

Headstone Cleaning 101

What never to do to a stone

- Never use bleach. Bleach contains salts that damage stone. It will also cause brown staining over time.
- Never use pool algaecides. They are very corrosive. Many are bad for the environment.
- Never use acids. Acids dissolve marble and limestone leaving an inappropriate glossy and crystallized looking surface. This damage cannot be undone and the use of acids is also dangerous to you and the surrounding vegetation.
- Never sand blast a stone. This approach (even if "soft" materials like glass spheres are used) is very harsh and will dramatically abrade the stone surface. This has the potential to actually accelerate further deterioration of the stone.
- Never use high pressure water. Water over 90 psi has the potential to significantly damage any stone that isn't sound, increasing spalling and accelerating sugaring.
- Never use metal tools. All tools should be softer than the stone. Wood or plastic scrapers and soft brushes should be used.

Safety first

- Never walk backwards in a cemetery. You could step in a hole or trip over something.
- Protect yourself from the sun. Consider the use of sunscreen.
- Stay hydrated especially on hot sunny days.

Is it safe to clean this stone?

Do not attempt to clean a headstone that exhibits physical damage such as chipping, cracking, peeling, pitting, etc. Cleaning may cause additional damage to the stone. Do not attempt to clean a headstone that is wobbling. The stone might fall over or break.

Removal of Organic Materials

Algae, Lichen, Fungi, which may be green, black, gray, yellow, red, orange, brown, or blue, can be hazardous to gravestones because they trap moisture on (and under the surface of) the stone. They also secrete acids that can dissolve limestone, marble, sandstone, concrete, and mortar. And they may insert their "roots" into the pores of the stone. These growths will swell and shrink in response to moisture, leading to cracking and spalling of the stone.

Plant life – such as ivy, ferns, and moss, may be hazardous to the gravestone because they have roots that will penetrate the stone and also because they trap moisture.

On smooth, stable surfaces, algae, lichen, and fungus may sometimes be easily brushed or scraped off before washing. (always use scrapers that are softer than the stone, such as wood popsicle sticks or bamboo skewers). Most surfaces, however, require wetting the growth before gently brushing, prying, or scraping them off the stone. Plants should be gently pulled out of cracks or clipped, and then the soil or debris they were rooted in should be brushed away from the stone. If there is a mass of plant life, don't just yank it from the stone, carefully clip or pull away each section, to prevent pulling away any loose or weakened fragments of stone.

How To Clean Headstones

Work from bottom to top. The reason for this is if you start from the top, as you rinse the stone dirty water running down over the dry stone could stain it.

1. Remove any loose debris or plant life.
2. Soak the stone by spraying it down with a hose or spray bottle or dumping clean water over the entire surface. Headstones can be very porous and can soak up the cleaning solution before it has a chance to work. Spraying down the headstone first will help maximize the effectiveness of the cleaning solution.
3. Using a plastic or wood scraper, scrap off any algae, lichen or fungi from flat surfaces. Rinse as needed.
4. With a soft-bristle brush and a soap/water mixture, gently scrub the headstone in an orbital motion from bottom to top. Avoid any cracks or flakes when scrubbing. You may want to avoid cleaning the entire stone if there is an excessive amount of scratches or flaking.
5. If needed use a small plastic or wooden tool (brush, popsicle stick, skewer) to clean any Debre or growth from lettering and other carving on the stone.
6. Rinse the stone from bottom to top to avoid streaking. Rinse with a hose, bucket or sprayer using clean, fresh water until the stone is clear of any cleaning solution.
7. Using a sprayer (pump-up, low pressure, or other) spray the wet stone with D-2 Biological Solution. Allow to air dry. The D-2 works with the elements and results occur within one week or one month, depending on the severity of soil. Reapply if rain occurs within 12 hours of application.

Be sure to keep the headstone wet throughout the procedure.

Note: Heavy biological deposits may require repeat applications of D-2 to achieve complete cleaning.

Note: D-2 is not available locally. My suggestion is you order it from www.atlaspreservation.com