

Sustainable without compromise.

Safer & More Robust than Glass

- Closed loop post-consumer product
- Excellent optical clarity
- Useable toward LEED credits
- No compromise in performance
- Made in the United States
- Cold and heat bendable
- Thermoformable

Interstate Advanced Materials Renovo-MPC™ is the first fully sustainable closed loop polycarbonate sheet.

Post-consumer Renovo-MPC™ retains all physical properties and benefits of extruded polycarbonate without compromise, including excellent optical quality with high light transmission and low haze.

Our proprietary processes efficiently coordinate the reclaiming of post-consumer and industrial polycarbonate feedstock for reprocessing into Renovo-MPC™ sheet. Inline downstream optical scanning ensures the highest quality product possible. In some applications, Renovo-MPC™ may be used toward LEED Materials & Resources credits.

Typical Properties*

| Property | Test Method | Units | Values |
|--|---------------|-------------------------------|-------------------------|
| PHYSICAL | | | |
| Specific Gravity | ASTM D 792 | – | 1.2 |
| Refractive Index | ASTM D 542 | – | 1.586 |
| Light Transmission, Clear @ 0.118" | ASTM D 1003 | % | 96 |
| Light Transmission, I30 Gray @ 0.118" | ASTM D 1003 | % | 50 |
| Light Transmission, K09 Bronze @ 0.118" | ASTM D 1003 | % | 50 |
| Light Transmission, I35 Dark Gray @ 0.118" | ASTM D 1003 | % | 18 |
| Water Absorption, 24 hours | ASTM D 570 | % | 0.15 |
| Poisson's Ratio | ASTM E 132 | – | 0.38 |
| MECHANICAL** | | | |
| Tensile Strength, Ultimate | ASTM D 638 | psi | 9,500 |
| Tensile Strength, Yield | ASTM D 638 | psi | 9,000 |
| Tensile Modulus | ASTM D 638 | psi | 340,000 |
| Elongation | ASTM D 638 | % | 110 |
| Flexural Strength | ASTM D 790 | psi | 13,500 |
| Flexural Modulus | ASTM D 790 | psi | 345,000 |
| Compressive Strength | ASTM D 695 | psi | 12,500 |
| Compressive Modulus | ASTM D 695 | psi | 345,000 |
| Izod Impact Strength, Notched @ 0.125" | ASTM D 256 | ft/lbs/in | 18 |
| Izod Impact Strength, Unnotched @ 0.125" | ASTM D 256 | ft/lbs/in | 60 (no break) |
| Instrumented Impact @ 0.125" | ASTM D 3763 | ft-lbs | 47 |
| Shear Strength, Ultimate | ASTM D 732 | psi | 10,000 |
| Shear Strength, Yield | ASTM D 732 | psi | 6,000 |
| Shear Modulus | ASTM D 732 | psi | 114,000 |
| Rockwell Hardness | ASTM D 785 | – | M70 / R118 |
| THERMAL | | | |
| Coefficient of Thermal Expansion | ASTM D 696 | in/in/°F | 3.75 x 10 ⁻⁵ |
| Coefficient of Thermal Conductivity | ASTM C 177 | BTU-in/hr-ft ² -°F | 1.35 |
| Heat Deflection Temperature @ 264 psi | ASTM D 648 | °F | 270 |
| Heat Deflection Temperature @ 66 psi | ASTM D 648 | °F | 280 |
| Brittleness Temperature | ASTM D 746 | °F | -200 |
| Shading Coefficient, clear @ 0.236" | NFRC 100-2010 | – | 0.97 |
| Shading Coefficient, Gray or Bronze @ 0.236" | NFRC 100-2010 | – | 0.77 |
| U factor @ 0.236" (summer, winter) | NFRC 100-2010 | BTU/hr-ft ² -°F | 0.85, 0.92 |
| U factor @ 0.375" (summer, winter) | NFRC 100-2010 | BTU/hr-ft ² -°F | 0.78, 0.85 |
| ELECTRICAL | | | |
| Dielectric Constant @ 10 Hz | ASTM D 150 | – | 2.96 |
| Dielectric Constant @ 60 Hz | ASTM D 150 | – | 3.17 |
| Volume Resistivity | ASTM D 257 | Ohm-cm | 8.2 x 10 ¹⁶ |
| Dissipation Factor @ 60 Hz | ASTM D 150 | – | 0.0009 |
| Arc Resistance | | | |
| Stainless Steel Strip electrode | ASTM D 495 | Seconds | 10 |
| Tungsten Electrodes | ASTM D 495 | Seconds | 120 |
| Dielectric Strength, in air @ 0.125" | ASTM D 149 | V/mil | 380 |
| FLAMMABILITY | | | |
| Horizontal Burn, AEB | ASTM D 635 | in | <1 |
| Ignition Temperature, Self | ASTM D 1929 | °F | 1022 |
| Ignition Temperature, Flash | ASTM D 1929 | °F | 824 |
| Flame Class @ 0.060" | UL 94 | – | HB |
| @ 0.394" | UL 94 | – | V-0 |

*Typical properties are not intended for specification purposes.

**Some properties characterized using non-textured sheet.

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RENOVO-MPC™
 INTERSTATE ADVANCED MATL.

Shop Online
www.renovo-mpc.com

IT'S WHAT WE DO.

Product Comparisons

| Property | | Renovo-MPC™ | GP-Polycarbonate | Lexan™ |
|--------------------------|------------------------|----------------------------------|----------------------------------|----------------------------------|
| Impact Resistance | Drop Ball Test, 0.5 lb | No Break | No Break | No Break |
| Cold Bend | Bend Radius | 100x material thickness | 100x material thickness | 100x material thickness |
| Sheet Weight | 0.125" | 0.78 lb/ft ² | 0.78 lb/ft ² | 0.78 lb/ft ² |
| Thermal Expansion Rate | - | 3.75 x 10 ⁻⁵ in/in/°F | 3.75 x 10 ⁻⁵ in/in/°F | 3.75 x 10 ⁻⁵ in/in/°F |
| Shading Coefficient | 0.236" clear sheet | 0.97 | 0.97 | 0.97 |
| U Factor – Summer | 0.236" | 0.85 BTU/hr-ft ² °F | 0.85 BTU/hr-ft ² °F | 0.85 BTU/hr-ft ² °F |
| U Factor – Winter | | 0.92 BTU/hr-ft ² °F | 0.92 BTU/hr-ft ² °F | 0.92 BTU/hr-ft ² °F |
| Sound Transmission Class | 0.236" | 29 | 29 | 29 |

Regulatory code compliance and certifications

ANSI Z97.1-2009: American National Standard for Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test, Class A, Unlimited

CPSC 16 CFR 1201 Category I and Category II: Safety Standard for Architectural Glazing Materials

Florida Building Code 2014

High Velocity Hurricane Zone Classified

Miami-Dade County NOA No. 16-1024.01

ICC-ES Evaluation Report ESR-2728

UL 94: Flammability File #E351891

UL 972: Burglary Resistant Glazing Materials, UL File #BP2126

UL 746C: Suitability for Outdoor Use, UL File #351891*

Renovo-MPC™ resistance is a factor of thickness. Avoid exposure to heat or aromatic solvents. Clean with soap and water. Avoid abrasives. The statements, technical information, and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and the information referred to herein are beyond our control, AZPolymers expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED, OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent, and it should not be construed as an inducement to infringe any patent the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

See SDS for Health & Safety Considerations. Renovo-MPC™ is a trademark of Interstate Advanced Materials. All rights reserved.



This high-quality, post-consumer, reprocessed polycarbonate sheet is offered with a five-year limited warranty against breakage.

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