

DSS-E.04.01 | Environmental Exposure / Weathering

Recurring Drip / Run Staining Pattern

Environmental residue/attack - repetitive gravity-flow paths concentrating soils/minerals from architectural features; vertical drip legs, fan runs, repeat at identical elevations; typically SC-0 for residue films, SC-1 where cyclic deposition forms very shallow micro-texture; reclassify to mineral system if crystalline rims/etch are dominant

Diagnosis summary

Recurring drip/run staining is an appearance change on glass caused by repeated gravity-driven moisture paths that carry soils/minerals/organics from upstream features (caps, signage letters, flashings, parapets, shading fins). It presents as vertical "drip legs," fan-shaped runs, or curtains that repeat at the same height across adjacent lites beneath the same source detail.

Field identification cues

- Surface-catch class (MSRT)
- SC-0 where contamination is residual film only and lifts on reveal.
- SC-1 where incipient micro-texture exists from cyclic deposition/soils. SC-2 suggests misclassification-consider Ch.03.03 mineral etching or M.02 abrasion.
- Perform one light, non-marring pass on a small revealed test patch (substrate). Use a polymer stylus if a functional coating is suspected. MSRT supports classification only

Classification, severity and scope

- Assign CAT by visibility at acceptance geometry and MSRT after a reveal patch. Depth values are indicative-field measurement not required.
- CAT-1 (Benign / non-relief): Legible drip runs comprised of residue film only; SC-0; mainly angle/raking visible; lifts on reveal. Indicative relief: 0-10 µm.
- CAT-2 (Light): Persistent runs post-reveal with localized SC-1 (incipient micro-texture); limited standard-view impact. Indicative relief: ~10-40 µm.
- CAT-3 (Moderate): Wide-area run curtains legible at standard distance with consistent SC-1 and interior low-contrast matte; indicates long dwell/high frequency. Indicative relief: ~40-120 µm.
- Reclassify when: White/grey crystalline rims, ringed edges, or etched halos dominate → Ch.03 Mineral system (Deposits/Staining/Etching).

Distinguishing criteria

- vs.
- vs. Hard-water mineral system (Ch.03): Minerals exhibit crystalline rims/etch; recurring drip runs may be film-only-verify with reveal + MSRT.
- vs. Detergent/surfactant film (R.04.01): Detergent shows tool-path streaks/iridescence; recurring runs follow gravity from a common elevation with no wipe geometry.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique; raking macros of leg edges/interior matte; context frames of source detail and adjacent panes showing height repetition.
- MSRT result (substrate): After a small reveal test patch, perform one light, non-marring pass; record SC-class (SC-0/SC-1/SC-2).
- 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-e-04-01-recurring-drip-run-staining-pattern/>