

DSS-A.03.03 | Assembly / Internal Conditions

Adhesive / Chemical Attack from Behind (mirror back-coating)

Assembly / back-coated products - typically CAT-5 by location; out of in-place scope

Diagnosis summary

Localized under-glass staining, bloom, or matting visible through the mirror that originates from adhesives, mounting compounds, cleaners, or chemicals acting on the back-coating/reflective layer (behind the glass). The cue is not on the exposed viewing face and therefore is not addressable in place; classification is location/condition-driven.

Field identification cues

- Surface-catch class (MSRT):
- On the exposed viewing face, record SC-0 (none). Perform one light, non-marring pass only to support classification; do not abrade.
- Reveal / lighting / geometry:
- Evaluate clean & dry after a Non-Invasive Reveal; inspect at 12 / 36 / 72 in, normal incidence + oblique sweep (~60°-120°) under raking light per VIS. Back-side attack remains unchanged by reveal.

Classification, severity and scope

- CAT-5 - Out of in-place scope when the appearance change arises in the back-coating system (behind the glass). Document and refer per project protocol (fabricator/replace).
- If any face-side condition is also present (scratches, films, coating rubs), classify that separately under M/Co/R families by CAT; do not let the back-side condition set face acceptance.

Distinguishing criteria

- vs. Front-face residues/films (R-series): Face films respond to Non-Invasive Reveal; back-side attack does not.
- vs.
- vs. IGU between-pane artifacts (A.01 family): IGU conditions show fixed parallax between #2/#3; mirror back-coating attack is behind a back-paint/reflective system, not a cavity condition.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique, raking; include one macro confirming under-glass character (unchanged by reveal) and one context frame showing proximity.
- MSRT result (face): SC-0; one pass; non-marring; polymer stylus preferred when any face functional coat is present/suspected.
- Forms: Pane ID; product & context (mirror/back-coated); reveal status; lighting/time; geometry checklist; surface numbering where applicable.

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-a-03-03-adhesive-chemical-attack-from-behind-mirror-back-coating/>