



PRODUCT DATA SHEET

SMARTGARD SECURITY GLAZING

GCPHGI116 - MAKROLON® HYGARD CG375 Core

PRODUCT #: GCPHGI116

DESCRIPTION:

A symmetrical composite of two 1/8" clear or tinted glass outer lites, clear adhesive interlayers, and a high quality MAKROLON® HYGARD CG375 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 CG375 sheet is a two-ply laminated polycarbonate constructed with two 3/16" layers of MAKROLON® polycarbonate sheet bonded by an adhesive interlayer. MAKROLON® HYGARD CG375 sheet satisfies the requirements of ASTM F1915-Grade 3.

FEATURES:

- Makrolon Hygard Core
- Attack resistant (20 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)										
.125" Annealed or Heat-Strengthened Glass**	Nominal Thickness: 0.729"										
.050" Bonding Interlayer	Thickness Tolerance: 0.705" to 0.753"										
.177" Uncoated Polycarbonate Sheet	Weight: 6.24 Lbs. / Square Foot										
.025" Bonding Interlayer	Attack Rating: ASTM F1915 Grade 3 (20 min attack) HP White TP-0500.03 Level II Forced Entry ASTM F1233 Class 2.8 Sequence I6;										
.177" Uncoated Polycarbonate Sheet	Ballistic Rating: HP White TP-0500.03 9mm/.38 Special (3 shot) No bullet penetration / Low Spall										
.025" Bonding Interlayer											
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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>.73</td> <td>.73</td> <td>.81</td> <td>.83</td> <td>176.20</td> </tr> </tbody> </table>	U-VALUE	SHGC	VISUAL LIGHT TRANS.	SHADING COEFFICIENT	RELATIVE HEAT GAIN	.73	.73	.81	.83	176.20
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<i>Protection side / Inboard / Interior</i>	*Calculated using LBL Window Software v7.6.4										

COMPLIANCES:

- ASTM C1036 – Standard Specification – Flat Glass
- ASTM C1172 – Standard Specification for Laminated Architectural Flat Glass
- ASTM C1048 - Standard Specification-Heat Treated Glass
- ANSI Z97.1 - Safety Materials Used in Buildings
- 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
- Anti-eavesdropping Signals Defense
- Fire rated glass
- Custom designs & make-ups

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

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