



PRODUCT DATA SHEET

SMARTGARD SECURITY GLAZING

GCPHG2216MOD - (MAKROLON® HYGARD CG750 Core)

PRODUCT #: GCPHG2216MOD

DESCRIPTION:

A asymmetrical composite of one 1/4" clear or tinted glass outer lite on the attack side, clear adhesive interlayer's, and a high quality MAKROLON® HYGARD CG750 laminated polycarbonate core. The protection side has an abrasion resistant polycarbonate spall shield over 3/16" glass for no spalling. 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:
<i>Attack side / Outboard / Exterior</i>	Max Dimension: 60" x 96" (standard) (Larger sizes may be available – contact us)
.250" Annealed or Heat-Treated Glass **	Nominal Thickness: 1.491"
.050" Bonding Interlayer	Thickness Tolerance: 1.441" to 1.541"
.118" Uncoated Polycarbonate Sheet	Weight: 12.34 Lbs. / Square Foot
.025" Bonding Interlayer	Attack Rating: ASTM F1915 Grade I (60-minute attack) ASTM F1233 – Class III
.500" Uncoated Polycarbonate Sheet	Ballistic Rating: UL752 Level III - .44 mag - (3 shots) No bullet penetration & No Spall
.025" Bonding Interlayer	
.118" Uncoated Polycarbonate Sheet	
.050" Bonding Interlayer	
.187" Annealed or Heat-Treated Glass **	
.050" Bonding Interlayer	
.118 Abrasion Resistant Polycarbonate Spall Shield	
<i>Protection side / Inboard / Interior</i>	

U-VALUE	SHGC	VISUAL LIGHT TRANS.	SHADING COEFFICIENT	RELATIVE HEAT GAIN
.59	.67	.67	.77	161.19

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

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

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