

DSS-E.03.02 | Environmental Exposure / Weathering

Lichens / Moss (Rough Adhesion)

Biological residue/growth - symbiotic fungi-algae (lichens) and bryophytes (moss) adhering where moisture and nutrients persist; rough, tenacious pads/tufts, edge colonization; typically SC-0 for organic mass, localized SC-1 where grit is trapped or prior abrasive wiping occurred

Diagnosis summary

Lichens / moss represent biological colonization on glass under persistent damp/shade with nutrient deposition (dust, organics). They appear as tenacious rough pads (lichens) or small green tufts (moss), commonly edge-biased near gaskets, sealants, weeps, horizontal ledges, and shaded façades. Classification is appearance-only per VIS (method-agnostic). Inspect after Non-Invasive Reveal under VIS lighting/geometry;

Field identification cues

- Surface-catch class (MSRT)
- Typically SC-0 (organic mass on surface).
- SC-1 can register adjacent to colonies where grit is embedded or prior abrasive wiping created very shallow micro-texture.
- 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 small reveal patch around (not through) a colony. Depth values are indicative-field measurement not required.
- CAT-1 (Benign / non-relief): Sparse, small colonies with SC-0 surroundings; visible mainly in raking/angle; lifts when organic mass is dislodged on test patch.
- CAT-2 (Light): Multiple colonies/edge clustering with localized SC-1 where grit entrapment created slight micro-texture; limited standard-view impact. Indicative relief: ~10-40 µm.
- CAT-3 (Moderate): Broad colonization legible at standard distance (edge belts/ledges), scattered SC-1, persistent wetting anomalies after rinse.
- Reclassify when: Post-reveal, if non-directional substrate matte remains without organics → E.01.02 atmospheric matte; if white crystalline rims/etch present → Ch.03 mineral system; if linear abrasion.

Distinguishing criteria

- vs. Algae/biofilm (E.03.01): Algae is thin chromatic film; lichens/moss are discrete, raised colonies with physical relief.
- vs. Sealant/mastic smear (R.01.xx): Sealant residue is oily/tacky with stringers; colonies are dry/vegetative and retain moisture when misted.
- vs. Mineral accretions (Ch.03.01/02): Minerals are inorganic, crystalline/white-grey; colonies are green/olive/grey, organic, and compressible.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique; raking macros of colony relief, attachment edges, edge clustering; façade context showing shade/moisture/vegetation.
- MSRT result (substrate): After a small reveal patch around the colony, 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-e-03-02-lichens-moss-rough-adhesion/>