



CHARACTERISTICS

- Gunsmoke gray coloration
- Super hydrophobic
- Self-healing
- Anti-yellowing
- Anti-contamination

LAYER DESCRIPTIONS

Cap Sheet

Protects film before use

Top Coat

Hydrophobic and scratch-resistant

Base Film

Thermoplastic polyurethane (TPU)

Color Adhesive

Color representation

Adhesive

For easy installation

Liner/RF

Silicone-based liner

APPLICATIONS

For automotive use (other uses may apply).

APPLICATION SURFACE

Flat surfaces, simple curves, and compound curves

APPLICATION METHOD

Paint protection films should be installed within one year from the date of purchase.

Technical Data Sheet

PRODUCT IMAGE

FORCESHIELD Twilight is a semi-transparent gray TPU paint protection film (PPF) designed to provide clarity while effectively safeguarding vehicle exteriors. With its proprietary top coating, it prevents discoloration and surface gloss reduction caused by smog, contaminants, road oils, and water spots. Its high impact resistance protects against stone chips, scratches, and car wash brushes. Additionally, the film features outstanding self-healing properties, allowing minor scratches to disappear over time.

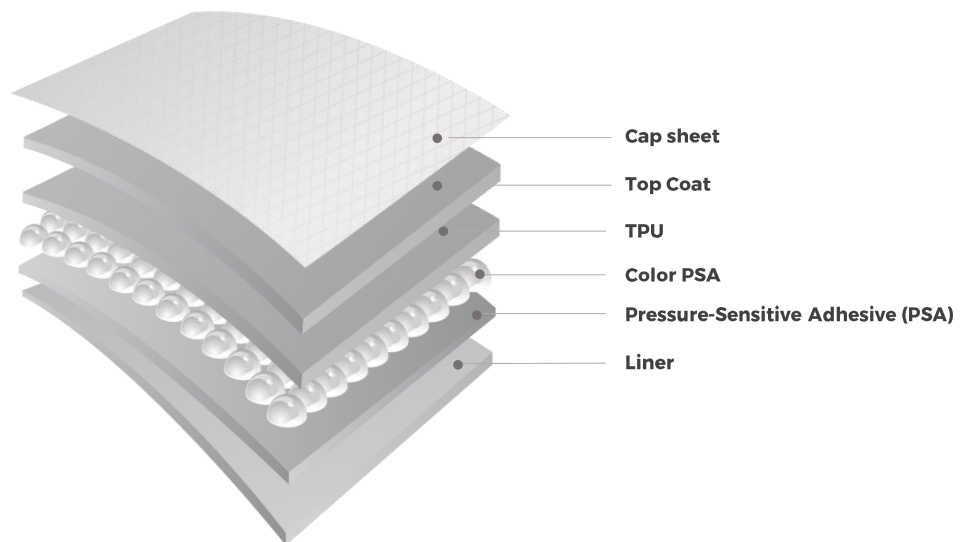
STORAGE INSTRUCTIONS

Recommended Temperature Range: 20 ± 2 °C (68 ± 2 °F)

Recommended Relative Humidity: 40-60%

Avoid extreme temperature ranges in storage. Store the product in its original packaging in a horizontal orientation, away from direct sunlight. Do not place heavy objects on top of the packaging, as this may damage the product.

LAYER STRUCTURE



PROPERTIES

Thickness	$210 \pm 10 \mu\text{m}$
Gloss	>90 Gu
Self-Healing	Super
Coating Layer Crack	60 ± 10 mm
Adhesion (30 min)	$1,800 \pm 400$ gf/inch
Adhesion (24 hrs)	$2,500 \pm 500$ gf/inch
Hydrophobicity	Hydrophobic
Weathering	No change 6500 W Xenon Arc Irradiance: 0.51 W/m^2 (340 nm), 65° C Humidity: 50%, R.H. 1000 hrs

PACKAGE DIMENSIONS

Box Dimensions

60": 1630 x 185 x 180 (mm)

Technical Data Sheet

ROLL CONFIGURATIONS

60 in x 50 ft	15 m (1524 ±2 mm)
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NOTES

All data have been collected by STEK Automotive through internal testing standards and methods. Results may differ when using other testing standards.

Reported values are expected properties and should not be used for product certification.

The provided technical information consists of representative product data and should not be used for specification purposes. Unless otherwise noted, all tests are performed at room temperature.

All concerns regarding warranty and liability are subject to the terms and conditions of sale. When applicable, these terms and conditions are governed by prevailing laws.

Prior to application, the user must determine the suitability of the product for its intended use, and assumes all risk and liability therein.

WARRANTY

10-year warranty

Only applicable in the case of proper handling and use. Terms and conditions apply.