



PALSHIELD™

Containment and Bullet Resistant Glazing



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



www.palram.com



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 Palram.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.Palram.com/PALSHIELD for complete warranty and technical details.

Forced Entry Products	Protection Level	Thickness (mm)	Plies	Kg/m ²	Light Transmission
PALSHIELD FE 375	ASTM F1915-05 - Security Grade Level 2	9.5mm	2	11.7	86%
PALSHIELD FE 500	ASTM F1915-05 - Security Grade Level 2 HPW 0500.03 Level A ballistics (.38 special)	12.7mm	3	16.1	83%
PALSHIELD FE 750	ASTM F1915-05 - Security Grade Level 1 HTW 0500.03 Level B Ballistics (9mm)	19mm	3	23.9	77%

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

Ballistic Products	Protection Level	Thickness (mm)	Plies	(Kg/m ²)	Light Transmission
PALSHIELD 318 (UL1-750*)	UL 752 Level 1* - 9mm 3 shots BS 5051 Part 1: 1988 Level G0	19mm	3	23.9	88%
PALSHIELD 425 (UL2-1000)	UL 752 Level 2* - .357 3 shots	25.4mm	4	31.7	72%
PALSHIELD 432 PC (UL3-1250)	UL 752 Level 3* - .44 Mag 3 shots ASTM F1915-05 Security Grade 1 ASTM 1233-08 Class V (Body)	32mm	4	39.5	67%
PALSHIELD 432 PMMA (UL6-1250**)	UL 752 Level 6* - High Velocity 9mm 5 shots, Supplemental shotgun 1 shot	32mm	4	39.5	78%

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

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

Dimensions* (mm)	Colors
Width: 1220, Length: 1830, 2440	Clear, bronze, grey

*Other dimensions are available upon request, subject to minimum quantity.

Layer Detail

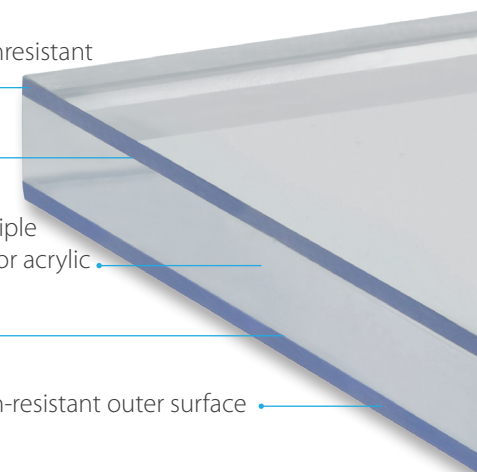
Polycarbonate with abrasion-resistant outer surface

Adhesive

Core made of single or multiple plies of polycarbonate, and or acrylic

Adhesive

Polycarbonate with abrasion-resistant outer surface



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