LOCAL HISTORIC DISTRICT: Dilworth

PROPERTY ADDRESS:	330 East Kingston Avenue
SUMMARY OF REQUEST:	Addition of water-repellant to brick chimney
APPLICANT/OWNER:	Diane St. John

Details of Proposed Request

Existing Conditions

The existing structure is 2.5 story building known as the Rev. Alexander Martin house constructed in 1905. Architectural features include a high hip slate roof with hip roofed dormer, two story side projecting bays, German siding. Front porch is one story, full facade with second floor balcony with balustrade and supported by flat paneled columns. It is a multi-family building. Adjacent structures are 1.5, 2 and 2.5 story single-family and multi-family houses.

Proposal

The proposal is the application of a water-repellant coating to the primary brick chimney stack, located on the left elevation and visible from Euclid Avenue. The proposed product is ChimneySaver Water-Base Water Repellent.

According to the product specification sheet the product is absorbed approximately ¼" into the brick and bonds with the brick to prevent new water from entering the brick but allows any trapped vapor to escape. ChimneySaver is activated by ultraviolet light, unlike other water repellent products that break down under ultraviolet rays.

Design Guidelines – Masonry, page 5.5-5.6

7. Avoid waterproofing, water-repellent, or nonhistoric coatings on masonry unless moisture is able to "breathe" through the coating. An antigraffiti coating may be used on masonry areas if needed.

Staff Recommendation

1. The Commission will determine if the proposed product is appropriate for use on the chimney.

HDC-2019-00232 PID: 12307513 LOCAL HISTORIC DISTRICT: DILWORTH PROPOSED PROJECT: BRICK CHANGES June Meeting 2019







330 E. Kingston Ave - Dilworth Case No. HDC-2019-00232



Context/Adjacent Structures



CURRENT CONDITIONS

330 E. KINGSTON AVE - DILWORTH CASE NO. HDC-2019-00232

May 2019



May 2019

CURRENT CONDITIONS





CURRENT CONDITIONS

330 E. KINGSTON AVE - DILWORTH CASE NO. HDC-2019-00232

May 2019

THE PROBLEM.

All new and existing masonry substrates are susceptible to water damage and even if repaired, will continue to deteriorate if not protected.

Water Damage Can Be Prevented

Chimneys are highly exposed to the elements and if left unprotected, are susceptible to structural deterioration. It is important to address this problem before serious damage occurs. A complete protection program should include a chimney cap and repair of any cracks or deterioration on the crown, mortar joints and flashing; in addition to an application of ChimneySaver Water Repellent to the entire chimney.



Severe spalling and deterioration is caused by water penetration.

Efflorescence stains caused by water penetration and leaching salts are unsightly and add to deterioration.

Water penetration and freeze/thaw damage result in loss of insulation value and lead to structural failure.



ChimneySaver contains patented siloxanes small enough to penetrate most masonry pores up to 1/4" or more. These special siloxanes form strong bonds with the silica in masonry and concrete. Because of this bonding process, one application of ChimneySaver provides up to ten times the water repellent protection of typical sealers while maintaining the masonry's breathability.

WATER '

100% Breathable

Moisture from a variety of sources is always present in masonry and concrete. Sealers and silicone coatings form a water resistant surface film which traps water vapor inside. If these vapors cannot escape, they will contribute to spalling, scaling, deterioration, and freeze-thaw damage. ChimneySaver is 100% vapor permeable - a non film-forming water repellent that penetrates and lines masonry pores.

This partially rebuilt chimney would continue to deteriorate if left unprotected.



Sealers Trap

Water Vapors

Enlarged

Masonry Pores

ChimneySaver Releases

The value and added benefits of protecting your masonry with ChimneySaver are obvious when comparisons are made with popular retail brands of water sealers.

Features/Benefits	ChimneySaver	Brand "T"	Other Brands
Siloxane	Yes	No	No
Warranty	Ten Years	One Year	No
Initial Application	One Coat	Two Coats	One - Two Coats
Applications/Ten Year Period	One	Twenty	Ten - Twenty
100% Breathable	Yes	No	No
Best Value	Yes	No	No

Many Products, One Solution-**ChimneySaver®**

ChimnevSaver Water-Based Water Repellent

The industry standard for masonry chimneys. 100% vapor permeable, water-based, and environmentally friendly.

ChimneySaver Solvent-Based Water Repellent

The original solvent-based product.100% vapor permeable.

ChimneySaver V.O.C. Compliant Solvent-Base Water Repellent A solvent-based ChimneySaver specifically formulated for use in states and municipalities with new, lower V.O.C. laws. 100% vapor permeable.

ChimneySaver Water-Based Water Repellent With Stain Blocker

The same great protection as ChimneySaver WB. Plus, it forms an invisible barrier that blocks the return of unsightly stains. Great for high humidity areas. 100% vapor permeable.

ChimneySaver Water-Based Water Repellent For Block Chimneys

A high performance penetrating water repellent formulated for the unique capillary structure of block chimneys and other concrete masonry units.



PROPOSED MATERIALS

THE SOLUTION.

ChimneySaver is the first water repellent specifically developed to protect masonry chimneys from severe weather conditions.

Protect Your Investment

There are approximately 40 million masonry chimneys in North America and the most common problem with these structures is water penetration. Water causes over a billion dollars in damage annually in the form of staining, loss of insulation value, freeze-thaw damage, deterioration, and ultimately structural failure.

ChimneySaver is a WATER REPELLENT - not a water sealer. The difference could save you hundreds, or even thousands of dollars in repairs because sealers can actually damage masonry. Unlike waterproofing sealers that remain on the surface, ChimneySaver penetrates deep enough to protect masonry from destructive water penetration while maintaining the structure's vapor permeability.

Long-Term Protection

ChimneySaver is an investment in long-term protection that will help prevent expensive reconstruction. No water repellent, however, is a substitute for good construction and workmanship. The first step in preventing water damage is to make necessary repairs to structural cracks, damaged crowns, flashings, deteriorated bricks, and mortar joints. The second step is to protect porous masonry from further water penetration by applying ChimneySaver Water Repellent.

Protection is particularly needed when a new chimney liner has been installed. If repairs and preventive measures are not taken, the old chimney will continue to deteriorate around the new liner.

ChimneySaver[®] 10 YEAR WARRANTY

Our recommendations for use of this product are based upon tests believed to be reliable. Since field conditions vary widely, the user must determine the suitability of the product for the particular use and specific method(s) of application. SaverSystems warrants that ChimneySaver Water Repellent will exhibit a water repellent effect for ten years from the date of application when properly applied by a professional contractor according to label instructions and if minimum application requirements are met. This warranty does not cover pre-existent flaking, spalling, abrading, faulty construction and/or other defects which might erode treated surfaces. If water repellent fails to perform as specified, SaverSystems will furnish, as the sole remedy, enough water repellent to correct the condition.

This warranty does not include labor, or the cost of labor for the re-application of water repellent. SaverSystems shall not be liable for incidental or consequential damages resulting from any breach of this warranty and fitness for use. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Available from:

SaverSystems® Richmond, IN 47374 800-860-6327 www.chimneysaver.com Copyright 2013 SaverSystems



Chimney<u>Saver</u>

The Clear Solution To Prevent Water Damage



PROPOSED MATERIALS

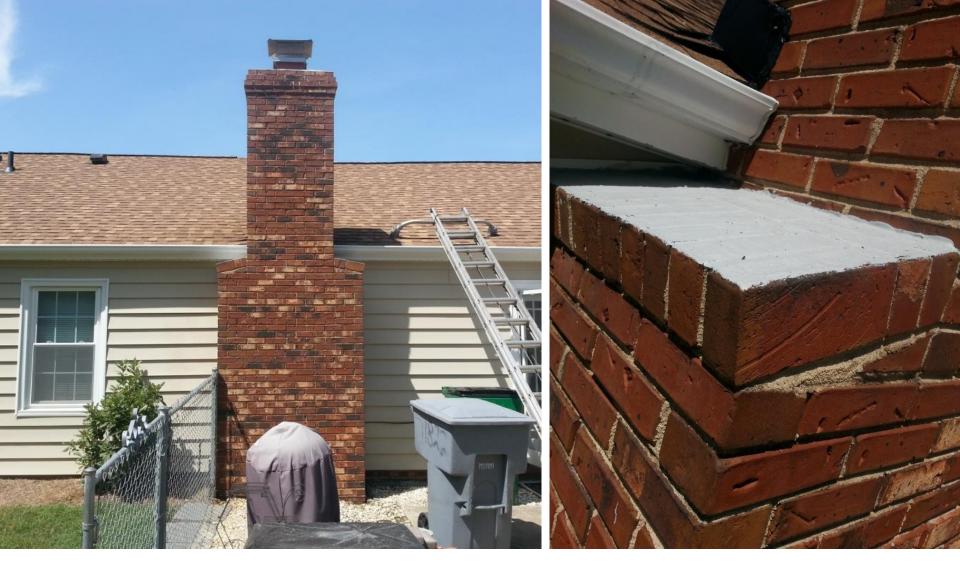
What is the difference between ChimneySaver and other water repellents?

Since ChimneySaver is a photo-reactive chemical that does not depend on solids to achieve a water repellent effect, the surface remains vapor permeable. ChimneySaver is composed of 100% active ingredients which physically and chemically react with a surface.

After a treated masonry surface has been exposed to ultraviolet light, the electrostatic charge of the surface is reversed to match the electrostatic charge of water. This photo-reactive process allows the treated surface to repel water similar to the way two identical poles of a magnet repel each other.

Most waterproofing agents are actually water sealers, which trap water vapors produced inside the chimney. If this water vapor cannot escape it will condense, freeze and accelerate freeze/thaw damage. Our water repellent does not evaporate or wash out and it consistently outperforms and outlives resins, silicones, acrylics, silanes and siloxanes.

PROPOSED MATERIALS



2014: Proposed product applied earlier in the day





2018: 4 years post-application



Product applied to chimney, not house. Note no difference in color.