



PRODUCT DATA SHEET

SMARTGARD SECURITY GLAZING

GCPHG1516 - (MAKROLON® HYGARD CG500 Core)

PRODUCT #: GCPHG1516

DESCRIPTION:

A symmetrical composite of two 3/16" clear or tinted glass outer lites, clear adhesive interlayers, and a high quality MAKROLON® HYGARD CG500 laminated polycarbonate core. All AIT security products are custom manufactured to be utilized in secure environments where consistent quality and optimum optical clarity are priorities. MAKROLON® HYGARD CG500 sheet is a three-ply laminated polycarbonate constructed with two 1/8" and one 1/4" layers of MAKROLON® polycarbonate sheet bonded by an adhesive interlayer. MAKROLON® HYGARD CG500 sheet satisfies the requirements of ASTM F1915-Grade 2.

FEATURES:

- Makrolon Hygard Core
- Attack resistant (40 min)
- Ballistic properties (low spall)
- Glass on interior and exterior surfaces.

CONSTRUCTION:	PERFORMANCE DATA:										
<i>Attack side / Outboard / Exterior</i>	Max Dimension: 60" x 96" (standard) (Larger sizes may be available – contact us)										
.187" Annealed or Heat-Treated Glass **	Nominal Thickness: 0.996"										
.050" Bonding Interlayer	Thickness: 0.963" to 1.029"										
.118" Uncoated Polycarbonate Sheet	Tolerance:										
.025" Bonding Interlayer	Weight: 8.83 Lbs. / Square Foot										
.236" Uncoated Polycarbonate Sheet	Attack Rating: ASTM F1915 Grade 2 (40-minute attack) HP White TP-0500.03 Level II Forced Entry WMFL Level II (60 minute)										
.025" Bonding Interlayer	Ballistic Rating: No bullet penetration & Low Spall										
.118" Uncoated Polycarbonate Sheet											
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	<table border="1"> <thead> <tr> <th>U-VALUE</th> <th>SHGC</th> <th>VISUAL LIGHT TRANS.</th> <th>SHADING COEFFICIENT</th> <th>RELATIVE HEAT GAIN</th> </tr> </thead> <tbody> <tr> <td>.70</td> <td>.69</td> <td>.77</td> <td>.79</td> <td>167.52</td> </tr> </tbody> </table>	U-VALUE	SHGC	VISUAL LIGHT TRANS.	SHADING COEFFICIENT	RELATIVE HEAT GAIN	.70	.69	.77	.79	167.52
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.70	.69	.77	.79	167.52							
<i>Protection side / Inboard / Interior</i>											

*Calculated using LBL Window Software v7.6.4

COMPLIANCES:

- ASTM C1036 – Standard Specification – Flat Glass
- ASTM C1048 Standard Specification-Heat Treated Glass
- ASTM C1349 Standard Specification-Flat Glass Clad PC
- ANSI Z97.1 - Safety Materials Used in Buildings
- CSPC 16 CFR1201 Cat 1 & 2 for Impact
- Made from UL 972 Listed Polycarbonate Sheet

INSTALLATION SPECIFICATIONS:

AIT strongly suggests the use of a suitable structural security framing with an appropriate protection rating. Allow for a minimum of a (1) inch edge engagement in the frame with sufficient rabbet depth to allow for expansion (approximately 1/16"/FT). Only use sealants and gaskets that are compatible with polycarbonate. Remove protective masking when installation is complete and before prolonged exposure to sunlight, weather, and moisture.

ADD-ON OPTIONS & ADDITIONAL INFO:

Some additional combination options may include:

- Insulated glass units with air or argon gas fills
- Tinted glass
- Spandrel glass
- Smart Glass – instantly switchable privacy glass
- Various low-e coatings
- Textured glass
- Colored Interlayers
- Smart Designs - decorative options inside glass
- Varied thicknesses
- Mirropane one-way mirror
- Logos or signage in glass
- Custom designs & make-ups
- Fire rated glass
- Signals Defense anti-eavesdropping protection

Contact an AIT representative for all possible options, or custom makeups.

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