

INSTALLATION GUIDELINES

OMEGA-SHIELD™ PAINT PROTECTION FILMS

OS-Shield-IG2025-V1-EN

The following installation guidelines apply to the Omega-Shield™ paint protection polyurethane film in GLOSS and MATTE versions.

PROPERTIES AND CHARACTERISTICS

Omega-Shield™ Paint Protection Film (GLOSS and MATTE) is an aliphatic polyurethane film with very soft, resilient, and flexible properties. This allows the film to easily conform to both convex and concave surfaces while maintaining its elasticity. As a result, impacts, abrasion, and stone chips are absorbed by the film rather than damaging the underlying substrate. The adhesive layer is acrylic-based and has a mild initial tack that activates quickly during installation. Thanks to its special composition, installation corrections can easily be made (lifting, repositioning, and reapplying the film). Any adhesive lines will disappear automatically within a few minutes.

Key features that set this film apart

- Very soft, elastic, and resilient: up to 360% (GLOSS)
- Mild, correctable adhesive layer that quickly builds adhesion strength

Requirements and basics

Installing PPF is not difficult, provided the correct procedure is followed. The right cleaners, proper tools, and a dust-free environment make all the difference. A few key points:

- Always work with pre-cut patterns of body panels rather than from bulk film. Studies show that using pre-cut patterns reduces material consumption by up to 25% per vehicle.



Before you begin

Paint inspection

When the car arrives, walk around it and inspect the paint. Mark any risk areas or irregularities. The best practice is to do this together with the owner so they are fully aware of potential issues that may become visible after film installation.

Place a small piece of masking tape at the risk area, take a photo, and discuss it with the owner before starting the job.

Paint condition

PPF is a surface protection film with an adhesive layer applied directly to the paint. The adhesive is designed to allow the film to be removed later without damaging or pulling paint from the bodywork—provided the paint is in good condition. Factory paint is always preferred, as it is baked at high temperatures and usually has the best adhesion. Whenever a vehicle has been repaired or resprayed, risks are involved.

Repair paints applied by body shops are never baked at the same high temperature as factory paint. Adhesion can therefore vary. How often has the car been resprayed? How much damage has it had? Was the surface prepared with a primer? Was the repair carried out professionally, or was a quick respray done over the factory paint to save costs?



Scratches also pose a risk. A damaged paint layer is broken and can lift at the scratch edge when removing the film years later.



Important

Neither the PPF installer nor the manufacturer can ever guarantee against paint problems caused by poor paint condition after film removal. The underlying condition of the paint is simply unknown. Always discuss this with the customer during the paint inspection.



Paint: wax and coatings

If the paint has been treated with wax or special coatings, this may cause adhesion problems. Check this in advance. Always know whether the car has been treated with a repellent layer. To remove wax, we recommend:

- 600-T900 Silicone & Wax Remover of SOTT
- OS-C-012-1 OMEGA X-Treme Degreaser



Paint: industrial fallout / rail dust

Some vehicles suffer from fallout: microscopic iron particles that bond to the paint and oxidize. These often only become visible after installation because PPF is applied with water. Small rust-colored spots may then appear. This phenomenon is common on cars parked near railways or industrial areas. Use a dedicated fallout remover to clean this.



Paint: engine grime

Seams around the engine area—such as the grille, hood, and fenders—may be contaminated with motor grease (engine grime). This cannot be removed with a standard surface cleaner.

Use **OS-C-012-1 OMEGA X-Treme Degreaser**. After cleaning, follow up with **OS-T-C180 Omega-Skinz Space Clay** for best results.



Vehicle inspection

When the car arrives, inspect its overall condition. Loose panels and grease deposits in seams and joints will certainly cause adhesion problems. Major issues that may complicate or even sabotage installation should always be discussed with the customer beforehand.

Cleaning and degreasing

Cleaning and degreasing

These terms are often confused, but they are not the same.

- **Cleaning:** removing road dirt, insects, handprints, and daily contamination with a surface cleaner. **OS-C-010 Omega-Skinz Surface Cleaner** is suitable for this.
- **Degreasing:** removing asphalt tar, bitumen undercoating in wheel wells, and oil or grease deposits (engine grime) from the engine area around the grille, hood, and bumper.

Always use different products for cleaning and degreasing.



Attention: dust and loose dirt in seams and crevices

Because PPF is installed wet, dirt trapped in seams and edges can loosen during installation. The excess water and slip solution you use, combined with squeegeeing the film toward the edges, can pull dirt out and carry it under the film. Always clean these areas extra thoroughly before starting installation.



Cleaning and degreasing order

The following procedure explains what to use, where, and in what order:

WHOLE VEHICLE	Wash with a pH-neutral shampoo and rinse with clean water (no wax).
WHOLE VEHICLE	Clean all seams, joints, and edges thoroughly. Spray OMEGA Surface Cleaner OS-C-010-1 on a clean SOTT 300-020 cloth and wipe until the white cloth shows no more dirt.
WHOLE VEHICLE	Use OMEGA Gold Microfiber Cloth OS-T-202 to clean all painted panels with OMEGA Surface Cleaner OS-C-010-1.
SPECIFIC AREAS	Treat all seams, joints, and surfaces that may contain engine grime. Use OMEGA X-Treme Degreaser OS-C-012-1: spray on a cloth, wipe thoroughly, wait a few minutes, and then wipe dry with another cloth.
SPECIFIC AREAS	Remove tar deposits or bitumen undercoating with OMEGA X-Treme Degreaser OS-C-012-1: spray on a cloth, wipe thoroughly, wait a few minutes, and then wipe dry with another cloth.
RECOMMENDED	Use Omega-Skinz Space Clay OS-T-C180 to remove embedded dirt from the paint pores. This smooths the surface and improves adhesion.
OPTIONAL (whole vehicle)	Use a deionizer to remove possible fallout. Afterward, clean again with OMEGA Surface Cleaner OS-C-010-1.



300-020



OS-T-202



OS-C-010-1



OS-C-012-1

Installation: wet application

Installation: wet application

Transparent PPF must always be applied wet. Since the film is crystal clear, any trapped air or fingerprints would otherwise be visible. Using moisture prevents this. For flawless installation, we recommend clean water. Keep in mind that water hardness varies by region; some installers prefer distilled water. Water must always contain a slip solution to allow the film to slide and be positioned correctly.

Recommended slip solutions:

- Babyshampoo (oil-, silicone-, and fragrance-free). Two drops per liter are usually sufficient. Test in advance depending on climate conditions.
- SlideNGlide from SOTT. Adhesion time can be adjusted by adding more or less. SlideNGlide bonds significantly faster than baby shampoo. Always follow the dosage instructions on the bottle.

Both options cause no silvering, no adhesive lines, and do not damage the adhesive layer.

Strictly avoid: IPA/alcohol

Despite what you may read online, we strongly advise against using IPA or alcohol in the slip solution. Gels, concentrates, or pre-mixed solutions containing alcohol are also discouraged.

Reason: alcohol attacks and softens the adhesive. This may cause quicker initial bonding, but lifting or correcting the film will damage the adhesive, leading to silvering and adhesive lines that will not disappear.

Car wrappers often use IPA to secure edges quickly, as they are accustomed to working with wrap film. PPF, however, is a completely different film with a different purpose. Patience, precision, and calm installation always give the best results.

Major benefit

By not using IPA or alcohol, the film can always be lifted again if dust or dirt is trapped underneath. After cleaning, the film can simply be reapplied; without adhesive lines, without distortion, without silvering.

Result: a cleaner installation and the best possible finish.



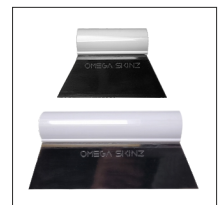
Installation: the right squeegees

The right squeegees

Although many types of squeegees can be used and anything is technically allowed (no law exists), we recommend just three models:

- OMEGA Wet Dream OS-T-242
- OMEGA BlackOut 13 OS-T-I252
- OMEGA Black Teflon OS-T-I211

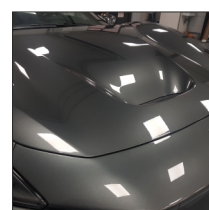
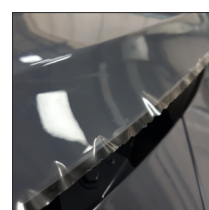
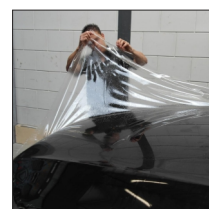
Important: always pull the water out with the squeegee rather than *pushing*. In car wrapping you push the film with a squeegee; in PPF you *pull* the moisture out from under the film.



Installation process

Installing Omega-Shield™ PPF is easier than with many other brands. The balance between adhesion, flexibility, and repositioning ability makes installation relaxed and worry-free. It is important to follow a few steps, as we recommend and teach during our training sessions.

- *Ensure the workspace is clean and dust-free. Lightly spray the floor with water to reduce dust. Spray the air occasionally so floating dust settles before application.*
- *Use plenty of water/slip solution during installation—better too much than too little. Spray both the surface and the adhesive layer. The moisture supports the film until it is squeegeed out. Spray the top of the film as well so the squeegee glides easily.*
- **Important:** *pull the water out with overlapping squeegee strokes. Pushing can cause the film to bunch and create folds or creases that cannot be removed.*
- *Work calmly from the center outward. Use short strokes (max 20 cm) to guide the film and distribute stretch evenly. On the second pass you can apply more pressure to remove remaining water.*
- *Be aware that a lot of water remains under the film initially. The surface may look bumpy or uneven right after installation—this will evaporate naturally. The less you disturb it, the better the result.*
- *Edges may not bond immediately due to moisture. Squeegee out as much water as possible, without heat. Do not use alcohol. Instead, flush edges with pure water to remove slip solution and speed adhesion. Small lifted sections are called “fingers.”*
- *Do not focus excessively on edges during the first hours. Overworking the “fingers” makes the result worse. Usually, after 2–3 hours, they can be pressed down neatly in one go.*



OUR GOLDEN RULES:



Work calmly

Take your time. If a section does not adhere properly, continue with another part and return later. Usually it will bond naturally as the adhesive dries.



Patience and next-day check

Patience is everything. Plan for the car to remain overnight in the workshop to dry. The next morning, check all edges and firmly squeegee down any remaining “fingers.” Done.



Note

Refer to the Maintenance Sheet for full details on film maintenance. This information is important for the vehicle owner and should be discussed at delivery.