

DSS-M.06.02 | Mechanical Abrasion, Scoring, Impact & Cracking

Notch Root Micro-Cracks

Mechanical - drilling/notching-related; integrity cue

Diagnosis summary

Notch root micro-cracks are fine, crack-like fissures emanating from the root (inside radius) of a notch or cutout. They are integrity indicators: any confirmed cracking (even hairline) places the lite out of in-place restoration scope under VIS (CAT-5 by condition/location). Classification here is appearance-only; methodology is out of scope. Inspect under VIS lighting/geometry after Non-Invasive Reveal;

Field identification cues

- Surface-catch class (MSRT)
- Do not pass a stylus across any suspected crack. If needed, a single light, non-marring pass adjacent to (not across) the root may be used to sense local surface relief from associated chips/lip for context.
- Visual signature
- Filament-thin, continuous line(s) emerging from the notch root that do not behave like surface scratches (no consistent flank sparkle; may traverse micro-texture without interruption).

Classification, severity and scope

- Assign category by appearance + integrity:
- CAT-5 (default for this entry): Any confirmed micro-crack at a notch root (visible continuity, branching, or propagation under angle/raking) → Non-Repairable / Out of In-Place Scope.
- Reassign only if no crack is present:
- If evaluation shows no fissure and only micro-chips/lip intruding onto the face → classify under M.06.01 Hole edge micro-chips (excess) or M.03.04 Edge “shelling” at holes/slots as appropriate.
- If the cue is a linear surface score (continuous lineation away from root) without crack characteristics → classify under M.01 Linear scoring.

Distinguishing criteria

- vs. Linear surface scratch at root: Scratches exhibit abrasive edges and MSRT catch; true micro-cracks can cross subtle texture without flank sparkle and may show tip blunting/branching.
- vs. Exit-lip / burr: Exit-lip is edge-confined, reads SC-0 on the face, and lacks a continuous filament extending into the glass.
- vs. Chip train: A train of tiny perimeter chips can appear dotted under low light; with raking, chips resolve to discrete facets rather than a continuous fissure.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique, include raking macros of the notch root that resolve the continuous fissure (not just chip facets).
- MSRT note. If recorded, note SC class from an adjacent area only (do not cross the fissure); one light, non-marring pass; polymer stylus if coating is suspected.
- Forms: Pane ID; surface numbering (#1-#4; laminate-internal); worked surface Y/N; functional coating 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-m-06-02-notch-root-micro-cracks/>