

Historic Preservation Office Paint Removal Methods

What is <u>not</u> permitted:

Please be aware that our office does <u>not</u> approve any mechanical (grinders, disks, etc.) or blasting paint removal method (blasting with soda, peanut or walnut shells, grain hulls, plastic particles, ground silica, etc.). Abrasive and mechanical paint removal methods interact with the building, rather than the paint itself, to remove the paint. These methods cause damage to the outer "skin" that gives brick its waterproofing protection as well as their associated mortar joints; these methods can also severely affect the brick's color appearance.

Cleaning with <u>acidic chemical cleaners</u>, particularly those that include hydrofluoric acid or hydrochloric acid, as well as alkaline cleaners containing sodium hydroxide and ammonium bifluoride, also are <u>not recommended</u> since they can dissolve the outer layer of the brick, etch the brick surfaces and/or leave stains. Using the wrong type of cleaner can cause permanent staining and damage to your building, so be careful.

What is permitted:

The best advice is to start with the gentlest methods possible. Newly applied graffiti can be removed more easily than paint that has dried and hardened over time, so act quickly.

Owners of historic buildings should use alkaline or organic based paint removers (other than as noted above) following manufacturer recommended application methods (typically a synthetic brush or roller, an airless sprayer, or spread on the surface via a paste). These products typically require a neutralizer or water wash to ensure that chemicals do not remain on the masonry, and continue to interact with and "eat" into the masonry layers over time. If a water rinse is required, a low to medium (no higher than 300 psi) pressure water rinse is encouraged to avoid water pressure induced damage to brick surfaces. Keep in mind that the rinse water may create runoff containing chemical and lead residue, and that this may need filtering or containment. We encourage you to use a contractor who has been trained in and uses lead safe work practices.

Testing of various chemical strippers on a small inconspicuous area is highly recommended prior to applying chemicals to a larger area. This will help to ensure that the product will be both effective and non-damaging to the masonry surfaces. Please ensure that you follow the directions completely, particularly in terms of neutralization, ventilation and protective gear required. Also note that more than one application may be required when a building has multiple layers of paint. Poulticing (a paste or slurry which permeates the brick and graffiti over time) methods are usually more effective than spray-on or scrubbing removal methods.

Brick and mortar damage caused by abrasive cleaners and sandblasting to remove graffiti on a historic building.

In terms of picking an appropriate product, it is useful to know the type of paint on the building, e.g., oil/lead based paint, latex paint, etc. Two well-regarded companies and products within the Historic Preservation community are:

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- Peel Away, Dumond Chemicals, Inc. 212-869-6350, <u>dumondchecmicals.com</u>. This company produces Peel Away 1, the preferred product for oil-based lead paint, and Peel Away 7, a product that works on both oil and latex based paint. A newer product called Wipe Out is also available. Peel Away Products are carried by Sherwin Williams Paint Stores locally (sometimes in stock or by special order). A neutralizer is recommended. We highly recommend that you talk to a Dumond representative on the phone to describe your exact situation, including your type of brick, prior to purchasing a product.
- Diedrich Technologies, 414-764-0058, diedrichtechnologies.com. This company produces Diedrich 606 Multi-Layer Paint Remover. This product removes oil and latex paints, and is applied with a brush, roller or sprayer. The chemical is neutralized with a water mist application. Information on product purchase is available on the web site and by contacting the company. Again, we recommend you talk to a Diedrich representative prior to purchasing a product.

There are other alkaline and organic products coming on the market all the time. The above list is <u>not</u> intended to be a comprehensive list of acceptable products. We encourage you to contact our office for approval to use other products that meet the above criteria.

Barrier Coatings:

We do not recommend barrier coatings since they can appear glossy or patchy, require continued application and maintenance, and can change the color of the brick.

Things to remember:

- ☑ Paint removal is the best treatment.
- ☑ Do not paint over graffiti on historic unpainted masonry buildings.
- ☑ Prompt removal of graffiti is recommended.
- ☑ **Test** removal methods and materials on a small test area, prior to applying to larger area.
- ☑ Use **caution** when using toxic chemicals, and hire a professional if possible.
- ☑ **Avoid** mechanical or grinding methods of removing paint, regardless of what the contractor may tell you.
- ☑ If you use a chemical product, <u>follow the directions and follow up with neutralizer and</u> water wash if directed to do so.
- Avoid acidic chemical cleaners, particularly those with hydrofluoric of hydrochloric acid, or alkaline cleaners containing sodium hydroxide or ammonium bifluoride.
- ☑ Consider **lighting and other security** measures to avoid vandalism and graffiti in the future.

Contact the Historic Preservation Office at 602-261-8699 for more information or if you have questions.