

DSS-Co.01.03 | Coating Anomalies

Pinholes / Islands (localized coating loss; sputtered low-E & multilayer films)

Coating anomaly on the worked surface or within cavity; acceptance constrained by VIS §6 “Coatings”

Diagnosis summary

Discrete clear points (“pinholes”) or small bare-glass islands within a sputtered low-E / multilayer functional coating. On exposed coated faces (#1 or #4, as applicable) these present as local loss of optical density (often brighter/clearer) without chip-flank fracture morphology. On cavity faces (#2/#3), they are between-pane and thus not addressable in-place; classification is then governed by location/condition.

Field identification cues

- Surface-catch class (MSRT):
- Expect SC-0 (none) for pure coating loss/absence; coating stacks are sub- μm and do not produce tactile relief at MSRT scale.
- Reveal / lighting / geometry:
- Complete Non-Invasive Reveal before evaluation. Inspect at 12 / 36 / 72 in, normal incidence + oblique sweep ($\sim 60^\circ$ - 120°) with raking light, per VIS.

Classification, severity and scope

- If on exposed coated face (#1/#4)
- CAT-1 - non-tactile, isolated pinholes with SC-0, not perceptible at standard/wide-field when clean.
- CAT-2 - faint modeled micro-texture around a pinhole yielding SC-1.
- CAT-3 - noticeable modeled micro-texture/halo visible at standard view, still without chip flanks. (Assign CAT by visibility convention + MSRT outcome; use appearance cues only.)
- If on cavity face (#2/#3) or otherwise inaccessible: CAT-5 - out of in-place scope by location; document and refer per project protocol (fabricator/manufacturer/warranty).

Distinguishing criteria

- vs. Face films/overspray (R-family): Films change with Non-Invasive Reveal; true pinholes persist.
- vs. Mechanical scratches (M.01): Scratches show chip flanks/micro-chipping and SC-2 along a line; pinholes are discrete points, SC-0.
- vs. IGU internal haze/volatiles (A.01.01) or cavity fines (A.01.03): Internal cues show fixed parallax and are CAT-5 by location.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique, include raking; add macro frames showing discrete point(s) without chip flanks or a worked ring.
- Forms: Pane ID; surface numbering; worked surface Y/N; functional coating present on worked surface? (Y/N/Unknown); geometry checklist; photos attached.

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-co-01-03-pinholes-islands-localized-coating-loss-sputtered-low-e-multilayer-films/>