The Use of Masonry Coatings on Museum Properties

In certain instances Historic New England staff are faced with the decision of using some form of water sealer or water repellent on masonry. Typically the building element under consideration is a brick chimney with soft or delaminated brick with moisture issues related to harsh environmental conditions. Sealers and repellants are referred to in this document as “masonry coatings” and do not apply to such finishes as paint, limewash or stucco.

Literature produced by preservation and conservation resources consistently warn against the use of masonry coatings for the following reasons: The long term affect of the coating may be difficult to ascertain as the longevity of the treatment is variable, re-application is often difficult, discoloration may occur, the coating can easily trap moisture or salts behind the coating causing disastrous conditions, the coating may be incompatible with other building elements (such as caulk and glass), and once applied the coating is typically permanent.

The very surfaces Historic New England is most inclined to apply the coating to, chimneys, are the very surfaces least appropriate for application. Issues may arise from the high moisture content as well as the existence of salts and other microscopic materials that travel through the brick and become trapped underneath the coating.

Guidelines for Masonry Coatings

- Traditional methods for controlling moisture penetration through masonry surfaces will be the first course of actions. This includes re-pointing, flashing and other water management techniques.
- The use of coatings will only be used in extreme cases where all other approaches to manage water penetration have failed and the application is considered the final chance at protecting original fabric of the masonry.
- The application of a coating will occur under the direction of an architectural conservator only after proper analysis and testing have occurred.
- Water-repellants and sealers are modern interventions for a historic problem. Their long term affects have not been truly ascertained and therefore their use should be conservative in nature.

Further Reading: