

DSS-R.04.04 | Residue / Film / Adhesion

Kitchen Grease / Aerosol Film

Residue/film - cooking aerosols, lipids, and volatiles; tacky amber veil, spatter freckles, dust capture; typically SC-0, localized SC-1 where wiped with abrasive/dusty cloths

Diagnosis summary

Kitchen grease / aerosol film is an appearance change on glass caused by cooking-generated aerosols (lipids, emulsifiers, sugars, combustion by-products) that condense on nearby glass. It presents as a tacky amber veil with fine spatter freckles, dust capture, and wipe trails from ad-hoc cleaning. Classification is appearance-only per VIS (method-agnostic).

Field identification cues

- Surface-catch class (MSRT)
- Typically SC-0 (lipid film on surface).
- SC-1 may occur where abrasive/dusty wiping introduced very shallow micro-texture or compacted soil; SC-2 is uncommon-recheck classification if observed.
- Perform one light, non-marring pass on a small revealed test patch (substrate). 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 test. Depth values are indicative-field measurement not required.
- CAT-1 (Benign / non-relief): Thin lipid veil; SC-0; mainly angle/raking visible; minor spatter/dust. Indicative relief: 0-10 µm (optical).
- CAT-2 (Light): Persistent grease film with spatter field and localized SC-1 (prior abrasive wiping/soil); limited standard-view impact. Indicative relief: ~10-40 µm.
- CAT-3 (Moderate): Wide-area tacky contamination legible at standard distance (global haze/amber cast), with scattered SC-1; typically from long dwell or poor housekeeping.
- Reclassify when: After true residue lift, any modeled micro-texture or SC>0 persists → evaluate under M.02 (abrasion fields); if heavy soot dominates, consider E.01.03 Soot/particulate pollution film.

Distinguishing criteria

- vs. HVAC aerosol/oil film (R.04.03): HVAC films are broader/neutral with grille-aligned gradients; kitchen grease shows amber tone and localized spatter near cooking lines.
- vs. Detergent/surfactant film (R.04.01): Detergent films show iridescence and tool-path streaks; grease shows tacky veil and spatter freckles.
- vs. Fabric softener/additive film (R.04.02): Additive films show strong wetting contrast and fragrance; grease films show odor of cooking oils and spatter morphology.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique; raking macros of spatter, sheen, overlap lines; context frames of kitchen equipment/hoods. Record distance/angle in-frame.
- 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-04-04-kitchen-grease-aerosol-film/>