



ASHIELD PROFESSIONAL DOCUMENT

# Paint Protection Film Technical Data Sheet

Core construction, performance characteristics, adhesion values, and storage guidance for ASHIELD PPF product families.

TECHNICAL DATA SHEET

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## Product scope

This technical data sheet summarizes ASHIELD Paint Protection Film construction and general performance characteristics. Values are intended as guidance for professional evaluation and product comparison.

## Film construction

| Layer / Product family             | Reported value        |
|------------------------------------|-----------------------|
| PPF thickness - standard total     | 203 micron (8 mil)    |
| Topcoat - standard                 | 13 micron (0.5 mil)   |
| Base film - standard               | 152 micron (6 mil)    |
| Adhesive - standard                | 38 micron (1.5 mil)   |
| Liner                              | 89 micron (3.5 mil)   |
| Cap sheet - optional               | 51 micron (2 mil)     |
| A-GUARD / A-XTREME total thickness | 254 micron (10 mil)   |
| A-GUARD / A-XTREME topcoat         | 14.5 micron (0.6 mil) |
| A-GUARD / A-XTREME base film       | 200 micron (8 mil)    |
| H-PRIME / H-LITE total thickness   | 190 micron (7.5 mil)  |
| H-PRIME / H-LITE base film         | 139 micron (5.5 mil)  |

## General characteristics

| Category            | Characteristic         | Result / Method noted                          |
|---------------------|------------------------|------------------------------------------------|
| Aging test          | UV aging test          | No detrimental effect / ASTM                   |
| Aging test          | Xenon arc aging test   | No detrimental effect / SAE J                  |
| Aging test          | Ozone aging test       | 90% gloss retention / SAE J                    |
| Aging test          | Temperature aging test | No detrimental effect / ISO                    |
| Chemical resistance | Acid resistance        | No detrimental effect                          |
| Chemical resistance | Alkali resistance      | Test passed with oxalate for 72 hours          |
| Chemical resistance | Oil resistance         | No detrimental effect / immerse for 30 minutes |
| Physical properties | Stone chip resistance  | Tested performance characteristic              |
| Physical properties | Scratch resistance     | Tested performance characteristic              |
| Physical properties | Swirl resistance       | Tested performance characteristic              |
| Physical properties | Self healing           | Tested performance characteristic              |
| Mechanical          | Elongation at break    | 25% / 50%                                      |

| Category               | Characteristic   | Result / Method noted             |
|------------------------|------------------|-----------------------------------|
| Hydrophobic properties | Surface behavior | Tested performance characteristic |

## Peel adhesion

| Condition                   | Reported adhesion |
|-----------------------------|-------------------|
| During installation         | 2 N/cm            |
| 24 hours after installation | 8 N/cm            |

## Recommended storage conditions

Store film at 60-86 F (16-30 C) and 44%-55% relative humidity. Keep film in appropriate packaging before use.

## Product families referenced

- H-LITE
- A-GUARD
- S-FLEX
- H-PRIME
- A-XTREME
- Glass & Light PPF
- Satin & Matte
- Color Paint Protection Film

## Note

The representations of performance and suitability for use contained in this Technical Data Sheet are intended only as a guide. Final product selection should consider substrate, installation environment, application method, and customer use case.