

RODION TEAM

PPF INSTALLATION QUALITY STANDARD

Quality standard for polyurethane paint protection film (PPF) installation

Version 1.2 | Effective September 1, 2025

Purpose of this document

This standard defines the acceptance criteria for PPF installation at Rodion Team, the permissible characteristics of hand installation, and the conditions that require correction. Its purpose is to establish a clear and consistent basis for evaluating the result before work begins - for both the studio and the client.

PPF is installed by hand on a vehicle that has already been manufactured, painted and assembled. A quality installation is professional, clean and durable; it does not mean absolute microscopic perfection.

1. VISUAL INSPECTION CRITERIA

Cosmetic installation characteristics - dots, microscopic inclusions, minor optical variations, stretch marks and similar visual nuances - are assessed on a clean vehicle under normal, even lighting from a distance of 2 metres.

This assessment does not use a directed flashlight, magnification, special inspection lighting or a deliberate close-range search for microscopic defects.

Characteristics that are not visible from 2 metres under normal conditions are considered permissible cosmetic characteristics, provided they do not affect adhesion, material integrity, protection or durability of the PPF.

Functional defects are assessed regardless of viewing distance.

2. DUST, DOTS AND MICROSCOPIC INCLUSIONS

Even after careful preparation of the vehicle and work area, it is technically impossible to eliminate every isolated microscopic particle during a manual wet installation.

Up to 10 separate microscopic inclusions per 1 m² of installed PPF are acceptable if they are minimal in size, do not form an obvious cluster, do not create a significant bubble or lift, do not impair adhesion and are not clearly visible from 2 metres.

The quantity is calculated in proportion to the covered area. For example, the guideline for an area of approximately 0.5 m² is up to 5 microscopic inclusions.

Quantity is not the only criterion: even one large or clearly visible inclusion may require correction. A cluster of several dots in one small area may also be considered a significant defect.

The presence of a permissible microscopic inclusion is not, by itself, an automatic reason to replace the film on the entire panel.

3. WATER, MOISTURE AND BUBBLES

PPF is installed using a wet method. After installation, residual moisture, small water pockets, installation solution or local haze may temporarily remain beneath the material.

These conditions during the initial drying period are not defects by themselves. Final assessment is performed after the material has stabilised.

After drying, permanent air bubbles, significant areas without adhesion and pronounced residual defects that affect appearance or use require correction.

4. EDGES AND WRAPS

Rodion Team aims to hide PPF edges wherever doing so is technically possible, safe and durable. A visible edge or the absence of a wrap is not, by itself, a defect.

An edge may remain exposed if wrapping would require unjustified disassembly, risk damage to the vehicle paint, require excessive stretching, increase the risk of future lifting or be impossible because of the panel design.

Clearly uneven edges, significant loss of adhesion and continuing spontaneous lifting require correction.

5. CORNERS, TRIMMING AND TECHNICAL STRESS RELIEF

Corners of body panels are among the most complex areas in PPF installation. A flat sheet must take the three-dimensional shape of the panel, so on some corners it is impossible to fully conceal the material, preserve a perfect visual form and eliminate all internal stress at the same time.

Rodion Team aims to form corners as cleanly as possible. Depending on panel geometry, PPF properties and thickness, the degree of stretch and the available working space, the film edge, trim line, a small technical seam, overlap, join or minimal change in the film's shape or texture may be visible.

These characteristics are not defects by themselves when the material is securely fixed and the solution does not affect normal use or PPF durability.

If a full corner wrap creates excessive stress, a lifting risk or is technically unjustified, the installer may trim the material at the corner or leave a controlled exposed edge.

Technical cuts and relief cuts are permitted on complex corners to release internal stress. They may be used to reduce tension and overstretching, prevent edge lifting, form the corner correctly and improve installation stability.

A professionally executed technical cut may be visible on close inspection and is not considered damage or an installation defect.

On the rear side of a panel and in wrapped areas, the installer may make relief cuts, including envelope-style corners, V-shaped cuts and other technical cuts. Their number, shape and location are determined by panel geometry and the direction of stress in the material.

When the choice is between a fully hidden corner under excessive stress and a technically relieved corner with a visible cut, join or edge, Rodion Team may choose the more stable and durable solution.

A technical cut in the PPF itself is an accepted material-forming method and must not be confused with damage to the vehicle's paintwork.

6. TECHNICAL JOINS AND OVERLAPS

On panels with complex geometry, installation with a single piece is not always the most correct or durable solution.

Rodion Team may use technical joins, overlaps, inserts or several separate pieces of material to release internal stress in the PPF, reduce overstretching and improve installation stability.

These solutions may be used on bumpers, mirrors, spoilers, diffusers, air intakes, deep recesses, sharp transitions and other complex parts.

A professionally executed and technically justified join or overlap is not a defect and does not require replacement solely because it exists or is visible.

7. COLOR PPF CHARACTERISTICS

Color PPF provides both protection and a decorative change. On coloured materials, especially dark glossy shades, forming marks and changes in light reflection may be more visible than on clear PPF.

To fit a flat sheet to a three-dimensional body panel, the material is heated, tensioned, stretched and formed over the surface. On complex geometry it is therefore not always technically possible to eliminate every stretch mark.

The more complex the panel geometry, the deeper the curves and the sharper the transitions between planes, the more forming is required and the greater the possibility of stretch marks or local changes in reflection, texture, optical uniformity, shade or colour depth.

Minor technical stretch marks are acceptable if they are not obvious during a standard inspection from 2 metres and do not affect adhesion, material integrity or durability.

Pronounced overstretching, damage to the top coat, a significant colour change or loss of adhesion is considered an installation defect.

On complex parts, Color PPF may also be installed in several pieces with a technical join or overlap. Technical stability and durability take priority over a requirement to cover every part with one piece only.

8. ADHESIVE LINES AND OPTICAL CHARACTERISTICS

On some colours and at certain lighting angles, the adhesive-layer structure, minor adhesive lines or other optical characteristics of PPF may be visible.

Characteristics visible only from a special angle, under directed light or during deliberate close inspection are acceptable if they are not visible during a standard inspection from 2 metres and do not affect performance.

A significant disturbance in the adhesive layer that is visible during normal inspection requires assessment and correction when necessary.

9. DISASSEMBLY AND REASSEMBLY

A quality installation may, in some cases, require removal of handles, mouldings, badges, headlights, lamps, bumper components, wheel-arch liners, plastic panels and other parts.

Rodion Team aims to minimise disassembly and carries it out only when it is technically justified.

After disassembly and reassembly, there may be a slight change in the original position of parts or factory gaps. We aim to restore each part as accurately as possible, but vehicle design, fastener types, factory adjustments, tolerances, fastener condition and previous disassembly do not always allow the original factory position to be reproduced exactly.

A minor change in the gap or position of a reinstalled part is not a defect if the part is securely fixed, operates normally and there is no significant visual or functional issue.

Single-use clips, pins, retainers, latches, adhesive mounts and other components with limited disassembly cycles may deform or break even during correct and careful removal.

If replacement fasteners are needed for correct reassembly, the cost of new parts and consumables may be charged separately. Significant additional costs will be agreed with the client in advance.

The condition of hidden fasteners cannot be guaranteed before disassembly. Previously broken clips, missing fasteners, non-original parts, adhesive, sealant, damaged threads and the consequences of earlier repairs are not PPF installation defects.

10. VEHICLE CONDITION BEFORE INSTALLATION

PPF follows the vehicle surface and does not correct scratches, chips, dents, orange peel, paint or clear-coat defects, contamination within the paintwork, signs of earlier repair, unevenness, factory gaps or asymmetry between parts.

Some existing surface characteristics may become more visible after clear or coloured PPF is installed. This is not an installation defect.

11. DAMAGE TO THE VEHICLE DURING INSTALLATION

Damage to the paintwork directly caused by incorrect action by Rodion Team during installation is not a permissible deviation. If studio responsibility is confirmed, the matter will be assessed and remedied by Rodion Team.

Damage and defects that existed before work began are unrelated to the quality of the PPF installation.

12. CORRECTION AND FILM REPLACEMENT

A comment or complaint does not automatically require complete replacement of the PPF on a panel. Rodion Team determines the technically correct professional remedy for a confirmed defect: local correction, edge treatment, contamination removal, partial replacement or complete replacement.

Complete replacement is required when a confirmed defect significantly affects appearance during standard inspection, adhesion, protective performance or expected durability and cannot be corrected professionally at a local level.

Permissible cosmetic characteristics of manual installation are not grounds for replacement.

13. FACTORY CHARACTERISTICS OF THE VEHICLE

Rodion Team is not responsible for factory variations in body gaps, differences in panel shape, orange peel, contamination within the paintwork, factory paint defects, characteristics of plastic parts or the consequences of earlier repairs.

PPF installation is not intended to correct or improve the vehicle manufacturer's original production tolerances.

14. PAINTWORK AND PPF REMOVAL

Rodion Team does not guarantee the integrity of paint and clear coat on painted plastic parts, or on parts that have previously been repainted, repaired or have an unknown repair history.

In some cases, the adhesion of PPF to the surface may be stronger than the adhesion of the paint layers to their substrate. Paint, clear coat, primer or earlier repair materials may therefore separate during installation, correction, replacement or removal of PPF.

This risk is especially relevant to painted plastic components, repainted parts, local paint repairs, filled surfaces, parts painted outside the correct process and surfaces where the quality of previous repairs is unknown.

Rodion Team is not responsible for damage to or separation of such a coating during work with PPF or its removal when the cause is inadequate adhesion, the condition of the existing coating or the quality of the existing paintwork.

The fact that the coating appeared intact before work began does not guarantee proper adhesion to the substrate. The bond strength of every paint and clear-coat layer cannot be determined in advance without damaging it.

15. RODION TEAM QUALITY PRINCIPLE

We require a high standard from our work and correct genuine installation defects. At the same time, we distinguish a genuine defect from a permissible characteristic of manual work.

The Rodion Team standard is a clean, professional, visually high-quality and durable installation that protects the vehicle without unjustified interference with its original construction.

Our goal is the highest result reasonably achievable. This quality standard is not a promise of absolute microscopic perfection.