

Torian ScreenShield TPU Windscreen Protection Film

Professional Application Guide

(For certified installers and advanced detailing professionals)

Torian ScreenShield is an advanced TPU-based windscreen protection film designed to deliver exceptional impact resistance, optical clarity, and self-healing durability for road, track, and off-road vehicles. Developed for high-performance automotive environments, ScreenShield protects windscreens from stone chips, pitting, sandblast damage, and debris impact, while maintaining perfect transparency and wiper compatibility.



✓ Key Features

- High-Impact TPU Construction, engineered to absorb and disperse impact energy from gravel, debris, and track fragments, protecting glass from cracking and pitting.
- Ultra-Clear Optical Transparency, ensures distortion-free visibility for drivers, even in high-speed or low-light conditions.
- Hydrophobic Surface Coating, repels water, dust, and dirt, improving visibility in wet conditions and reducing maintenance.
- Self-Healing Topcoat, surface micro-repairs minor scratches and abrasions with the application of gentle heat or sunlight.
- UV and Chemical Resistance, provides long-term protection from yellowing, UV degradation, and cleaning products.

- Easy Application and Removal, conformable TPU allows for clean installation and residue-free removal, ideal for race teams managing quick-turnaround maintenance.
- Protects Expensive Components, extends windscreen lifespan, preventing costly replacements during competition or testing.
- Maintains Optical Clarity, keeps driver vision crystal clear under demanding race conditions.
- Enhances Safety, reduces the risk of glass fragmentation or damage from flying debris at high speed.
- Quick and Efficient Maintenance, designed for pit crews and race engineers; easy to replace between race stages or events.
- Professional Motorsport Proven, suitable for GT, touring, endurance, rally, off-road, and track-day vehicles.

✓ 1. Inspection & Cleaning

- Ensure the windscreen is cool, dry, and positioned in a dust-free environment. Humidity: Below 70% to prevent moisture entrapment.
- Inspect for cracks, chips, or contamination, ScreenShield should only be applied to damage-free glass.
- Clean the surface thoroughly using a pH neutral shampoo and a Fusion Pink Clean Squeegee cloth.
- Perform a final wipe with isopropyl alcohol (IPA 70%+) to remove residues, silicones, and surfactants.
- Temperature range: 18°C to 28°C (64°F to 82°F).
- Recommended lighting: Diffuse, bright, shadow-free illumination.

✓ 2. Tools Required

- Spray bottle with application slip solution (distilled water + a few drops of baby shampoo).
- Hard squeegee (TPU or PPF type) with a clean, rounded edge.
- Water expelling squeegee with handle (Fusion Prodigy Yellow Flat Out and Pink Clean)
- Soft squeegee buffer for finishing strokes.
- Heat gun (low to medium setting).
- Knife with stainless steel blades (Olfa AB-10S)
- Microfibre towels, lint-free cloth or wipes, and IPA solution.

✓ 3. Application Steps.

Film Handling

- Handle the film using nitrile or powder-free gloves to prevent contamination.
- Store rolls horizontally at room temperature.
- Always pre-cut the film using a plotter or cutting template, ensuring at least 10–15 mm excess on all edges for trimming.
- A pre-cut template from Matmak software or hand cut template can be used.

Step 1 – Wet Application (Slip Phase)

- Lightly mist the adhesive side of the ScreenShield film and the windscreen surface with the slip solution.
- Remove cap sheet.
- Position the film centrally, allowing for even overhang on all sides.
- Gently slide into final alignment using hands or squeegee edge.

TORIAN® ScreenShield™

Step 2 – Tack & Anchor

- Apply firm, overlapping squeegee strokes from the centre outward, anchoring the film in the middle.
- Maintain even pressure to expel trapped air and slip solution with handled squeegee.
- Avoid overstretching — ScreenShield's TPU structure is designed for minimal elongation during fitting.

Step 3 – Edge Finishing

- Once positioned, apply gentle heat (no more than 60°C) to activate the TPU's memory and encourage conformity to glass curvature.
- Post-heat all edges carefully to secure adhesion and remove any tension.
- Trim excess film neatly using a sharp blade, maintaining a 1–2 mm offset from the screen edge.

Step 4 – Final Inspection

- Recheck for air pockets or moisture. Small residual moisture will dissipate naturally within 24–48 hours.
- Wipe the surface clean using a microfibre cloth and IPA solution.
- Allow the film to cure for 24 hours before exposing to rain, washing, or wiper use.

✓ 4. Aftercare & Maintenance

- Avoid washing the vehicle or using wipers for at least 24 hours post-installation.
- Clean using pH-neutral automotive shampoo and soft cloths only.
- Do not use abrasive pads, strong solvents, or ammonia-based cleaners.
- For maximum clarity, apply Torian PPF NanoShield or a hydrophobic sealant designed for TPU films every 3–6 months.
- If minor scratches occur, expose the area to sunlight or warm air — the TPU surface will self-heal.

✓ 7. Summary

Optical Transmission: >90% visible light

Compatible with: Windscreens, visors, light lenses, and racing aero screens.

Torian ScreenShield is designed for on-road, off-road, motorsport, and performance applications. Installers must ensure compliance with local regulations regarding windscreen modifications. Torian and its partners assume no liability for improper installation or use beyond intended purpose.

Torian ScreenShield – The Clear Advantage in Windscreen Protection.
Engineered for performance. Designed for protection.

✓ For installation training please contact sales@torian.group.

Torian® Warranty

Due to the great variety of substrates and the growing number of new applications, the installer must check the suitability of the product for each application. In case of doubt, please request an expert evaluation of the compatibility of the film and the surface in question. All of the published information is based on measurements regularly performed in the laboratory. The published information does not however constitute a binding guarantee. The seller cannot be held liable for indirectly related damages and assumes no liability for claims that are higher than the replacement value of the purchased product. All specifications are subject to potential changes without prior notice.