



AC-300™/ 350™

AC-300™/350™ Cast Acrylic Sheet Products are designed to control static electricity in applications ranging from clean room windows to industrial static control uses.

The **AC-300™** surface is harder than **AC-350™** and will resist abrasion better.

AC-350™ is designed for modest bending. Generally it is advisable, if not mandatory, to remove the coating prior to adhesive bonding.

PORT PLASTICS offers the following:

Thickness (standard) - 1/8" - 1/2"

Size (standard) - 48" x 96"

(Other sizes and Thicknesses are available on request)

AC 300™ Cast Acrylic & AC 350™ Acrylic Typical Physical Properties			
Property	Test Method	Units	AC-300 Cast Acrylic AC-350 Acrylic
Physical Pencil Hardness	ASTM D-3363	Hardness Scale	4H-AC-300 3H-AC-350
Mechanical Tensile Strength Flexural Modulus	ASTM D-638 ASTM D-790	psi psi	10,000 475,000
Thermal Max. Continuous Service Temp. Coefficient of Thermal Expansion	- ASTM D-696	°F in/in/°F	170 4.0 X 10 ⁻⁵
Flammability UL Rating	UL Classification	UL94	94HB
Electrical Surface Resistivity Electrostatic Decay	ASTM D-257 FTS 101C Method 4046.1*	ohms/sq sec	10 ⁶ - 10 ⁸ less than 0.05

Engineering Note:

- A. AC -300™ not recommended in applications requiring bending
- B. Removal of coating prior to bonding is recommended



StatiCon® Glazing AC-300™ Cast Acrylic

Typical Physical Properties (Typical but not guaranteed values for 0.25 inch material)

Property	Test Method	Units	AC-300
PHYSICAL			
Specific Gravity	ASTM D792	--	1.19
Pencil Hardness	ASTM D-3363	Hardness Scale	5H
MECHANICAL			
Tensile Strength--Ultimate	ASTM D-638	psi	10,000
Tensile Strength--Elongation	ASTM D-638	%	4.2
Tensile Modulus	ASTM D-638	psi	400,000
Flexural Strength	ASTM D-790	psi	16,500
Flexural Modulus	ASTM D-790	psi	475,000
Compressive Strength	ASTM D-695	psi	18,000
Izod Impact Strength (milled notch)	ASTM D-256	ft-lb/inch of notch	0.4
THERMAL			
Deflection Temperature (264 psi load)	ASTM D-648	°F	210
Vicat Softening Point	ASTM D-1525	°F	239
Maximum Continuous Service Temp.	--	°F	180
Coefficient of Thermal Expansion	ASTM D-696	in/in/°F	3.5 x 10 ⁻⁵
Coefficient of Thermal Conductivity	Cenco-Fitch	BTU•in/hr•ft ² •°F	1.3
FLAMMABILITY			
Horizontal Burn (Flame Spread)	ASTM D-635	inch/min	1.1
UL 94 Rating	UL 94	UL Classification	HB
OPTICAL			
3mm Transp. Clear Transmittance--Total	ASTM D-1003	%	80
Haze	ASTM D-1003	%	Less than 3.0
ELECTRICAL			
Surface Resistivity	ASTM D-257	ohms/sq	10 ⁶ -10 ⁸
Surface Resistance	EOS/ESD S11.11	ohms	10 ⁵ -10 ⁷
Electrostatic Decay	FTS101C Method4046.1*	sec	Less than 0.05

* Federal Test Standard 101C, Method 4046.1 as described in EIA-541, Appendix F, Measurement of Electrostatic Decay Properties of Dissipative Planar Materials

Chemical Resistance ASTM D-543

Samples immersed in the specified chemicals for 24 hours at room temperature and visually examined

Chemical	Surface Attack	Visual Evaluation
Deionized Water	None	Clear
30% Sodium Hydroxide	None	Clear
30% Sulfuric Acid	None	Clear
30% Nitric Acid	Slight pitting	Clear
48% Hydrofluoric Acid	Severe Attack	White, rubbery
Methanol	Slight pitting	Hazy
Ethanol	None	Clear
Isopropyl Alcohol	None	Clear
Acetone	Severe pitting	Coating clear-plastic attacked
Methylene Chloride	Sample dissolved	Sample dissolved