



Hygard® MS1250 sheet

Multi shot protection

Hygard® MS1250 ballistic grade sheet is a 1.250", 4-ply acrylic and polycarbonate laminate that meets UL 752 Level 6 rating for high speed multi-shot 9 mm (Uzi) ballistic attack. All Hygard products incorporate Makrolon® polycarbonate sheet produced for high optical quality in security glazing laminates. Exterior surfaces have a proprietary Makrolon AR hardcoat that facilitates cleaning and resists marring, chemical, and graffiti attack. Hygard MS1250 sheet has a seven (7) year Limited Product Warranty against coating failure, yellowing, and hazing. The terms of the warranty are available upon request.

Applications

Government and detention facilities, banks, heavy equipment glazing, specialty retailers, 24 hour convenience stores, cash transaction windows

Typical Properties*	
Property	Values
Gauge / Tolerance	1.30 in
Weight	8.1 lbs / sq ft
Shading Coefficient	0.98
U-Value	0.56
Light Transmission	78%

*Typical properties are not intended for specification purposes

Product Performance Ratings	
BALLISTIC	UL 752 Level 6 multiple shots from a sub-machine gun, such as a 9 mm Uzi, with muzzle energy 540-653 ft-lbs Supplementary Shotgun - A supplementary UL test using rifled lead slug with a muzzle energy of 2438-2950 ft-lbs (3306-4000 J) and 00 lead buckshot with a muzzle energy of 2078-2415 ft-lbs (2818-3275 J) fired from a 12-gauge shotgun
AGENCY INFORMATION	UL File: BP6864 Combustibility Class CC2 Miami-Dade NOA 12-0605.05

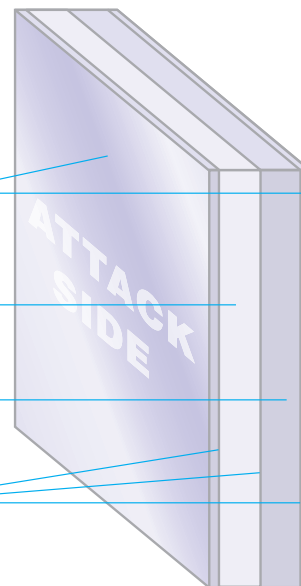
Hygard® MS1250 Sheet Construction

1/8" Makrolon® AR-1 Sheet

1/2" Acrylic Attack Side

1/2" Makrolon® Sheet

Interlayer Bond



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Glazing recommendations

- Structural security framing systems with equal or greater forced entry and/or ballistics ratings as the selected Hygard laminate are recommended
- Hygard MS1250 must be installed with acrylic ply facing the ballistic attack side
- Hygard laminate should be cut to allow for a minimum of one (1) inch edge engagement in the frame, with sufficient rabbet depth for material expansion (approx. 1/16"/ft.)
- Use wet or dry sealants/gaskets that are compatible with polycarbonate
- Remove protective masking after glazing operations are completed and before prolonged exposure to direct sunlight, moisture, or high temperature

Standard sheet size

48" x 96"

Product specification

Hygard MS1250 polycarbonate and acrylic laminate:

- Four-ply, clear Hygard polycarbonate sheet constructed as follows:
 - 1/8" Makrolon® AR-1 abrasion resistant surface
 - Polyurethane bonding interlayer
 - 1/2" Makrolon polycarbonate sheet
 - Polyurethane bonding interlayer
 - 1/2" acrylic sheet
 - Polyurethane bonding interlayer
 - 1/8" Makrolon® AR-1 abrasion resistant surface



119 Salisbury Road
Sheffield, MA 01257
Toll Free: 800.254.1707
Fax: 800.457.3553
sfdinfo@covestro.com
sheets.covestro.com

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With respect to health, safety and environment precautions, the relevant Safety Data Sheets (SDS) and product labels must be observed prior to working with our products.