



PROTECT SURFACES.
ENHANCE COMFORT. PRESERVE PRIVACY.

CLEARSHIELD® WPPF

WINDOW PROTECTION FILM

A new generation of surface protection films unlocking fresh possibilities

CLEARSHIELD WPPF series is the latest innovation in Solar Gard's range of surface protection films: a range of high-performance, weather-resistant exterior films designed with flexibility at its core. Unlike traditional rigid exterior films that are PET-based, CLEARSHIELD WPPF adapts effortlessly to a wide variety of surfaces and shapes, opening the door to applications that were previously difficult or impossible.

At the heart of CLEARSHIELD WPPF is an optically clear, ultra-low-distortion TPU layer that is either clear or that is infused with advanced solar-control components. This unique construction delivers exceptional solar performance while maintaining a perfectly uniform, crystal-clear view without haze or distortion. Unlike many TPU-based solar films, CLEARSHIELD WPPF integrates its solar performance

directly into the TPU—not the adhesive—resulting in superior durability, long-term stability, and consistent performance over time.

CLEARSHIELD WPPF also features a specially engineered adhesive system that ensures excellent compatibility with a wide range of substrates, particularly polycarbonate and PMMA surfaces where traditional films often struggle. As its name suggests, CLEARSHIELD WPPF is highly flexible—and even slightly stretchable—allowing it to conform smoothly to curved or complex geometries.

With its combination of flexibility, clarity, and long-lasting solar protection, CLEARSHIELD WPPF sets a new benchmark for exterior film technology and expands what's possible in both architectural and specialty applications.

PUBLIC TRANSPORT



Buses, trains and trams: Anti scratch and anti graffiti combined with effective solar control



VEHICLES



Cars: especially rear windows of coupés and sedans!

CARAVANS



Caravans and mobile homes

CLEARSHIELD WPPF is available in 4 performance levels, allowing you to choose the perfect balance between privacy, clarity, and solar control

- 1- A high-performance, weather-resistant exterior solar control film designed with flexibility at its core. ✓
- 2- CLEARSHIELD WPPF adapts effortlessly to a wide variety of surfaces and shapes, that were previously difficult. ✓
- 3- CLEARSHIELD WPPF is an optically clear, ultra-low-distortion TPU layer infused with advanced solar-control components. ✓
- 4- Delivers exceptional solar performance while maintaining a perfectly uniform, crystal-clear view without haze or distortion ✓
- 5- Up to 5 year product warranty* ✓



- 6- Available in 4 performance levels, allowing you to choose the perfect balance between privacy, clarity, and solar control. ✓
- 7- Specially engineered adhesive system that ensures excellent compatibility with a wide range of substrates. ✓
- 8- CLEARSHIELD WPPF is highly flexible — and even slightly stretchable — allowing it to conform smoothly to curved or complex geometries. ✓
- 9- CLEARSHIELD WPPF also acts as a durable surface protection layer, especially on materials prone to scratching. ✓

*For details see the Solar Gard SWT&C on www.solargard.eu.

A flexible solution offering privacy, comfort and surface protection!









WINDOW PROTECTION FILM



AUTOMOTIVE - PUBLIC TRANSPORT

CLEARSHIELD WPF is available in four performance levels, allowing you to choose the perfect balance between privacy, clarity and solar control:

-  15% Visible Light Transmission – Ideal for maximum privacy and highly efficient solar protection.
-  40% Visible Light Transmission – A balanced, versatile option offering both comfort and visibility.
-  70% Visible Light Transmission – Perfect when maintaining clear outward and inward views is essential, while still reducing solar heat gain.
-  Clear version – optically clear, invisible surface protection

All versions deliver over 99% UV protection, helping safeguard occupants and preventing interior fading and discoloration.

CLEARSHIELD WPF is backed by a robust warranty:

-  5-year limited warranty for roof lights, side lights
-  1-year or max 12,000 km limited warranty for windshield and rear window applications

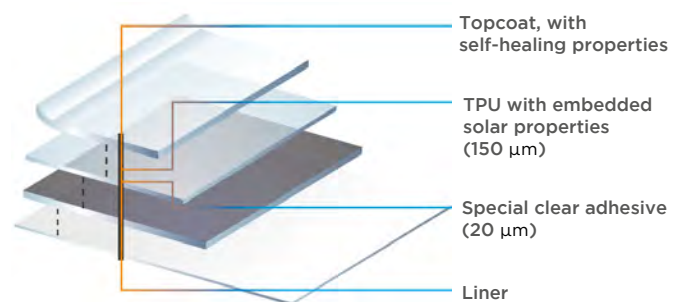
Full warranty details are available at www.solargard.eu

Beyond privacy and summer comfort, CLEARSHIELD WPF also acts as a durable surface protection layer, especially on materials prone to scratching—such as windows on recreational vehicles, mobile homes, and caravans. It also provides an excellent alternative to traditional window films for the rear windows of coupés and sedans, where heavy thermoforming and complex installation are typically required.

TECHNICAL DATA²

PERFORMANCE RESULTS	CSP WPF 15	CSP WPF 40	CSP WPF 70	CSP WPF Clear
VISIBLE LIGHT				
Transmittance %	15	44	69	89
Reflectance exterior %	5	6	7	8
Reflectance interior %	5	6	7	8
SOLAR ENERGY				
Total solar energy rejection (TSER) %	63	54	46	N/A
Transmittance %	12	25	36	N/A
Absorbance %	83	70	59	N/A
Reflectance %	4	5	5	N/A
Shading coefficient	0.4	0.5	0.6	N/A
Solar heat gain coefficient (G-value)	0.4	0.5	0.5	N/A
Emissivity	1.0	0.9	0.9	N/A
Solar Selectivity index-luminous efficacy (VLT/SC)	0.4	0.8	1.1	N/A
Light to solar heat gain ratio (VLT/SHGC)	0.4	0.9	1.3	N/A
IR				
SIRR %	92	90	90	N/A
UV				
Ultraviolet light blocked @ 300 to 380 nm %	>99	>99	>99	>99

HOW IT'S BUILT



Product Code	
Clearshield WPF 15	SF7CSWPF15-6050
Clearshield WPF 40	SF7CSWPF40-6050
Clearshield WPF 70	SF7CSWPF70-6050
Clearshield WPF Clear	SF75200500-4850

Mechanical and Physical Properties	Clearshield WPF
Tensile strength	150 N/cm ²
Elongation at Break	<200%
Peel strength	at 30 min: 1500 g/25 mm at 24 hrs: 1800 g/25 mm
Gloss (ASTM 523)	110 GU
Water Contact Angle (ASTM D7334)	100°
Fire Reaction	EN 13823: B-s1, d0 NF P92-501: M1 EN 13501: Pending EN 45545: R1- HL1, H2, HL3
Physical Properties Nominal	
Thickness without liner (mil)	8 mil
Roll dimensions	60"x50 lin ft

A slight haziness or foggy appearance may occasionally be visible immediately after installation. This is simply due to a small amount of moisture trapped beneath the film during the application process. It is completely normal and nothing to worry about. The film will clear up on its own within a few days, depending on weather conditions.

Regular Cleaning To maintain the film's appearance and performance, regular and gentle cleaning is essential.

- Always **rinse the surface thoroughly with clean water** before applying any cleaning solution. This helps prevent scratches caused by dust or larger dirt particles.
- Clean the film using a **mild soap-and-water solution**.
- **Avoid harsh or aggressive products such as ammonia-based cleaners, strong chemicals, or abrasive pads**, as these may damage the film.
- Use a **soft microfiber cloth or sponge** to gently wipe the surface.
- **Do not use abrasive tools** such as rough towels, brushes, or scrapers.

1. Not recommended for vehicles with a rear wiper.
2. Performance values are calculated according to the EN 410 methodology and may vary within industry standard tolerances. They are provided for guidance only and intended as estimates. These data are supplied for informational purposes and may exhibit normal variations related to the manufacturing process.