

Cultural Stone Stability Index

SCORING: Please indicate your score by **CLEARLY** circling 0, 1, 2 or 3

CONTINUE SCORING... CLEARLY circling 0, 1, 2 or 3

Site Setting (Overarching Geologic Factors)		Not present	Present	Obvious	Dominant
Fissures independent of stone lithification (pressure release, calcareous wedging)					
		0	1	2	3
Fissures dependent on lithification (bedding, foliations)					
		0	1	2	3
Anthropogenic fissures (mortar work)					
		0	1	2	3
Changes in textural anomalies (banding, concretions)					
		0	1	2	3
Rock weakness (Modified Moh's Hardness: 0 = quartz scratch/clean t scratch; 1 = knife blade scratch; 2 = penny scratch; 3 = fingernail scratch)					
		0	1	2	3
Weaknesses of the Edifice/Facade/Dressed Stone (Impending and Future Loss)					
	Not present		Present	Obvious	Dominant
Fissuresol (future location of break-off)					
	0	1	2	3	
Roots					
	0	1	2	3	
Plant growth near or on facade					
	0	1	2	3	
Scaling & Flaking (future location of centimeter- to half meter-size diameter)					
	0	1	2	3	
Splintering (following stone structure and oblique to stone surface)					
	0	1	2	3	
Undercutting (larger than scaling)					
	0	1	2	3	
Weathering-rind development					
	0	1	2	3	
Other concerns (e.g. water flow, pollution, foot traffic, etc.)					
	0	1	2	3	
Evidence of Large Erosion Events On and Around the Edifice/Facade/Dressed Stone (Large Losses, Already Occurred)					
	Not present		Present	Obvious	Dominant
Anthropogenic activities					
	0	1	2	3	
Fissuresol/calcrete wedging (or dust in fissuresol, or both)					
	0	1	2	3	
Fire					
	0	1	2	3	
Undercutting (larger than scaling)					
	0	1	2	3	
Other natural causes of break-off (wedgework of roots, earthquakes, intersection of fractures, ...)					
	0	1	2	3	

Evidence of Small Erosion Events On the Edifice/Facade/Dressed Stone (Incremental Losses, Already Occurred)		Not present	Present	Obvious	Dominant
Abrasion (from sediment transport by water; plants rubbing; people leaning/scratching on facade)					
	0	1	2	3	
Anthropogenic cutting (carving, chiseling, bullet impact...)					
	0	1	2	3	
Anthropogenic joints/jointing (mortar work)					
	0	1	2	3	
Alveolization (honeycombed appearance)					
	0	1	2	3	
Crumbliness/disintegration (in groups of grains or powdery)					
	0	1	2	3	
Flaking (single or multiple; centimeter to a few inches in size)					
	0	1	2	3	
Granular disintegration (frequently sandstone and granitic)					
	0	1	2	3	
Lithobiont pitting					
	0	1	2	3	
Loss parallel to stone structure (layers "peeling" from stone surface parallel to bedding plane)					
	0	1	2	3	
Rock coating detachment (usually incomplete; includes paint material and "leafing" in inscriptions)					
	0	1	2	3	
Rounding and/or blurring of carved edges or inscriptions					
	0	1	2	3	
Scaling (first-sized; thicker than flaking)					
	0	1	2	3	
Textural anomaly features erode differentially (clay lenses, cementation differences, nodules)					
	0	1	2	3	
Splintering (following stone structure and oblique to stone surface)					
	0	1	2	3	
Other forms of incremental erosion (e.g. insects, birds)					
	0	1	2	3	
Rock Coatings On the Edifice/Facade/Dressed Stone					
	Not present		Present	Obvious	Dominant
Anthropogenic (chalking, graffiti, exhaust, dust, other)					
	0	1	2	3	
Carbonate (showing on the stone surface, NOT part of rock)					
	0	1	2	3	
Case hardening (hardened outer shell)					
	0	-1	-2	-3	
Oxidation (rusting on the stone surface)					
	0	1	2	3	
Rock coating present					
	0	-1	-2	-3	
Salt efflorescence or subflorescence					
	0	1	2	3	

Your name:

Date:

Building/Cultural Stone Name/ID:

GPS Coordinates and/or Address:

Quick Sketch of the Edifice/Facade/Dressed Stone to be Assessed:

Notes on rock type and environment:

Highlighting Vandalism and other Issues

CONCERNS		Please briefly describe the problem and why you believe that this concern endangers the panel. Put in "X" on the right to indicate whether this concern creates a "severe danger", "great danger", "urgent danger" or "problem" for the panel.			
		Creates a problem	Urgent Danger	Great Danger	Severe Danger
Graffiti					
Other Vandalism (describe)					
Trash					
Visitor impact (e.g. dust, road proximity)					
Land use issues (e.g. livestock, off-road vehicles)					
Natural processes that are a major concern to you					

Notations on Rock Coatings (note: these notes do not alter the Index Score, but are useful in analyzing a site's context)

Less difficult to identify in the field

Rock Coating	Circle your answer	Notes
Droppings	Yes / No / Uncertain	
Dust Coatings	Yes / No / Uncertain	
Iron Film	Yes / No / Uncertain	
Lithobionts (e.g. lichen)	Yes / No / Uncertain	
Pollution	Yes / No / Uncertain	
Rock Varnish (desert varnish)	Yes / No / Uncertain	

Other Notes: