



PRODUCT DATA SHEET

SMARTGARD GCPHG2016 SECURITY GLAZING (MAKROLON® HYGARD CG750 Core)

PRODUCT #: GCPHG2016

DESCRIPTION:

A symmetrical composite of two 3/16" clear or tinted glass outer lites, clear adhesive interlayer's, and a high quality MAKROLON® HYGARD CG750 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 CG750 sheet is a three-ply laminated polycarbonate constructed with two 1/8" and one 1/2" layer of MAKROLON® polycarbonate sheet bonded by an adhesive interlayer.

MAKROLON® HYGARD CG750 sheet satisfies the requirements of ASTM F1915-Grade I.

FEATURES:

- Makrolon Hygard Core
- Attack resistant (60 min)
- Ballistic properties (low spall)
- Glass on interior and exterior surfaces.

CONSTRUCTION:	PERFORMANCE DATA:										
.187" Annealed or Heat-Treated Glass ** .050" Bonding Interlayer .118" Uncoated Polycarbonate Sheet .025" Bonding Interlayer .500" Uncoated Polycarbonate Sheet .025" Bonding Interlayer .118" Uncoated Polycarbonate Sheet .050" Bonding Interlayer .187" Annealed or Heat-Treated Glass **	Max Dimension: 60" x 96" (standard)										
	Thickness: 1.26"										
	Thickness Tolerance: 1.218" to 1.302"										
	Weight: 10.47 Lbs. / Square Foot										
	Attack Rating: ASTM F1915-03 Grade I (60-minute attack) HP White TP-0500.03 Level III Forced Entry WMFL Level II (60 minute)										
	Ballistic Rating: UL752 - 9mm / .38 Special / .357 - (3 shot) No bullet penetration & Low Spall										
	<table border="1"> <thead> <tr> <th>U-VALUE</th> <th>SHGC</th> <th>LIGHT TRANS.</th> <th>SHADING COEFFICIENT</th> <th>RELATIVE HEAT GAIN</th> </tr> </thead> <tbody> <tr> <td>.62</td> <td>.68</td> <td>.70</td> <td>.78</td> <td>163.56</td> </tr> </tbody> </table>	U-VALUE	SHGC	LIGHT TRANS.	SHADING COEFFICIENT	RELATIVE HEAT GAIN	.62	.68	.70	.78	163.56
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	<i>*Calculated using LBL Window Software</i>										

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 CFR 1201 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

Additional options include: Pilkington Mirropane®, Hard Coated Low E, (Wire Glass-Fire Rated-Ref GCPFR0850), Air-Gap Units, Insulated Glass Units, Signals Defenses SD1000 & SD2500 RF/IR Barrier Films, LTI Electrified Switchable Privacy Glass (Smart Glass), and Graphics inside the laminate (Smart Designs).

* Values referenced are for clear product. Tinted glass with translucent bonding interlayers are available, minimums may apply. When specifying tinted or translucent SMARTGARD laminated polycarbonate and/or glass clad polycarbonate contact AIT for details on availability and minimums.

**All AIT SMARTGARD glass-clad polycarbonate products meet certification with annealed glass.

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FOR MORE INFORMATION, PLEASE CONTACT:

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