



## Overview

The PALSHIELD product line offers various levels of ballistics and forced entry protection.

Due to its layered structure, the laminate withstands both physical attack and multi-shot assault, absorbing the entire impact energy without shattering or spalling.

PALSHIELD features an abrasion resistant coating, which ensures long-term clarity for applications in accessible areas.

## Main Benefits

- No spall design
- Abrasion resistant surface
- Complies with various ballistic and forced entry standards (*see table on reverse side*)
- Low weight: nearly half the weight of glass-equivalent
- Clear - good optical quality
- Colors: clear, bronze, grey

## Typical Applications

- Security glazing in banks and government facilities
- Public institutions
- Gas stations and convenience stores
- Drive-up windows
- Ticket booths and kiosks
- Prisons and detention centers



## A Growing Line of Products

PALSHIELD is engineered to meet a variety of forced entry and ballistic test standards. Palram's Palshield line of products is destined to expand over time. The information listed below represents the Palram products that meet or exceed the various testing standards at the time of this printing. Please visit [PalramAmericas.com/Palshield](http://PalramAmericas.com/Palshield) for the most up-to-date information and test approvals.

## Regulatory Code Compliance Certification

| Organization | Standard    | Classification                 |
|--------------|-------------|--------------------------------|
| ANSI         | Z97.1-09    | Approved Impact and Weathering |
| CPSC         | 16 CFR 1201 | Category I or II               |

## Manufacturer's Limited Warranty

PALSHIELD offers a 7-Year manufacturer's limited warranty against coating failure, structural delamination, yellowing, and loss of light transmittance. Visit [www.PalramAmericas.com/Palshield](http://www.PalramAmericas.com/Palshield) for complete warranty and technical details.

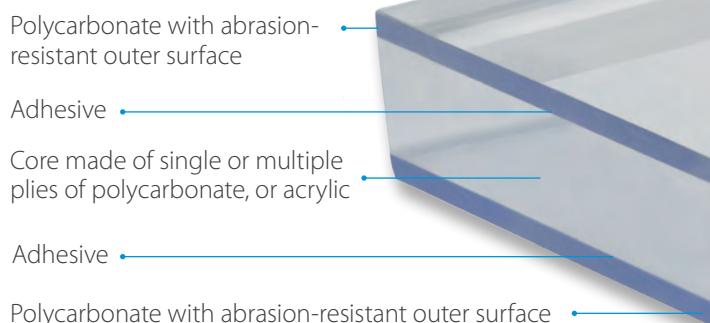
| Forced Entry Products | Protection Level   | Thickness (inches, mm) | Plies | Lbs./ft <sup>2</sup> (Kg/m <sup>2</sup> ) | Light Transmission |
|-----------------------|--|------------------------|-------|---|--------------------|
| PALSHIELD FE 375      | ASTM F1915-05 - Security Grade Level 2   | .375" (9.5mm)          | 2     | 2.4 (11.7)                                | 86%                |
| PALSHIELD FE 500      | ASTM F1915-05 - Security Grade Level 2<br>HPW 0500.03 Level A ballistics (.38 special) | .500" (12.7mm)         | 3     | 3.3 (16.1)                                | 83%                |
| PALSHIELD FE 750      | ASTM F1915-05 - Security Grade Level 1<br>HTW 0500.03 Level B Ballistics (9mm)         | .750" (19mm)           | 3     | 4.9 (23.9)                                | 77%                |

| Ballistic Products  | Protection Level   | Thickness (inches, mm) | Plies | Lbs./ft <sup>2</sup> (Kg/m <sup>2</sup> ) | Light Transmission |
|---------------------|--|------------------------|-------|---|--------------------|
| PALSHIELD UL1-750*  | UL 752 Level 1 <sup>†</sup> – 9mm 3 shots  | .750" (19mm)           | 3     | 4.9 (23.9)                                | 88%                |
| PALSHIELD UL2-1000  | UL 752 Level 2 <sup>†</sup> – .357 3 shots   | 1.0" (25.4mm)          | 4     | 6.5 (31.7)                                | 72%                |
| PALSHIELD UL3-1250  | UL 752 Level 3 <sup>†</sup> – .44 Mag 3 shots<br>ASTM F1915-05 Security Grade 1<br>ASTM 1233-08 Class V (Body) | 1.25" (32mm)           | 4     | 8.1 (39.5)                                | 67%                |
| PALSHIELD UL6-1250* | UL 752 Level 6 <sup>†</sup> – High Velocity 9mm 5 shots,<br>Supplemental shotgun 1 shot                        | 1.25" (32mm)           | 4     | 8.1 (39.5)                                | 78%                |

\* Contains Acrylic    † Tested by an accredited independent lab according to UL specs.

| Testing Std. Reference | Standard and Year | Title / Description  |
|------------------------|-------------------|--|
| ASTM                   | F1233-08          | Standard Test Method for Security Glazing Materials and Systems      |
| ASTM                   | F1915-05          | Standard Test Method for Glazing for Detention Facilities            |
| HP White               | TP-0500-03        | Transparent Material for Use in Forced Entry or Containment Barriers |
| UL                     | 752               | Bullet Resistant Equipment   |

## Typical Layer Detail



**PALRAM AMERICAS**  
9735 Commerce Circle  
Kutztown, PA, 19530 USA



Distributed by:  
**Piedmont Plastics®**  
where solutions take shape

Toll Free: 1.800.277.7898  
[www.piedmontplastics.com](http://www.piedmontplastics.com)

F2300 - 01.07.13 PBW

In as much as PALRAM Industries has no control over the use to which others may put the material, it does not guarantee that the same results as those described herein will be obtained. Each user of the material should make his own tests to determine the material's suitability for his own particular use. Statements concerning possible or suggested uses of the materials described herein are not to be construed as constituting a license under any PALRAM Industries patent covering such use or as recommendations for use of such materials in the infringement of any patent. PALRAM Industries or its distributors cannot be held responsible for any losses incurred through incorrect installation of the material. In accordance with our company policy of continual product development you are advised to check with your local PALRAM Industries supplier to ensure that you have obtained the most up to date information.

©1997-2013 PALRAM Industries Ltd. | PALSHIELD is a trademark of PALRAM Industries Ltd.

