



# Climate SEAL™

**MASTER DISTRIBUTOR**  
Environmental Window Solutions, LLC.

8215 Carter Creek Drive, Unit 203  
Charlotte, NC 28227  
704-200-2001 • E-fax: 704-973-9568  
Toll Free: 877-773-7379

The World's Best Thermal, Acoustic, Preservation Window Inserts!

### THERMAL PERFORMANCE TESTS ATI-2305, ATI-2309

	PRIME WINDOW	PRIME WINDOW W/FLEX-TITE
U-VALUE	1.15 BTU/HR FT 2/FT	0.44 BTU/HR FT2/FT
R-VALUE	.86	2.27
CRF	5.0	68.0

REDUCTION OF HEAT TRANSFER.....62%

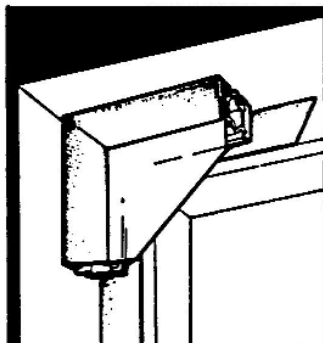
### STRUCTURAL PERFORMANCE TESTS

PERFORMED W/OUT PRIME	TEST PRESSURE	MEASURED RESULT
ASTM E-283 AIR INFILTRATION	0.56 PSF 1.56 PSF	0.03 CFM/FT 0.10 CFM/FT
ASTM E-330 UNIFORM LOAD	15 PSF	NO DAMAGE

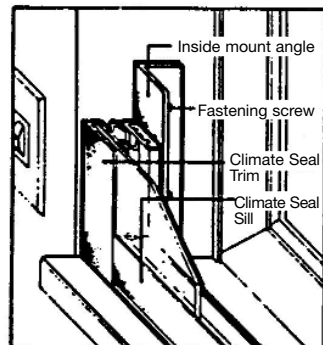
**Climate Seal Magnetic Interior Insulating Window System** is designed to reduce heat transfer and virtually eliminate infiltration through and around windows. The interior installation of the window is more convenient and less expensive than other methods of installing insulating windows.

### DUAL DUROMETER VINYL EXTRUSIONS

Climate Seal trim, available in white, tan and brown, is a dual durometer polyvinyl chloride extrusion.



Flush-mount installation



In-jamb installation

PROPERTY	TESTING METHOD	UNIT	VALUE
<b>MECHANICAL</b>			
Specific Gravity	ASTM D-792		1.38
Tensile Strength	ASTM D-638	PSI	6200
Tensile Modulus	ASTM D-638	PSI	350,000
Flexural Strength	ASTM D-790	PSI	11,200
Impact Strength	ASTM D-256	ft. lb/in notch	16
Rockwell Hardness	ASTM D-785		112
<b>THERMAL</b>			
Deflection Temperature	ASTM D-648	degree F	160
Coefficient of linear Thermal Expansion	ASTM D-696	in/in/degree F	3.7 x 10 <sup>-5</sup>
Flammability	ASTM D-638		self-ext.
UL Rating	UL LABS		UL-94 V-0
<b>CHEMICAL RESISTANCE</b>			
Effect of weak acids			none
Effect of strong acids			none to slight
Effect of weak alkalies			none
Effect of strong alkalies			none
Effect of organic solvents			Resists alcohols, aliphatic hydrocarbons, oil; soluble or swells in keystone and esters; swells in aromatic hydrocarbons.
Ultraviolet Resistance			good
<b>MAGNET</b>			
Dimension			.180" x .670"
Specific Gravity	ASTM D-792-66		3.73
Hardness Durometer D	ASTM D-2240-81		63
Tensile Strength at 73°F	ASTM D-412-80	PSI	919
Deflection Temperature At Room Temp.	ASTM D-648-72	degrees F	120
Average Shrinkback	At Room Temp. 110 degrees F 158 degrees F	in/ft in/ft in/ft	1/64 1/32 1/16
<b>STEEL TAPE LAMINATED WITH FOAM ADHESIVE</b>			
<b>PAINTED STEEL</b>			
Color		White, Tan, Brown	
Width			.75" +/-.015
Thickness			.014" +/-.004
<b>FOAM TAPE</b>			
1/32" white, closed-cell PVC foam, coated on both sides with a high performance, acrylic based pressure sensitive adhesive.			

Continued on next page.



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## Continuously Processed, High Molecular Weight Acrylic Sheet

- American National Safety Glazing Standard ANSI Z97.1
- American National Safety Institute Safety Code for Safety Glazing Motor Vehicles on Land Highways ANSI Z26.1
- Federal Motor Vehicle Safety Standard No. 205
- International Conference of Building Officials (ICBO)
- Uniform Building Code (UBC)
- UL Classifications; 94HB, HBE162, 746C, UV Light

Properties	ASTM Test Method	Units	Values
Specify Gravity	D-792		1.19
Optical Refractive Index	D-542		1.46
Light Transmittance (sample thickness .100)	D-1003		
		Total	% 92
Haze		% 2	
Sound Transmission (.125 thickness)	E 90-70 E 413	db	27
Water Absorption	D-570	% By Weight	.40
Shrinkage	D-702	%	.42
		Shrinkage	.33

Mechanical			
Tensile Strength Maximum	D-638	psi	10,900
Tensile Elongation Maximum		%	5.1
Modulus of Elasticity		psi	431,000
Flexural Strength Maximum	D-790	psi	14,600
Izod Molded Notch ½" x 2½" x ¼" bar at 73°F	D-256-56	Ft lbs/inch of notch	.4
Izod Milled Notch ½" x 2½" x ¼" bar at 73°F		Ft lbs/inch of notch	.28
Tensile Impact Strength <sup>1</sup>	D-1822	Ft lb/in <sub>2</sub>	20
Abrasion Resistance <sup>2</sup>	D-1044	Haze, %	2
		Haze, %	15
		Haze, %	30
		Haze, %	50
Rockwell Hardness .250 sample	D-785		M-93

THERMAL			
Maximum Recommended Continuous Service Temperature		°F	170-190
Softening Temperature		°F	210-220
Melting Temperature		°F	300-315
Deflection Temperature Load, Unannealed 3.6°F/minute, 264 psi 3.6°F/minute, 66 psi	D-648	°F	181 200
Coefficient of Thermal Expansion -40°F -20°F 0°F 20°F 40°F 60°F 80°F 100°F	D-696	ins/in/°F x 10-5	
			2.7
			2.9
			3.1
			3.2
			3.4
			3.6
			3.9
4.3			
Thermal Conductivity	C-177	BTU	.9
Flammability (Burning Rate)	D-635	(HR)(Ft <sup>2</sup> )(°F)/in ins/minute (.125" thickness)	1.24
Smoke Density Rating	D-2843-77	%	2.1
Self-ignition Temp	D-1929	°F	850°F
Flame Spread Index			145
Smoke Value	E-84-86		310

CHEMICAL			
Resistance to Stress - Critical Crazing Stress to:	ARTC modification of MIL-P-6997		
Isopropyl Alcohol		psi	900
Lacquer Thinner		psi	500
Toluene		psi	1,300
Solvesso 100		psi	1,600

- Tensile Impact Strength:** Long form samples, Type "L" cut from .125 discs parallel to flow.
- Abrasion Resistance:** Taper Abraser, CS-10F Wheels 1,000 Gram Load.
- Sheet Thickness & Tolerance:** Plaskolite acrylic is produced to tolerances of ± 1/16" length and width on sizes 32" x 42" or smaller. Sheet sizes greater than 32" x 42" up to 30" x 60" are produced to length and width tolerances of ± 3/32". All sheet sizes greater than 30" x 60" are produced to length and width tolerances of ± 1/8". All sheet thicknesses are within industry standards of ± 10%.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of these products are beyond our control. We recommended that the prospective user determine the suitability of these materials and suggestions before adopting them on a commercial scale.