IEC 61701 Salt mist corrosion testing of photovoltaic modules (also relevant to coastal facade exposure).		✓		
Photovoltaic (PV) Module Safety & Qualification				
IEC 61730-1 (Class II, 2022 rating) PV module safety qualification—Requirements for construction.		✓		
IEC 61215 (2021) Terrestrial PV modules—Design qualification and type approval.		✓		
IEC 61701 Salt mist corrosion—PV modules.		✓		
UL 1703		✓		
Coatings / Finishes				
AAMA 2605 Superior performing organic coatings on aluminium extrusions and panels (colour retention, gloss, chalk, corrosion, etc.).			✓	
Management Systems & Environmental Claims				
ISO 9001:2000 Quality management systems certification.			✓	
LEED ISO 14021:1999	✓			
Regional Approvals / Code Compliance (Florida / HVHZ / Miami-Dade)				
Florida Product Approval FL26341-R3 State product approval; marked "Approved for use inside HVHZ (High Velocity Hurricane Zone)".	✓			
Miami-Dade County NOA No. 23-0901.2 (exp. Sept 6, 2028) Notice of Acceptance for use in Miami-Dade; typically includes TAS 201/202/203 evidence as applicable.	✓			
TAS 202-94 / TAS 203-94 (embedded within some ASTM citations above) Florida/Miami-Dade test protocols for uniform air pressure and impact/cyclic pressure.	✓			