

DSS-R.03.02 | Residue / Film / Adhesion

Separator Pad Ghost / “Waffle” Print

Residue/pressure artifact - packaging separators/pads; grid/waffle imprint, pad-outline veils, adhesive specks; typically SC-0, SC-1 if aged conversion or light micro-texture

Diagnosis summary

Separator pad ghost / “waffle” print is an appearance change on glass caused by packaging/separator pads (foam, corrugated, felt, polymer “waffle” grids) used in racks/crates between lites. It presents as grid or checker imprints, pad-outline veils, or speck/adhesive islands coincident with pad contact zones. Artifacts may include plasticizer/adhesive transfer and pressure marks from long dwell, heat, or vibration.

Field identification cues

- Surface-catch class (MSRT)
- Typically SC-0 (film/pressure-only).
- SC-1 can appear where plasticizer/adhesive cross-linked (UV/heat dwell) or minor micro-texture formed from trapped fines; SC-2 uncommon-re-evaluate if present.
- Perform one light, non-marring pass on a small revealed test patch (substrate), not over gummy nodes. Use polymer stylus if a functional coating is suspected. MSRT supports classification only.

Classification, severity and scope

- Assign CAT by visibility at acceptance geometry and MSRT after a controlled reveal on a small area. Depth values are indicative-field measurement not required.
- CAT-1 (Benign / non-relief): Faint grid/pad outline; SC-0 after reveal; mainly angle/raking visible. Indicative relief: 0-10 µm (optical film).
- CAT-2 (Light): Persistent pad veil with node islands and occasional SC-1 (aged transfer); limited standard-view impact. Indicative relief: ~10-40 µm.
- CAT-3 (Moderate): Wide-area grid legible at standard distance, creating visual clutter; localized SC-1→SC-2 at heavy nodes (rare). Indicative relief: ~40-120 µm.
- Reclassify when: After true residue lift, any modeled micro-texture or SC>0 persists broadly → evaluate under Ch.06.02 hydrophobic mismatch halo (if wetting contrast dominates) or Ch.04.02/.03 (if).

Distinguishing criteria

- vs. Suction cup rings (R.03.01): Cup artifacts are large circles/ovals with lip+puck; separator ghosts are small-pitch grids or pad outlines repeating at rack spacing.
- vs. Adhesive label/sticker ghost (R.01.05): Labels are isolated, discrete shapes; separator ghosts are repeating and arrayed.
- vs. Mineral deposition rings (Ch.03.02): Mineral rings are concentric/puddle-based; separator patterns are uniform grids or pad rectangles.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique; raking macros of grid nodes, pad edges, boundary lines; context frames of racks/crates/pads.
- MSRT result (substrate): After a small reveal test patch, perform one light, non-marring pass; record SC-class (SC-0/SC-1/SC-2).
- Forms: Pane ID; product family & surface numbering; worked surface Y/N; functional coating present 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-r-03-02-separator-pad-ghost-waffle-print/>