



PRESERVATION AND CONSERVATION ASSOCIATION

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Artificial Siding and Historic Homes

Artificial siding has its roots in the late nineteenth century when asphalt shingles were introduced as an inexpensive, fireproof alternative to traditional wood, slate, and metal roofing. Within a few years, these shingles were used not only for the roofs of buildings, but for the exterior walls. Shingles, often designed to resemble brick and stone, became a popular way to re clad clapboard and masonry finishes.

As defined by preservationists, "artificial siding generally refers to any system of exterior finish that either replaces or covers the original exterior finish." Artificial siding now refers to any number of defunct and extant materials such as asphalt, mineral fiber, asbestos, plywood, stucco, wood shingle, steel, aluminum, and vinyl. While these products are generally poor imitators of the natural materials they mimic, manufacturers are increasingly showing greater accuracy in the reproduction of not only historic clapboard profiles, but also of ornamental details such as window and door surrounds or cornice detailing.

It is expected that these products will continue to be popular among some property owners, largely because of the perception that siding is inexpensive and maintenance free. It is important to consider, however, that the life expectancy of well-maintained materials such as wood and masonry is usually measured in centuries—while the life of materials such as vinyl and aluminum are, at best, measured in decades. Also, despite manufacturers' claims to the contrary, there never has, and in all likelihood never will be, a "no-maintenance" building material. All materials require periodic maintenance and repair.

Artificial siding presents several problems for the preservationist. Existing artificial siding can conceal the architectural details that may make a property eligible for the National Register of His-



Wide artificial siding changed the historic character of this Urbana house.

toric Places. Damage caused by artificial siding to historic material can render a property or district ineligible for landmark status, as well as cause a significant loss in market value. Finally, this damage can make the rehabilitation of the property economically unfeasible, therefore consigning it to eventual demolition.

Historic buildings can be damaged when siding is installed, and the siding may conceal damage due to water, fungus, and insects. While the masking and destruction of architectural detailing is easily detected, artificial siding can conceal damage to a structure caused by leaking gutters and downspouts, fungal decay of wood, and often, the action of termites and other pests. Most importantly, a property owner should have a clear understanding of the problems that may be encountered in order to financially cope with unexpected problems caused by siding damage.

Removing artificial siding

It is not possible to fully assess the damage caused by siding prior to its removal. However, an awareness of the

symptoms of damage and an understanding of their associated causes can make it possible to predict where damage exists and its extent. This knowledge can be helpful in determining the general scope of the rehabilitation work and the related costs.

Damage to historic buildings from artificial siding installation is usually caused by insensitive installation practices. Often, the original building materials are destroyed or removed. The quality of installation also has a direct bearing on damage caused by the environment. These issues will be discussed later in this article.

Typically, historic buildings have more ornamentation than new buildings. Since siding installation prices are normally given as a set bid prior to the beginning of the project, it is in the best interests of the siding company to spend the least amount of time on the installation to save labor costs and to maximize profit.

Historic buildings, particularly those with complex massings or elaborate ornament, make this task more difficult because the greater a building's three-

dimensional quality, the more time must be spent making angles and joints to clad it. During installation, some or all decorative features may be stripped. Soffit brackets, common to late nineteenth century architecture for example, make the installation of metal or vinyl soffits more difficult, and therefore more time-consuming for installers. These elements are often pried off and discarded. In order to run the channels that receive vinyl siding, window sills are often sliced off flush with the vertical window casing. This exposes the opened end grain of the sills and also creates a path for water and dirt to collect on the original siding beneath. Decorative siding is often covered up, degrading the visual integrity of the building. Any ornament that slows down the installation process and affects the project's profit potential is especially vulnerable to alteration or removal.

Predicting the amount of damage caused by siding installation requires some understanding of the decorative features common to the style of the historic building under study. There are several ways to research a building's potential decorative loss. One easy way is to walk through the neighborhood and look for buildings built about the same time or with similar massings. Buildings with similar form and decorative qualities may have been built by the same builder and therefore may once have had identical or very similar types of ornament. It also helps to know what type of ornament was common to particular styles. For example, brackets are common on Italianate-style houses. Therefore, buildings that have the massing characteristics, window types, etc. of Italianate houses but do not have these elements have probably been altered. Reproductions or original wood and sheet metal catalogs can be helpful for researching missing elements. Finally, historical societies may have early photographs of the building showing the original detailing.

A simple way to document missing details is to take clear 35mm photos of each elevation, make color photocopies of the photos at a larger scale, and make notes on the copies. As the research continues, keep a careful record of where information has come from, noting the source of that new information. This information can be used to determine what decorative details have been removed. Even so, a full assessment of the damage caused by the installation can only be made by removing the siding. Finally, it is important to resist the temptation to create decoration that never existed. The intent of any restoration effort should be to re-create the past, not invent it.

Locating Environmental Damage

Environmental damage should be assessed before artificial siding is removed. Environmental damage is the damage to the original fabric of the building caused by the long term effects of water infiltration and insect infestation.

Water vapor and rain are the most common forms of water damage. Artificial siding may act as a vapor barrier, inhibiting the normal flow of water vapor migration from the inside of the building to the outside. As a result, the building cannot breathe properly. The remodeling industry stresses the importance of building "tight" houses which do not permit air leaking from the house. In fact, the opposite is desired. It is not only important for the building to breathe properly in order to shed excess moisture laden air, but it is also necessary for the health of the occupants. When artificial siding acts as a barrier to the passage of vapor it can cause water to collect within stud walls and eventually lead to the deterioration of the walls themselves.

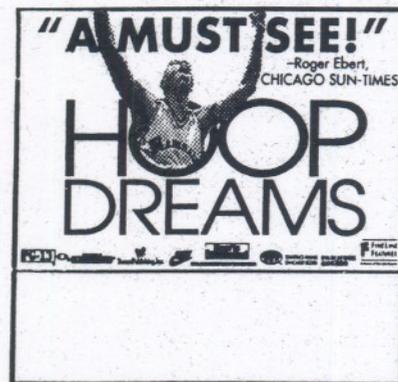
Artificial siding can conceal the effects of damage. Failing roof flashing and drip edges can provide paths for rainwater to flow behind the original siding and cause extensive damage to the original siding and stud walls. The damage can often go undetected for many years. Concealed gutters, which were common on many homes built in the late nineteenth century, are especially vulnerable to hidden damage. When these gutters began to deteriorate, owners often simply covered them and installed hanging gutters in their place. These concealed gutters, however, still provide easy paths for water flow and are often located directly over the wall framing, thus providing a direct path to the building structure.

Spotting water damage is relatively easy. The best place to begin looking is near the corners of buildings where downspouts are located. Downspouts will often overflow if they are serving to much roof area, causing the backed-up water to flow behind the artificial siding at the soffit line. Try to determine where water collects in its downward path and begin looking there for signs of water damage. It is advisable to remove a small area of siding near the bottom of the wall to look for deterioration.

Artificial siding also conceals damage caused by insects. Because vinyl, aluminum, and other materials are not organic, they are not subject to attack by insects. However, the wood framing and siding *behind* the artificial siding *are* organic and thus vulnerable to insect infestation. Artificial siding can conceal those effects until the damage is irreversible.

As mentioned before, manufacturers' claims that artificial siding is "maintenance free" are incorrect. While using artificial siding to conceal older original siding may have short-term cosmetic effects, it can be a major contributor to the long-term effects of deferred maintenance, installation damage, and environmental damage. Claims of improving energy efficiency are also erroneous as artificial siding possesses minimal insulating properties. In the long run, the most responsible and cost-efficient path for maintaining or restoring a historic property is to respect the original construction method and to replace historic materials only when they are clearly beyond repair with identical or compatible materials.

This article, written by Gary L. Cole, was first published as a three-part series in The Commissioner, the newsletter of the Illinois Association of Historic Preservation Commissions. For further information about artificial siding or the Illinois Association of Historic Preservation Commissions contact the Illinois Historic Preservation Agency at 217/785-4512.



HOOP DREAMS Benefit

A very special benefit will be held for the museum on January 13. Fred Marx, producer of the sensational new documentary HOOP DREAMS and a Champaign native, will attend the opening of his film at the Art Theater and a reception in his honor at The Discovery Place. Tickets to the benefit showing will be \$10.00; The Discovery Place and Douglass Center will each receive \$2.50. Tickets to the reception before the movie are \$15.00. Both can be purchased at the Art Theater, Douglass Center, The Discovery Place, and both Record Service locations.

Nominations Sought

The Heritage Award Committee is seeking nominations for the 1995 Heritage Award Program. Any building or landscape that has been appropriately renovated in the recent past or that contributes to enhancing the historic built environment should be nominated. In addition, persons, groups, or special projects that contribute to historic preservation activities in Champaign County are also eligible for an award. Projects in nearby communities that do not have preservation groups will also be considered for recognition. Nominations will be judged by a three person committee appointed by the PACA Board of Directors with the Awards presented at the next Annual Membership Meeting. For further information or to obtain a nomination form, call PACA at 328-7222. (Nomination forms were mailed with the last newsletter.)

The following is a list of award categories:

- Outstanding Heritage Award
- Community Commitment Heritage Award
- Landmark Heritage Award
- Residential Heritage Award
- Commercial Heritage Award
- Institutional Heritage Award
- Landscape Heritage Award
- Special Heritage Award



Preserving the Recent Past!

The immense preservation challenges of evaluating, maintaining, and reusing historic resources from the 20th century will be the subject of an in-depth, three-day conference at Chicago's historic Palmer House Hotel, March 30-April 1, 1995.

Developed for a wide range of preservation professionals and advocates, the conference is the first of its kind to focus exclusively on preserving the recent past. More than 80 leading experts from the U.S. and abroad will examine the difficult philosophical and practical issues associated with identifying and maintaining buildings, structures, and landscapes designed between 1920 and 1960.

Three tracks will focus on resource evaluation, preservation and reuse strategies, and conservation of 20th century materials and systems. Specific topics to be addressed in 26 separate sessions include themes in roadside architecture; the impact of World War II on construction technology; the evolution of modern housing and planned communities; reuse strategies for industrial complexes, government buildings, and Cold War resources; and technical issues associated with identifying and conserving concrete, aluminum siding, structural glass, and other construction materials.

A separate half-day workshop on curtain wall construction will be held as part of the conference. Eight educational tours will focus on the Chicago area's numerous 20th century resources, including Mies van de Rohe's glass and steel Farnsworth House, high-rise structures in the Loop, and landmark residences of the North Shore.

Attendees will receive a handbook specially prepared for the conference. It will include papers by conference presenters and information on all the major subjects being covered at the conference, including evaluating the recent past, preservation and reuse strategies, and preserving materials and systems. This 300-page, illustrated handbook is designed to be a ready reference tool and will be a valuable resource for future projects.

A single registration fee of \$265 will cover all educational sessions, a comprehensive handbook, and a festive opening reception. For additional information on conference registration, contact 217/244-7659.

Membership Application P.A.C.A.

MEMBERSHIP CATEGORY:

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Make checks payable to: PACA, Box 2555, Station A, Champaign, Illinois 61825

Contributions are tax deductible to the extent allowed by law.

Annual Membership Meeting

Plans are underway for the 1995 Annual Membership Meeting. As usual, the meeting will take place on a Sunday afternoon in February. The exact time and place are still being arranged. Meeting notices will be mailed to members in late January. A short business meeting highlighting the events of 1994 will precede the presentation of the 1995 Heritage Awards.

Three positions on the PACA Board of Directors are open for election. Board members serve a three-year term and attend monthly Board meetings. Nominations can be made by calling 328-7222 and will be accepted at the membership meeting.

The Discovery Places Opens!

An exciting event took place on Tuesday, December 27 at 11:00 am when a ribbon cutting ceremony marked the official opening of The Discovery Place. The opening of Phase I of the children's science museum, located in the three former storefront spaces of the historic Orpheum Theatre, ends a PACA preservation project begun in early 1989.

The City of Champaign had recently purchased the building and planned to demolish it for a parking lot. PACA formed the Save the Orpheum Committee to stop these plans to find a viable use for the theater. Through the hard work and dedication of the committee members, grants were sought, funds raised, and the community was educated

on the importance of the historic theatre. As a result, PACA was given permission by the City to remove the artificial siding that covered the original facade and to winterize the building to halt further interior deterioration. Subsequent listing of the building on the National Register of Historic Places expanded avenues of support with grants received from the Illinois Arts Council and the National Trust for Historic Preservation. This funding allowed for a consultant to study both the building and the community resulting in the suggestion that a children's interactive science museum was a viable use for the space. PACA then began working with other like-minded groups, principally ECIPEE (East Central Illinois Partnership for Excellence in Education), and formulated a museum marketing plan.

A non-profit group, The Discovery Place, Inc., was formed under PACA's auspices to develop and operate the children's museum as the project now became less preservation and more museum oriented. After lengthy negotiations with the City of Champaign, the building was purchased and plans begun for the museum. Renovation of the space was made possible by a participation loan from Busey Bank and the National Trust for Historic Preservation.

The next step for the museum will involve exterior renovation including painting the facade. Additional funds need to be raised to restore the theatre's main entrance and to replace the missing cornice removed in the 1960s. Less glamorous, but vital maintenance work

involves tuckpointing the remaining elevations and redesigning the building's drainage system, especially the southeast corner which currently "drains" into the building.

Individual and Family Memberships are available. For further information on the museum or to volunteer call The Discovery Place at 384-4838.

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