Docket Item # 8
BAR CASE # 2008-0092

BAR Meeting
July 9, 2008

ISSUE: Alterations

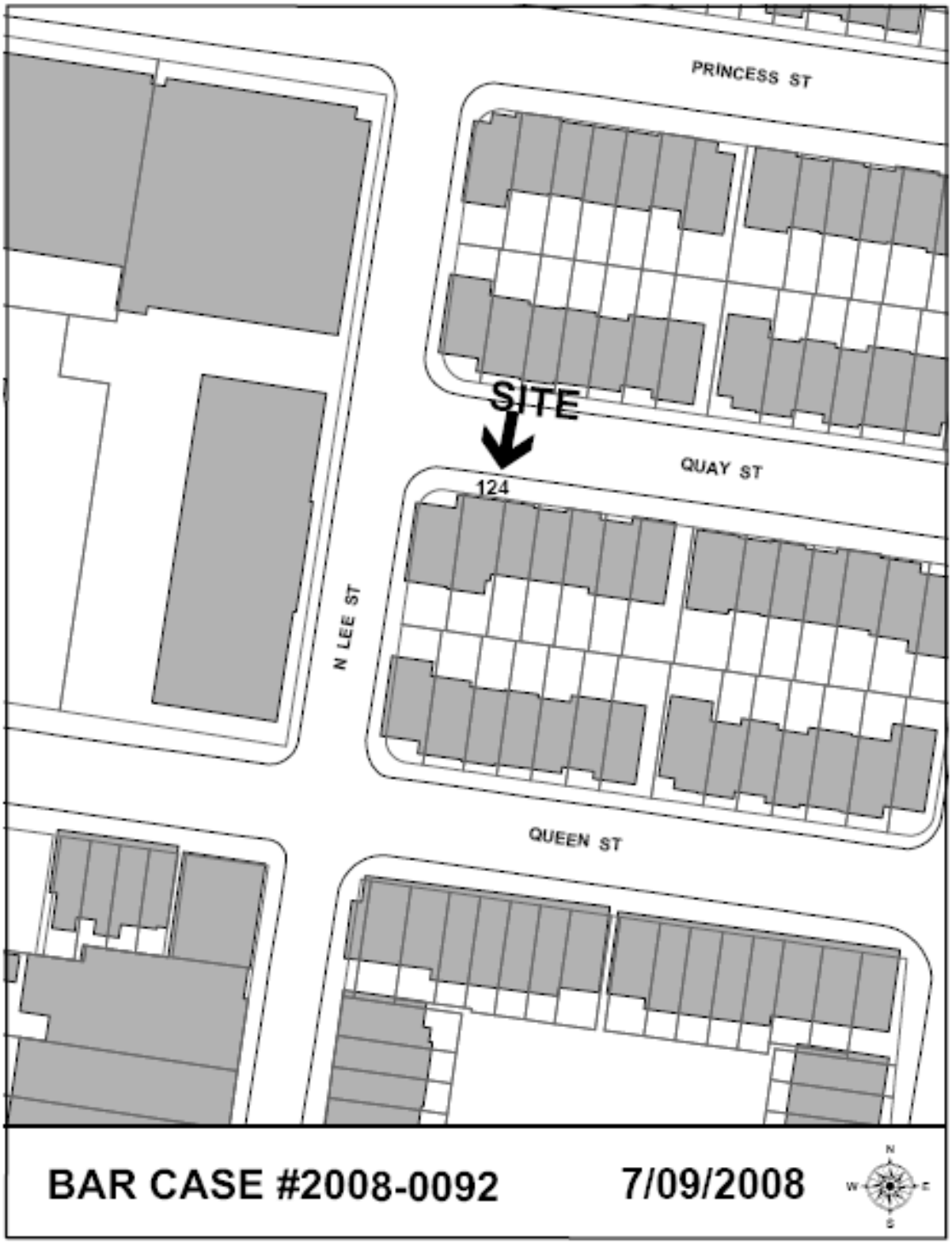
APPLICANT: Tracy and William Castle

LOCATION: 124 Quay Street

ZONE: RM/Townhouse Zone

STAFF RECOMMENDATION: Staff recommends approval of the Certificate of Appropriateness with the following conditions:

1. That the proposed roof be a historically appropriate material, such as standing seam metal or slate.


PRINCESS ST
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QUAY ST
124
N LEE ST
QUEEN ST
BAR CASE #2008-0092
7/09/2008
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I. ISSUE:

The applicant is requesting approval of a Certificate of Appropriateness to replace an existing deteriorating slate roof with a synthetic slate roof. The proposed synthetic slate is a colorized, mineral-filled polymer with the trade name LAMARITE. The applicant proposes to replicate the existing slate shingles in size and pattern.

II. HISTORY:

The three-story, interior townhouse at 124 Quay Street is a one of a group of 86 three-story brick townhouses bounded by North Union, North Lee, Queen and Oronoco Streets which were constructed in 1971. This area was not included in the Old and Historic Alexandria District between the late 1960s and June of 1984. Therefore, a number of alterations were made to individual townhouses during this period without B.A.R. review. Many of these changes would not be considered architecturally appropriate today. Although not reviewed by the Board during planning and construction, these townhouses all feature historic materials including masonry construction with either slate shingle or standing seam metal roofs.

No previous BAR approvals were located for this property.

III. ANALYSIS:

The proposed roofing complies with zoning ordinance requirements.

The *Design Guidelines* advise that "new and replacement roofs should be made of material appropriate to the period of significance of the structure." The *Guidelines* specifically address the use of synthetic slate and acknowledge that it "has occasionally been approved by the Boards to replace composition shingles when the original roofing material is lost or unknown….the Boards do not consider synthetic slate an appropriate roof replacement material for such historic roof materials." Furthermore, in the past, the Board has expressed concern over the life span of synthetic shingles.

124 Quay Street is a non-historic dwelling with historically compatible materials. While non-historic buildings and new construction are permitted greater flexibility in the selection and range of materials, in many circumstances the use of historically accurate materials contributes to the compatibility of new construction in the historic district. The development in which 124 Quay Street is located was constructed using authentic historic materials of slate and standing seam metal. It is unfortunate that in this circumstance, slate shingles, which typically last for decades, have significantly deteriorated and must be replaced. However, Staff finds that a replacement roof material should retain a sense of material integrity and be compatible with the historic materials found throughout the Old and Historic District. Therefore, Staff recommends that a more appropriate material, such as a standing seam metal roof, be used in place of synthetic shingle.

IV. STAFF RECOMMENDATION:

Staff recommends approval of the Certificate of Appropriateness with the following conditions:

1. That the proposed roof be a historically appropriate material, such as standing seam metal or slate.

V. CITY DEPARTMENT COMMENTS

Legend: C - code requirement R - recommendation S - suggestion F- finding

Code Enforcement:

C-1 Alterations to the existing structure must comply with the current edition of the Uniform Statewide Building Code (USBC).

C-2 Alterations to the existing structure and/or installation and/or altering of equipment therein requires a building permit. Five sets of plans, bearing the signature and seal of a design professional registered in the Commonwealth of Virginia, must accompany the written application. The plans must include all dimensions, construction alterations details, kitchen equipment, electrical, plumbing, and mechanical layouts and schematics.

C-3 Construction permits are required for this project. Plans shall accompany the permit application that fully details the construction as well as layouts and schematics of the mechanical, electrical, and plumbing systems.

Historic Alexandria:

No comment.

VI. IMAGES

Figure 1. Front elevation of 124 Quay (left).

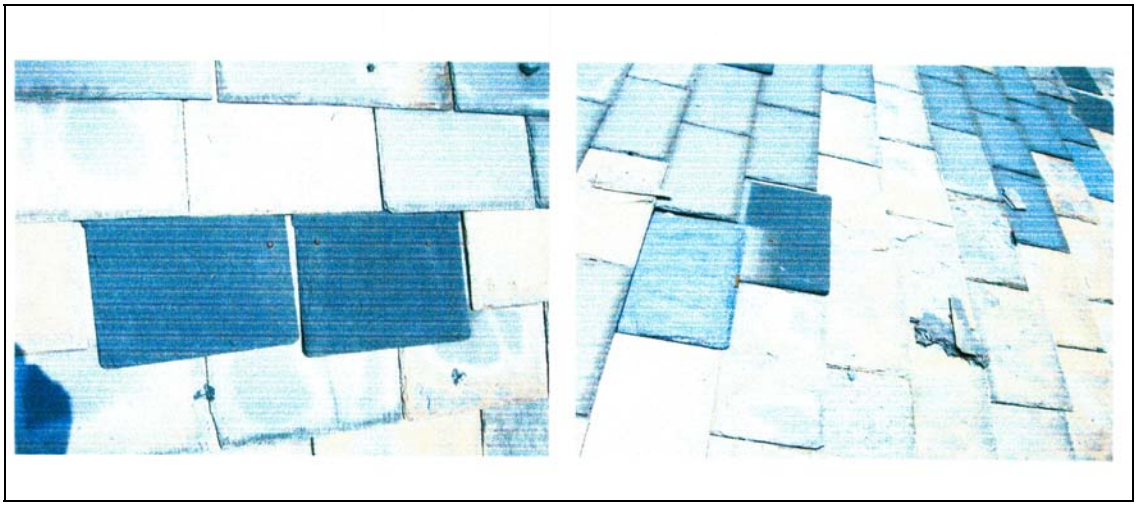
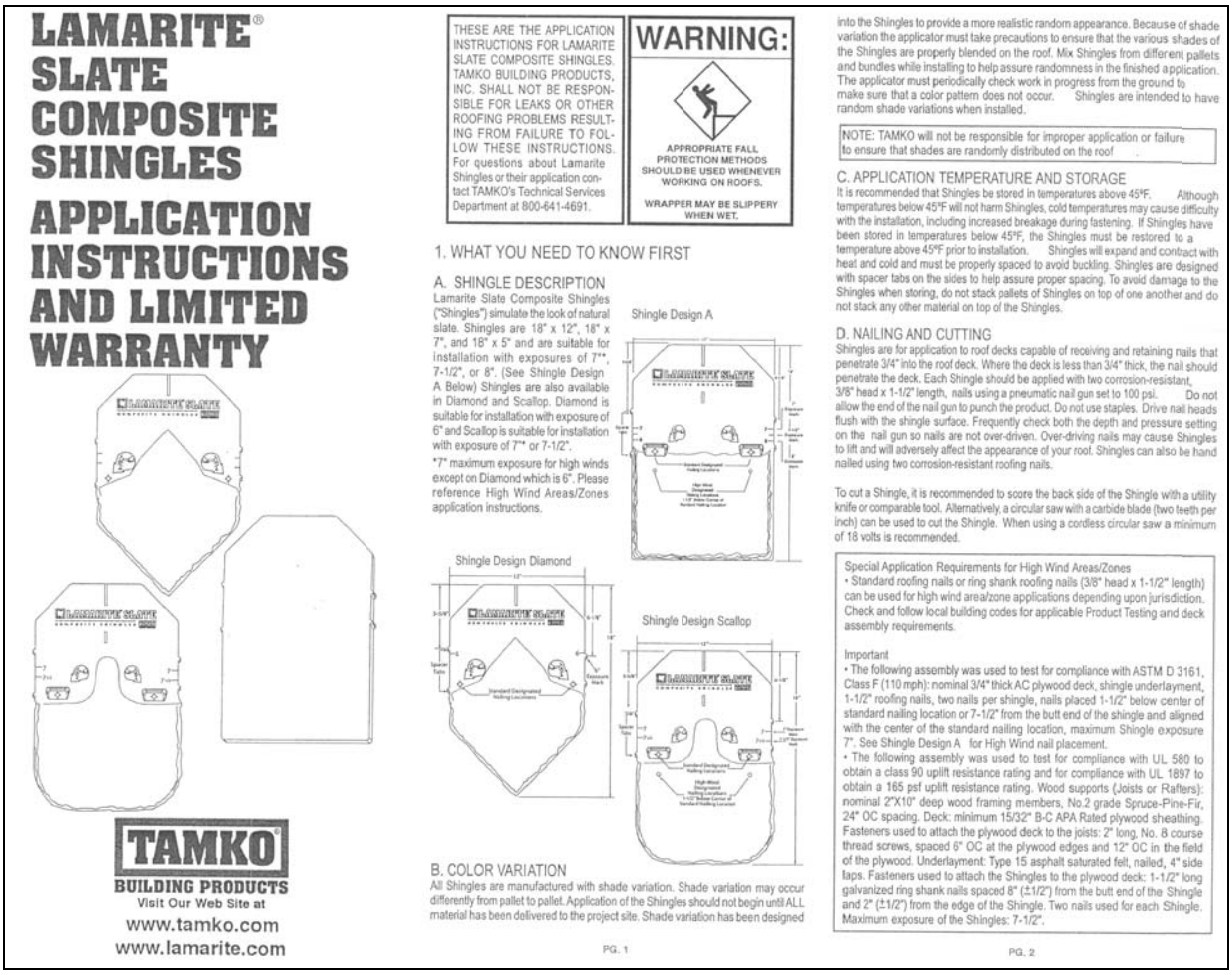


Figure 2. Existing deteriorating slate roof.



LAMARITE® SLATE COMPOSITE SHINGLES

APPLICATION INSTRUCTIONS AND LIMITED WARRANTY

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THESE ARE THE APPLICATION INSTRUCTIONS FOR LAMARITE SLATE COMPOSITE SHINGLES. TAMKO BUILDING PRODUCTS, INC. SHALL NOT BE RESPONSIBLE FOR LEAKS OR OTHER ROOFING PROBLEMS RESULTING FROM FAILURE TO FOLLOW THESE INSTRUCTIONS. For questions about Lamarite Shingles or their application contact TAMKO's Technical Services Department at 800-641-4691.

WARNING:

APPROPRIATE FALL PROTECTION METHODS SHOULD BE USED WHENEVER WORKING ON ROOFS.

WRAPPER MAY BE SLIPPERY WHEN WET.

1. WHAT YOU NEED TO KNOW FIRST

A. SHINGLE DESCRIPTION

Lamarite Slate Composite Shingles ("Shingles") simulate the look of natural slate. Shingles are 18" x 12", 18" x 7", and 18" x 5" and are suitable for installation with exposures of 7"*, 7-1/2", or 8". (See Shingle Design A Below) Shingles are also available in Diamond and Scallop. Diamond is suitable for installation with exposure of 6" and Scallop is suitable for installation with exposure of 7"* or 7-1/2".

*7" maximum exposure for high winds except on Diamond which is 6". Please reference High Wind Areas/Zones application instructions.

Shingle Design A

Shingle Design Diamond

Shingle Design Scallop

B. COLOR VARIATION

All Shingles are manufactured with shade variation. Shade variation may occur differently from pallet to pallet. Application of the Shingles should not begin until ALL material has been delivered to the project site. Shade variation has been designed into the Shingles to provide a more realistic random appearance. Because of shade variation the applicator must take precautions to ensure that the various shades of the Shingles are properly blended on the roof. Mix Shingles from different pallets and bundles while installing to help assure randomness in the finished application. The applicator must periodically check work in progress from the ground to make sure that a color pattern does not occur. Shingles are intended to have random shade variations when installed.

NOTE: TAMKO will not be responsible for improper application or failure to ensure that shades are randomly distributed on the roof

C. APPLICATION TEMPERATURE AND STORAGE

It is recommended that Shingles be stored in temperatures above 45°F. Although temperatures below 45°F will not harm Shingles, cold temperatures may cause difficulty with the installation, including increased breakage during fastening. If Shingles have been stored in temperatures below 45°F, the Shingles must be restored to a temperature above 45°F prior to installation. Shingles will expand and contract with heat and cold and must be properly spaced to avoid buckling. Shingles are designed with spacer tabs on the sides to help assure proper spacing. To avoid damage to the Shingles when storing, do not stack pallets of Shingles on top of one another and do not stack any other material on top of the Shingles.

D. NAILING AND CUTTING

Shingles are for application to roof decks capable of receiving and retaining nails that penetrate 3/4" into the roof deck. Where the deck is less than 3/4" thick, the nail should penetrate the deck. Each Shingle should be applied with two corrosion-resistant, 3/8" head x 1-1/2" length, nails using a pneumatic nail gun set to 100 psi. Do not allow the end of the nail gun to punch the product. Do not use staples. Drive nail heads flush with the shingle surface. Frequently check both the depth and pressure setting on the nail gun so nails are not over-driven. Over-driving nails may cause Shingles to lift and will adversely affect the appearance of your roof. Shingles can also be hand nailed using two corrosion-resistant roofing nails.

To cut a Shingle, it is recommended to score the back side of the Shingle with a utility knife or comparable tool. Alternatively, a circular saw with a carbide blade (two teeth per inch) can be used to cut the Shingle. When using a cordless circular saw a minimum of 18 volts is recommended.

Special Application Requirements for High Wind Areas/Zones

- Standard roofing nails or ring shank roofing nails (3/8" head x 1-1/2" length) can be used for high wind area/zone applications depending upon jurisdiction. Check and follow local building codes for applicable Product Testing and deck assembly requirements.

Important

- The following assembly was used to test for compliance with ASTM D 3161, Class F (110 mph): nominal 3/4" thick AC plywood deck, shingle underlayment, 1-1/2" roofing nails, two nails per shingle, nails placed 1-1/2" below center of standard nailing location or 7-1/2" from the butt end of the shingle and aligned with the center of the standard nailing location, maximum Shingle exposure 7". See Shingle Design A for High Wind nail placement.
- The following assembly was used to test for compliance with UL 580 to obtain a class 90 uplift resistance rating and for compliance with UL 1897 to obtain a 165 psf uplift resistance rating. Wood supports (Joists or Rafters): nominal 2"X10" deep wood framing members, No.2 grade Spruce-Pine-Fir, 24" OC spacing. Deck: minimum 15/32" B-C APA Rated plywood sheathing. Fasteners used to attach the plywood deck to the joists: 2" long, No. 8 course thread screws, spaced 6" OC at the plywood edges and 12" OC in the field of the plywood. Underlayment: Type 15 asphalt saturated felt, nailed, 4" side laps. Fasteners used to attach the Shingles to the plywood deck: 1-1/2" long galvanized ring shank nails spaced 8" (±1/2") from the butt end of the Shingle and 2" (±1/2") from the edge of the Shingle. Two nails used for each Shingle. Maximum exposure of the Shingles: 7-1/2".

PG. 1

PG. 2

Figure 3. Specifications for proposed synthetic slate.