

D/DRC Case

1230 Sumter Street

Individual Landmark / City Center Design Development District

TMS: 11401-03-01



DESIGN/DEVELOPMENT REVIEW COMMISSION
HISTORIC AGENDA
EVALUATION SHEET
Case # 9

ADDRESS: 1310 Lady Street and 1230 Sumter Street

APPLICANTS: Rick Patel, owner

TAX MAP REFERENCE: TMS# 11401-03-01

USE OF PROPERTY: Commercial

NATURE OF REQUEST: Changes to Bailey Bill project

FINDINGS/COMMENTS:

This landmark building came before the Commission in January 2015 and was approved for exterior changes and preliminary certification for the Bailey Bill. Given some drastic renovations in the 70s, the 1921 six story building lost many of its decorative features which the owners are now attempting to replace. The ten-story 1949 annex building also lost some sills, etc., but given its more contemporary, streamlined architecture, the damage from the 1970s renovation was minimized on this building.

As noted on the January evaluation, the owners planned to replace the terra cotta detailing on the more elaborate six story building with new terra cotta which would certainly satisfy the requirements of the Bailey Bill. However, after their contractor examined the damaged areas and they received some estimates on the work, the owner has some concerns about both adhering new terra cotta to the building and the expense of it. Their proposal is to have molds made from a polyurethane material produced by a company called Architectural Elements. The material is a polymer which has a smooth surface backed by a dense foam core on the interior. They are able to make exact molds based upon detailed measurements and the final product can be painted, etc., as desired. The company markets this material as a replacement for wood and terra cotta, among other materials. They have indicated they've used it on several National Register properties in the northeast (pictures included at the end of the evaluation).

Given that this is a landmark building and a Bailey Bill project, staff had concerns about using a synthetic material on the building. Normally, one would require repairs and replacement using original materials (#5 of Bailey Bill criterion states "*Deteriorated historic features shall be repaired rather than replaced; where the severity of deterioration requires replacement of a distinctive feature, the new should match the old in design, color, texture, and other visual qualities and, where possible, materials; replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.*"). Staff discussed this with other preservation colleagues who have found synthetic materials acceptable under certain circumstances, including scarcity of original materials, reproduction of an entire architectural feature, and so on. Another consideration is where the feature is actually placed on a structure and how visible it is, such as when an architectural feature being replicated is not on the first few floors of a building, but further up. It is more difficult in those instances to see the details which might indicate a synthetic material. Original materials must be used, however, at storefront and the first few floors of a building where differences in texture or solidity might be more easily discernable.

Staff has examined a sample of this material and it feels fairly dense and tough; the vendor reports that it's been in use for about 50 years but staff has not been able to review past applications for durability and longevity.

Staff is not recommending this material for general use on most projects which are reviewed by the DDRC. Any approval for its use on this particular building would be based upon the fact that it would be used only at the top of a six -story building, the fact that there is very little of the original material left, and that there is a large area where the original feature is missing. Staff would recommend this as a test case and also condition its use upon achieving the correct finish on the material.

Staff recommendations:

Staff recommends for the approval of the polyurethane materials as a test case and as a substitute for the original terra cotta, based on the fact that the material will be on the upper sections only of the building, the fact that there is very little of the original material left, and that there is a large area where the original feature is missing. Original materials must be used on the lower floors of the building where missing architectural features will be reproduced. Details, including finishes, must be worked out and approved by staff.



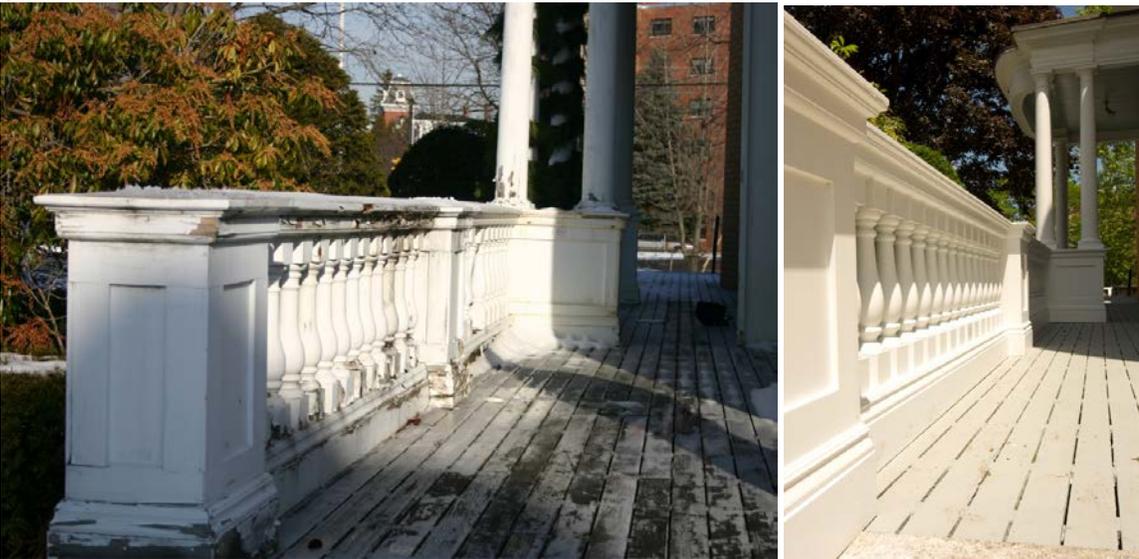
Damage where cornice was hacked off during renovations in the 1970s



Example of polyurethane cornice

Historic projects which used polyurethane molds

(photos supplied by vendor)



Masonic Temple, Portsmouth, NH—before and after



Dana Palmer House, Cambridge MA—completed project



Churchill Downs balustrade, completed project



Fairbanks Town Hall, before and after
Moore



Moulded Millwork

What is Moulded Millwork?

Moulded Millwork is constructed of urethane foam created by mixing isocyanate and resin. The mixture is kept under pressure in a mould as it expands to any desired shape. The result is a high-density, thermoset material that is perfect for interior or exterior trim.

Why Polyurethane Millwork?



If you're searching for a product that resists rot, mildew, insects, warping and splintering, you've come to the right place! These are just a few of the reasons architects specify urethane millwork for decorative and functional pieces to residential and commercial projects.

Made of high density materials, Polyurethane Millwork products have a closed cell structure that prevents water penetration and absorption. Each piece has a consistent quality and finish, which requires no additional priming or sealing. In fact, each piece is coated at our manufacturing location with a double-primed exterior grade ultraviolet stable coating. Once products are installed, they can be painted, stained and faux finished.

Looking for more reasons to specify urethane millwork? The products can be used on both the interior and exterior of your projects, are virtually maintenance free and are lighter in weight than wood or plaster, so there's job site savings on time and labor. And, if you want to be a true hero to your clients, you'll appreciate the promise that we ship our standard and special-fabricated millwork pieces within five working days. If you've got some extra time, you can even have us create custom designed pieces for you!

The Process

Ever wonder how we can create precision-molded pieces time-after-time? First we start with a detailed, finely crafted original master carved out of wood. That helps us create a production mould. We constantly maintain our masters and our moulds, replacing them if they show even the slightest signs of wear and tear to assure that every piece we produce is top-quality.

Our production moulds are finished with a barrier coat of ultraviolet resistant primer, and then filled with top quality liquid urethane. The mould is then sealed and the urethane expands under pressure, creating an exact duplicate of the original master.

Following a rigorous quality examination, the piece is finished with an ultraviolet resistant white topcoat of primer. After this, the piece is inspected one last time and then carefully packaged for delivery.

