

DSS-R.01.06 | Residue / Film / Adhesion

Protective Film Adhesive Residue (aged)

Residue/film - construction protection films; edge-peel scallops, panel-wide haze, adhesive islands; typically SC-0 on clean substrate, SC-1 possible in aged conversions

Diagnosis summary

Protective film adhesive residue (aged) is an appearance change on glass from construction/transport protection films whose pressure-sensitive adhesive (PSA) or plasticizers remain after removal-especially when films were over-aged, UV/heat exposed, or removed in cold. It presents as broad veils, edge-peel scallops, adhesive islands/strings, and tide-line halos matching the former film footprint.

Field identification cues

- Surface-catch class (MSRT)
- Expect SC-0 on the clean glass substrate once true adhesive is lifted (non-etch).
- SC-1 (slight) may appear where PSA cross-linked (UV/heat) or was over-worked with aggressive removers, leaving very shallow micro-texture. SC-2 is uncommon.
- Perform one light, non-marring pass on a small revealed test patch (substrate), not over gummy remnants. Use polymer stylus if a functional coating is suspected. MSRT supports classification only.

Classification, severity and scope

- Assign CAT by visibility impact at acceptance geometry and MSRT on a revealed test patch. Depth values are indicative-field measurement not required.
- CAT-1 (Benign / non-relief): Optical veil or island ghosting only; substrate SC-0 after true lift; visible mainly at angle/raking. Indicative relief: 0-10 μm (optical).
- CAT-2 (Light): Persistent thin PSA film within footprint with SC-1 (aged/cross-linked); limited impact at standard view. Indicative relief: ~10-40 μm .
- CAT-3 (Moderate): Broad panel-wide haze with dirty tide-lines, scallop edges legible at standard distance; SC-1 $\rightarrow$ SC-2 in worst islands. Indicative relief: ~40-120 μm .
- Reclassify when: After true residue removal, any modeled micro-texture or SC-class > 0 persists on the substrate $\rightarrow$ evaluate under Ch.04.02 Adhesive remover staining (solvent bloom) or Ch.04.03.

Distinguishing criteria

- vs. Adhesive label/sticker ghost (R.01.05): Labels are small, discrete shapes; protective film residues are large/panel-scale with edge scallops and pull arcs.
- vs. Silicone smear (R.01.01): Silicone tracks joints with tool-mark corduroy; film residue covers open fields with scalloped boundaries.
- vs. Butyl/PIB smear (R.01.02): PIB is dark/tacky and edge-line at spacers; film residue is clear/amber veil often panel-wide.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique; include raking macros of edge scallops, islands/strings, tide-lines; add context frames (film scraps, release liners).
- MSRT result (substrate only): After lifting a small test patch without abrasion, perform one light, non-marring pass on the clean substrate; record SC-class (expect SC-0).
- Forms: Pane ID; product family & surface numbering; worked surface Y/N; functional coating present on worked surface?

Safety / repairability boundary: Complete only the non-invasive reveal and inspection steps authorized by the controlling VIS guidance. Classification does not authorize restoration, establish acceptance, or override stop-work, coating, crack, integrity, access, chemical, fall-protection, or project-specific requirements.

Full DSS publication: use the catalog download. Web specification:

<https://a7df714357.nxcli.io/learning-center/resource-center/damage-specification-standards/dss-r-01-06-protective-film-adhesive-residue-aged/>