



Exterior Underlayments

Exterior underlayments have been used in construction projects for over 120 years but their use is not well documented in Historic New England structures. Often overlooked, it is important to treat exterior underlayments as historic fabric so that future generations can understand how exterior underlayments were used in construction. That being said, the exterior underlayment is also a sacrificial layer and will be replaced as needed when work occurs on a structure.

Preservation professionals are split on the merits of the different common types of exterior underlayments: felt paper, rosin paper and high density polyethylene. In testing, all three materials have provided comparable results as a water barrier and for vapor permeability¹. Felt paper and rosin paper have the advantage of 120 years of consistent use and experience where high density polyethylene house wraps of 2007 are different from house wraps made in 2003. The ability of the new high density polyethylene materials to perform long term is still untested.

Guidelines for Exterior Underlayments

- Document existing underlayment in any project and the manner in which it was applied using photographs as well as written word in the completion report. Retention of samples are not necessary unless the underlayment is unique (newspaper at the Pierce House).
- Primary option should be to replace the exterior underlayment in-kind.
- If there is a compelling reason to choose a different material (e.g. low drying potential of façade) then the use of the alternate material can be considered upon approval of team leader.

¹

Paul Fiset, Housewraps, Felt Paper and Weather Penetration Barriers, University of Massachusetts, 2001.