## Safe De-Icing of Stoops and Sidewalks



The repeated and inappropriate application of many de-icing products can lead to masonry damage. In this photo, the lighter patches are the result of the deterioration of the masonry's surface.

There are several suggestions to help speed melting and minimize damage to masonry when using a de-icing product:

- · Follow the manufacturer's instructions for use and safety.
- Before applying, shovel and remove as much snow and ice as possible.
- Apply the product sparingly in the area of highest foot traffic.
- · Assist the melting process by shoveling and removing snow and slush, especially away from the building.
- In the spring, wash down sidewalks, building bases, and areas near vegetation to help disperse the residue of the product.

## Available De-Icing Products

Since all de-icing products can potentially damage masonry and harm vegetation, use a product that works at lower temperatures and requires the least amount of material per application. Generally, these tend to be the calcium chloride-based products.

Calcium Chloride: Calcium chloride-based de-icers are effective to temperature -25 degrees Fahrenheit and are faster acting than sodium and potassium chloride. These products are often sold in white pellet form, which are preferred over flakes, as they are less apt to blow away. The recommended application rate is 2 to 4 ounces per square yard. Calcium chloride is moderately priced and can potentially harm vegetation and corrode metal.

Potassium Chloride: De-icing agents which contain potassium chloride, sold in pellet form, are not effective at temperatures below +25 degrees Fahrenheit. They work at slower speeds than sodium and calcium chloride. The recommended application rate is 8 ounces per square yard. Potassium chloride is expensive and can potentially harm vegetation but will not corrode metal.

Sodium Chloride: Often referred to as "rock salt," sodium chloride-based de-icers are not effective at temperatures below +20 degrees Fahrenheit and work slower than calcium chloride. The recommended application rate is 8 ounces per square yard. Sodium chloride is inexpensive and can potentially harm vegetation and corrode metal.

Other Options: Urea, used primarily as a fertilizer, is commercially available as a de-icing product. Sold in white-pellet form, urea does not chemically attack masonry, metal, or vegetation; however, it is not effective at temperatures below +25 degrees Fahrenheit and is not as readily available as salt-based de-icing products.

Courtesy, New York Landmarks Conservancy.