

DSS-V.02.02 | Vandalism

Etch-Cream Patterning (Consumer Etchant Traces)

Intentional chemical etch - store-bought glass/ceramic etch creams and gels; patchy white/milky fields, brush/dauber swirls, pooled meniscus rims; typically SC-2 within worked areas, SC-1 in feathered halos; depth varies with dwell/reapplication

Diagnosis summary

Etch-cream patterning is an appearance change created by consumer or contractor-grade etching creams/gels (commonly fluorides/acidic bases intended for glass/ceramics). Application by brush, dauber, sponge, or finger yields patchy white/milky micro-texture with tool-mark swirls, pooling at edges, and drip legs if over-applied.

Field identification cues

- Surface-catch class (MSRT)
- SC-2 across worked micro-textured fields (distinct interruption).
- SC-1 in feathered halos/thin film; SC-0 outside the treated area.
- 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; do not abrade to “prove” relief.

Classification, severity and scope

- Assign CAT by visibility at acceptance geometry and MSRT after a reveal patch. Depth values are indicative-field measurement not required.
- CAT-2 (Light): Thin cream haze with SC-1-SC-2 intermittent, faint swirls, limited standard-view impact. Indicative relief: ~10-40 µm.
- CAT-3 (Moderate): Clearly legible etched panels/bands visible at standard distance; SC-2 consistent; swirl/meniscus artifacts evident. Indicative relief: ~40-120 µm.
- CAT-4 (Severe): Dense, re-worked fills with strong whitening, multiple passes, runs/pools; visible at standard and wide-field; SC-2 throughout.
- Reclassify when: Sharp grooves with chip-flank sparkle → V.01.02 scribed; uniform mask-bounded granular frost → V.01.01 abrasive blast; white/grey ringed halos from water chemistry → Ch.03 mineral system.

Distinguishing criteria

- vs. Acid-marker tagging (V.02.01): Markers form stroke geometry with run legs; creams form area fills/panels with brush/dauber swirls and meniscus pooling.
- vs. Abrasive blast (V.01.01): Blast is uniform within masks, granular to touch; creams are modeled/mottled, show swirls and variable opacity.
- vs. Mineral etch (Ch.03.03): Mineral etch follows wetting/drip geometry with crystalline rings; cream fields have application geometry and tool marks.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique; raking macros highlighting swirls, meniscus rims, density variation; overview of full treated area.
- MSRT result (substrate): After a small reveal test patch, perform one light, non-marring pass within field and outside; record SC-class (SC-2 field, SC-1 feather, SC-0).
- 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-v-02-02-etch-cream-patterning-consumer-etchant-traces/>