Bullet-resistant LEXGARD® laminates are composite sheets that can withstand multi-shot assault, absorbing the total impact energy without dangerous spalling. LEXGARD laminates combine abrasion-resistant MARGARD® II surfaces with UV-coating technology to enhance the total life of the sheet. Depending on the application, LEXGARD laminates can be used alone or in component air gap systems utilizing laminated glass in combination with LEXGARD laminates. Appropriately matched to specific levels of threat, LEXGARD laminates and component systems provide transparent ballistic protection. They are widely used in retail, financial, corporate and government buildings, as well as in correctional facilities. With their unique multi-layer construction, LEXGARD laminates can withstand both physical attack and gunfire from weapons ranging from 9mm Hand Guns to 7.62mm NATO High-Power Rifles.

While no material or system can indefinitely withstand repeated assault by guns, sledgehammers, blow torches or other weapons, the exceptional performance of LEXGARD laminates gives you the time you need to protect your people and take appropriate action.

Today’s security threats go beyond physical and ballistic attack. Detonated blasts are a new and violent risk for some establishments. Provided that the building structure and sash system design are consistent with the security requirements, the inherent impact strength of LEXGARD laminates can provide protection against many of the overpressures and fragments associated with explosions.

LEXGARD Laminates - Proven Products, Documented Performance.

- UL-listed bullet-resisting – can absorb full ballistic impact without penetration. Will not pulverize or spall into sharp, dangerous shards.
- Warranty – warranted against abrasion, yellowing, coating failure and structural delamination.*
- Multi-shot capability – can stop even close-grouped shots, maximizing full vision.
- High impact, stress-free lamination – will not spider, crack or white-out on impact, providing vision after ballistic or physical attack. Eliminates costly replacement of broken glass.
- Abrasion-resistant surface – easy to maintain while enhancing long-term appearance. Even graffiti is easily removed.
- Lightweight, easily fabricated – the lightest weight/highest performing, bullet-resistant product available – requires no added support to walls or counters.
- Easy to install – can be cut to complex shapes for transaction ports, speaker holes, etc.
- Major model building code approved – ICBO, BOCA and SBCCI listed as CC1 flame reading (MP 750 is listed CC2).
- Installed in applications for over 20 years – a proven product with documented performance.

* Details of limited warranty available upon request.
### Intrusion/Detention
Forcible entry by hand-held tools or weapons other than guns or explosives. An understanding of the use and destructive potential of the "weapons" is engineered into every LEXGARD laminate product.

<table>
<thead>
<tr>
<th>Product ID</th>
<th>Product Description</th>
<th>Actual Gauge (in.)</th>
<th>Weight (lbs./sq.Ft.)</th>
<th>Test Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEXAN MR Sheet 1-Ply</td>
<td>1/2&quot; Monolithic Sheet offering UV resistance and exceptional abrasion resistance</td>
<td>.500</td>
<td>3.12</td>
<td>ASTM F1233-89 Class II, (Step 5) HPW-TP-0500.00 Level I</td>
</tr>
<tr>
<td>PL 250 2-Ply</td>
<td>1/8&quot; LEXAN Prismatic Sheet LR Bonding Interlayer 1/8&quot; LEXAN MR Sheet</td>
<td>.065</td>
<td>5.5</td>
<td>ASTM F1233-89 Class II, (Step 5) HPW-TP-0500.00 Level II (Step 7) UL 972</td>
</tr>
<tr>
<td>PL 375 2-Ply</td>
<td>3/16&quot; LEXAN Prismatic Sheet LR Bonding Interlayer 3/16&quot; LEXAN MR Sheet</td>
<td>.390</td>
<td>2.2</td>
<td>ASTM F1233-89 Class II, (Step 6) HPW-TP-0500.00 Level A-II (Step 10)</td>
</tr>
<tr>
<td>RNG 500 3-Ply</td>
<td>1/8&quot; LEXAN Protect-A-Glaze Sheet LR Bonding Interlayer 1/4&quot; LEXAN Sheet LR Bonding Interlayer 1/8&quot; LEXAN MR Sheet</td>
<td>.530</td>
<td>3.2</td>
<td>ASTM F1233-89 Class II, (Step 15) HPW-TP-0500.00 Level A-II (Step 10)</td>
</tr>
<tr>
<td>PL 500 3-Ply</td>
<td>1/8&quot; LEXAN Prismatic Sheet LR Bonding Interlayer 1/4&quot; LEXAN Sheet LR Bonding Interlayer 1/8&quot; LEXAN MR Sheet</td>
<td>.530</td>
<td>3.2</td>
<td>ASTM F1233-89 Class II, (Step 10) HPW-TP-0500.00 Level A-II (Step 14)</td>
</tr>
<tr>
<td>MPC 500 3-Ply</td>
<td>1/8&quot; LEXAN MR Sheet LR Bonding Interlayer 1/4&quot; LEXAN Sheet LR Bonding Interlayer 1/8&quot; LEXAN MR Sheet</td>
<td>.530</td>
<td>3.3</td>
<td>ASTM F1233-89 Class II, (Step 15) HPW-TP-0500.00 Level A-II (Step 14)</td>
</tr>
</tbody>
</table>

### Ballistics
Attack by handguns and rifles of various power. Considerations of caliber and bullet velocity are factored into the multi-ply composition and construction of LEXGARD laminates.

### Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM F1233</td>
<td>American Society for Testing and Materials</td>
</tr>
<tr>
<td>N-0314 Oslo</td>
<td>Royal Hong Kong Police Force, Crime Prevention Bureau (Ref. DID/CPB 5/2) using Type 54 Chinese military pistol (7.62mm) and Type 51-1 solid steel, banded ammunition (3 rounds). Royal Hong Kong Police Force Crime Prevention Bureau</td>
</tr>
<tr>
<td>HPW-TP-0500.00</td>
<td>Underwriters Laboratories Incorporated</td>
</tr>
<tr>
<td>HPW-TP-0500.00</td>
<td>Underwriters Laboratories Incorporated</td>
</tr>
<tr>
<td>Australian Standard 2343-1983</td>
<td>Bullet-Resistant Glazing Panels for Interior Use Standards Association of Australia</td>
</tr>
</tbody>
</table>
LEXGARD laminates are key components in air gap systems for both exterior and interior windows, walls and partitions. In these high-performance systems, a LEXGARD laminate is installed with an air gap behind laminated safety glass. If glass is broken, it can be easily and economically replaced while the LEXGARD laminate remains intact. Abrasion resistance and energy efficiency are additional advantages.

**BOMB BLAST**

Explosions to gain access, destroy property or harm people. While the resulting overpressures can easily shatter ordinary glazing, LEXGARD® laminates and air gap systems manufactured by authorized fabricators with LEXGARD laminates have been tested to absorb from 20 psi to as much as 57 psi, the equivalent of 4300 pounds of TNT detonated from 115 feet away.

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**Multi-Layer Systems Deliver Even Greater Security**

LEXGARD laminates are key components in air gap systems for both exterior and interior windows, walls and partitions. In these high-performance systems, a LEXGARD laminate is installed with an air gap behind laminated safety glass. If glass is broken, it can be easily and economically replaced while the LEXGARD laminate remains intact. Abrasion resistance and energy efficiency are additional advantages.
**LEXAN® NU-VIEW® Scratch- and Abrasion-Resistant Laminate**

Extends the life of LEXAN MR sheet and LEXGARD® laminates. Simply peel-off scratches, abrasion, and graffiti.

Patented LEXAN NU-VIEW laminate provides renewed visual clarity and appeal for LEXAN MR sheet or LEXGARD laminates.

If damaged by scratches, abrasion or graffiti, the clear and hard-coated NU-VIEW laminate can easily be peeled off and discarded without removing the window, to reveal the unblemished, underlying glazing surface. Or, you can choose to remove the window and apply a new film lamination. Either way, this affords you the benefit of considerable material cost savings by extending the life of the glazing, as well as the labor cost typically associated with removing damaged glazing.

In addition, LEXAN NU-VIEW laminate can easily be maintained without marring, hazing or yellowing.

- Patented design features high impact strength and protective scratch resistance of LEXAN HPH (interiors) or HPW (exteriors) film surface.
- Interior and exterior applications.
- Easily refurbished for longer surface life.
- Complies with major model building codes.
- CC-1 flame rated.†

The glazing surface chosen for high-traffic and graffiti-prone areas.

- School windows, hospitals and mental health facilities.
- High-security glazing for jails, prisons, convenience stores and kiosks.
- Train and bus glazing.
- Bus shelters, station windows and ticket booths.

**Total Material Thickness on LEXAN MR Sheet**: .128", .187", .246", .385", .510"

**Total Material Thickness on LEXGARD Laminate**: .260" to 1.35"  
**Standard Widths**: 24" minimum, 48" maximum

**Standard Lengths**: 96" maximum

**Standard Colors**: Clear, Grey, Greylite, Bronze and Light Green (Clear, Bronze and Grey for LEXGARD laminates).

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**High-Impact Wallboard**

Made available through a strategic alliance with COREGUARD® and Gold Bond® Hi-Impact Wallboard, this National Gypsum sheet product is designed for high-abuse, impact penetration areas.

High-impact wallboard combines LEXAN® polycarbonate sheet with fire-rated gypsum wallboard, to provide at least 600 ft. lbs. of impact strength plus UL 263 (ASTM-119) for one- or two-hour fire-rated wall assemblies.

- Very high-impact.
- Easy to install with traditional hand and power tools.
- Superior penetration resistance.
- Limited warranty against delamination.*

Impact and fire resistance.

- Psychiatric institutions
- Hospitals
- Correction facilities
- Schools

**Standard Gypsum Wallboard Sizes**: 4' x 8' and 4' x 10'

**LEXAN Sheet Thicknesses**: .010" - .080"

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* Consult warranty for complete details.
† Data on file at GE Plastics Structured Products.