

DSS-A.02.06 | Assembly / Internal Conditions

Local Delamination (ply/interlayer separation; laminated glass)

Assembly / internal condition - typically CAT-5 by location; out of in-place scope

Diagnosis summary

Local delamination is a separation between a glass ply and the interlayer (or between interlayers) creating a void/air interface within the laminate stack. Presents as silvering, Newton-fringe iridescence, or a defined lens-like boundary inside the laminate. Because the cue is laminate-internal (between plies), it is not on an exposed worked face and is not addressable in place;

Field identification cues

- Location / access (primary):
- Confirm laminate-internal location. On forms, record product family (laminated) and surface numbering (#1-#4; tag as laminate-internal). Do not re-number laminate-internal interfaces as IGU faces.
- Surface-catch class (MSRT):
- On exposed faces, record SC-0 (none). MSRT is single, non-marring and supports classification only-do not abrade to "probe" an internal cue. Prefer polymer stylus on coated faces or rely on visual/location cues.

Classification, severity and scope

- CAT-5 - Out of in-place scope when separation is within the laminate (not on an exposed worked surface). Document and refer per project protocol (fabricator/manufacturer/warranty).
- If face-side damage also exists (e.g., perimeter scoring), classify that separately under the appropriate M-family item and assign CAT per VIS.

Distinguishing criteria

- vs. Bubbles/stringers (A.02.02): Bubbles are discrete voids (round/linear) without pronounced fringe patterns; delamination shows defined separation boundary with silvering/iridescence.
- vs. Edge haze/whitening (A.02.01): Whitening is diffuse/milky; delamination has a sharp lens-like boundary and fringe effects.
- vs. Interlayer creep/exudation (A.02.04): Creep is material flow/exposure at the edge; delamination is ply/interlayer separation (air interface) within the stack.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique, raking; include at least one back-lit macro (when safe) to capture fringes/silvering and a context frame showing edge.
- Forms: Pane ID; product family & surface numbering (#1-#4; laminate-internal); worked surface Y/N; functional coating present on worked surface?
- Progression note: If observed across site visits, record growth/creep of boundary (mm and date) and any environmental conditions (temperature/RH, sunload).

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-02-06-local-delamination-ply-interlayer-separation-laminated-glass/>