

DSS-R.01.04 | Residue / Film / Adhesion

Mastic / Bitumen / Tar Transfer

Residue/film - roofing/asphalt/bituminous adhesives; dark brown-black tacky smear, drag strings, soil-loaded bands; typically SC-0

Diagnosis summary

Mastic/bitumen/tar transfer is an appearance change on glass from bituminous products (roofing asphalt, waterproofing mastics, tar-based adhesives/primers) contacting the surface during construction, roofing, façade waterproofing, or logistics. It presents as dark brown-black, tacky smears/bands, often edge- or frame-adjacent, with drag strings and heavy particulate/soot capture.

Field identification cues

- Surface-catch class (MSRT)
- SC-0 on the clean glass substrate once residue is truly lifted (non-etch).
- Do not run MSRT across active tack; if a small test patch is safely cleaned without abrasion, confirm substrate SC-0 there.
- Use polymer stylus if a functional coating is suspected on the worked face. MSRT supports classification only.

Classification, severity and scope

- Assign CAT by visibility impact under VIS geometry after a controlled reveal test confirms substrate SC-0 on a small patch. Depth values are indicative-field measurement not required.
- CAT-1 (Benign / non-relief): Thin optical smear; SC-0 on clean substrate; mainly angle/raking visible. Indicative relief: 0-10 µm (optical film).
- CAT-2 (Light): Persistent tar veil with soil/soot loading legible at standard view; SC-0 on substrate at test patch. Indicative relief: ~10-40 µm (film).
- CAT-3 (Moderate): Broad/opaque bands, ropey strings, heat-flow legs visible at standard distance; SC-0 on substrate where truly cleaned. Indicative relief: ~40-120 µm (film stack).
- Reclassify when: After true residue removal, any modeled micro-texture or SC-class > 0 persists on substrate → evaluate under chemical etch (Ch.04/.05) or mechanical families as indicated.

Distinguishing criteria

- vs. Butyl/PIB smear (R.01.02): PIB is usually edge-line/parallels spacers, tacky but less opaque; bitumen/tar is darker, more odoriferous, and often heat-flowed.
- vs. Polysulfide/PU smear (R.01.03): Polysulfide/PU tends amber/grey, shows elastic tails; tar is brown-black, more ropey with soot catch and heat sag.
- vs. Silicone smear (R.01.01): Silicone reads oily/iridescent, lighter, with corduroy tool lines; tar is opaque/dark with grit capture.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique; include raking macros resolving ropey edges, stringers, grit embed, and any heat-flow legs; add context frames.
- 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-01-04-mastic-bitumen-tar-transfer/>