

DSS-M.02.03 | Mechanical Abrasion, Scoring, Impact & Cracking

Directional Webbing (repetitive paths)

Mechanical abrasion field on the worked surface - appearance-based classification; acceptance per VIS §6

Diagnosis summary

A repeating, directional network of fine lines formed by a tool, pad, or abrasive traversing the glass in overlapping, semi-regular paths, producing a “spider webbed” pattern (linear/curvilinear strands with recurring orientation). Under raking light, strands may show edge sparkle; at higher severity, portions exhibit modeled micro-texture (subtle milky relief) and chip-flanks on some strokes.

Field identification cues

- Semi-regular strands (sometimes grid-like or mesh-like) with dominant direction and secondary cross-paths, spanning hand-sized patches or larger zones.
- Strongest in raking & oblique views, persists after Non-Invasive Reveal (clean & dry). Field Identification Cues (Normative)
- Surface-catch class (MSRT):
- Commonly SC-1 for shallow webbing; SC-2 (clear) where strands exhibit chip-flanks or tactile lineation. Conduct one light, non-marring pass only; MSRT supports classification, not acceptance.

Classification, severity and scope

- Assign CAT via VIS visibility convention + MSRT outcome + edge/morphology (three-part cueing):
- CAT-1 - Faint: SC-0 / SC-1, non-tactile webbing; reads mainly in raking light; no chip-flanks, does not localize at acceptance geometry.
- CAT-2 - Light: SC-1, clean-edged fine lineation; limited visibility at standard view.
- CAT-3 - Moderate: Portions show SC-2 (clear) and/or modeled micro-texture noticeable at standard distance.
- CAT-4 - Severe: SC-2 (clear-to-strong) with rough chip-flanks, pits/craters, or broad matte/frosted sectors distinctly visible at standard and wide-field views.

Distinguishing criteria

- vs. Cross-hatch scuffing (M.02.02): Cross-hatch is a lattice/X-weave of intersecting strokes; directional webbing shows dominant travel paths with more mesh-like continuity.
- vs. Micro-abrasion swirls (M.02.01): Swirls are looped/curvilinear clusters; webbing is path-oriented with repetitive, directed strands.
- vs. Residue films/overspray (R-family): Residues change with Non-Invasive Reveal; true mechanical webbing persists.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique, include raking; add macro frames of strand geometry and edge morphology (presence/absence of chip-flanks), and show no.
- MSRT result: Record SC class (SC-0 / SC-1 / SC-2 as observed); one pass, non-marring; for suspected coated faces, prefer polymer stylus or rely on visual cues.
- 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-02-03-directional-webbing-repetitive-paths/>