Built PA, Inc.

Friday, October 3, 2025 Delivery via E-Mail

Philadelphia Historical Commission

RE: 1919 Walnut Street Repainting Walnut Street Façade Trims Update

Property Owner:
1919 Walnut Street Associates
430 Devereux Dr., Villanova PA 19085

To Whom it May Concern,

Thank you for meeting us on Tuesday, September 30th, 2025. Based on our meeting where we discussed staining existing painted masonry surfaces at 1919 Walnut on Walnut Street Façade, we have updated our submission information

We plan to lift any existing paint from existing painted masonry surfaces, prep those surfaces and apply a new masonry appropriate coating color per this submission. We will also re-paint any existing painted wood trim surfaces with matching exterior rated paint. The existing non-painted brick surfaces and blue slate surfaces will remain as-is. Our intent is to work with Premier Building Restoration group who specialize in this type of work

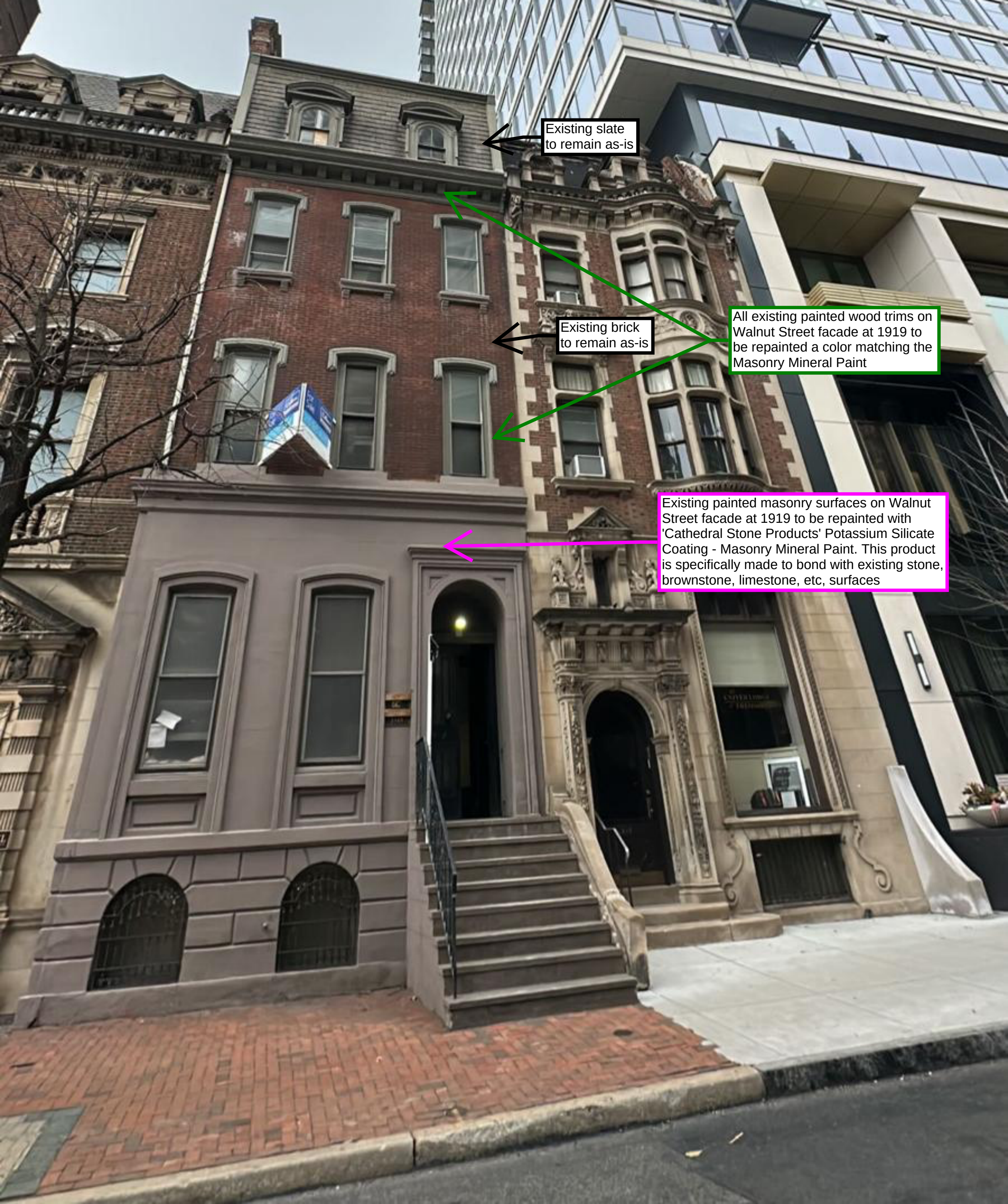
General summary of steps & products:

1. Use Paint Remover made by Cathedral Stone Products, Inc. specifically made for lifting paint from masonry surfaces without damaging the surface underneath. Specifications & Product Data have been provided in this document
2. After existing paint is lifted, we will clean the surfaces and test the PH to verify the substrate is ready for new application
3. Stain Product: Potassium Silicate Coating – Masonry Mineral Stains made by Cathedral Stone Products, Inc. This product is specifically designed to stain masonry & brownstone materials. Specifications & Product Data have been provided in this document

We look forward to your feedback and review

215-420-0556
Sincerely,

John Sofio
Principal
Built PA, Inc


Existing slate to remain as-is
Existing brick to remain as-is
All existing painted wood trims on Walnut Street facade at 1919 to be repainted a color matching the Masonry Mineral Paint
Existing painted masonry surfaces on Walnut Street facade at 1919 to be repainted with 'Cathedral Stone Products' Potassium Silicate Coating - Masonry Mineral Paint. This product is specifically made to bond with existing stone, brownstone, limestone, etc, surfaces

Stain product & color option A & B

Potassium Silicate Coating - Masonry Mineral Paints & Stains

(https://www.cathedralstone.com/public/system/Datasheet/2296.pdf)
(https://www.cathedralstone.com/public/system/Specs/2296.pdf)
(/Expert-Training)

DATA SHEET **SPECIFICATIONS** **TRAINING**

The most compatible paint for any masonry surface (concrete, brick, limestone, brownstone, sandstone, and terra cotta). 92% vapor permeable when applied directly to masonry. Color fast. Unlike latex and acrylic coatings, Potassium Silicate Coating is a mineral paint and forms a molecular bond with the masonry substrate. Combines the advantages of silicate/mineral and silicone coatings. Withstands extreme climate conditions and is a water repellent. Can be used as a mortar stain when diluted with Liquid Silicate (https://www.cathedralstone.com/IMS/Shop/Products/liquid-silicate).

This coating can be applied over latex and acrylic paints, but doing so may minimize the effectiveness and breathability of the potassium silicate.

Similar coatings have been used in Europe for over 160 years and are now produced for the first time in North America.

1. Select Color

Premium Colors


S1-MR


S2-MR


S3-MR


S4-MR


S5-MR


S6-MR


S7-MR


S8-MR

Laboratory Match Custom Color

- Laboratory color match to coating sample (site application may vary)
- Requires approx. 2 weeks to match and create sample coating
- Color Matching fee: $244 (includes laboratory matching and one quart sample)

ORDER CUSTOM COLOR

Stripper product specifications to lift existing color off brownstone/masonry

Cathedral Stone Products, Inc.

GUIDELINE FOR WRITING SPECIFICATIONS

LIGHT & HEAVY DUTY PAINT STRIPPER
(Division 09900 – Paints and Coatings)

1. GENERAL

1.1. RELATED DOCUMENTS

A. Work of this section shall be governed by the Contract Documents. Provide materials, labor, equipment, and services necessary to furnish, deliver, and install all work of this section as shown on the drawings, as specified herein, and/or as required by job conditions.

1.2. SUMMARY OF WORK

A. This section includes, but is not limited to the following:

1. Paint removal by chemicals from all historic surfaces including smooth and ornamental wood, metal, masonry, concrete, and brick. Mock-ups will determine the best appropriate method.

B. Protection of concrete mosaic, metals, stone, and other adjacent materials during all other work activities in related sections, below.

C. Visual Requirements:

1. Maintain aesthetic or historic qualities of Project by protecting Work designated to remain.

1.3. REFERENCE

A. Manufacturer's specifications and instructions.

1.4. SUBMITTAL

A. Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.

B. Product Data: Submit manufacturer's specifications and installation instructions for products used including finishing materials and methods.

C. Submit manufacturer's technical data sheet for each product indicated including chemical analysis and recommendations for their application and use. Include test reports and certifications substantiating that products comply with requirements.

D. Submit a detailed plan for proposed paint removal methods for each type of paint removal work, for review and approval by owner or owner's representative's.

E. Submit a work plan describing chemicals used to strip paint, procedures used to provide inlets, and capture, store, sample and dispose of all waste generated throughout this project.

F. Samples: Provide sample installation of paint removal. Locations per the owner or owner's representatives directions.

1.5. QUALITY ASSURANCE

A. Mock-ups: Prepare sample for each type of removal on the appropriate material indicated to be

stripped. See 1.6 Test Panels.

B. Provide at least one person who shall be present at all times during the execution of the work of this section, who shall be thoroughly familiar with the specified requirements, and the materials and methods needed for their execution, and who shall direct all work performed under this section.

C. Provide adequate numbers of workers skilled in the necessary crafts and properly informed of the specialized methods and materials to be used in this work.

1.6. TEST PANELS

A. The Contractor shall arrange for preparing test panels to determine the appropriate thickness at which the product is applied to the surface and the time values for removing the product. Size of testing area shall be no smaller than 1’ SF.

B. Contractor shall prepare a written report detailing results of testing including description of methods employed, materials, concentrations of chemicals, dwell times and other elements of test procedures.

C. Each test panel must be carefully labeled, charted, and photographed.

D. Approved test panels will become a part of the Work, and serve as the quality standard for similar type work on this project. Additional test panels, up to a maximum of 3 for each type of c stripping, shall be prepared if necessary to obtain satisfactory results.

E. Notify the owner’s representative seven (7) days in advance of the dates and time when the test panels will be installed.

F. As the Work progresses along the building, the Contractor shall perform test panels to confirm which paint removal product will be best for that location being worked on designated areas should take into consideration that the paint removal product will react differently based on temperature, substrate and type of coating. Prior repairs, remaining paint layers, type of paint, and sun exposure may not be uniform on the building and will potentially need separate removal products, amounts of chemical removers, and dwell times. Size of testing area will be no larger than 5’ SF.

1.7. PROJECT/SITE CONDITIONS

A. Contractor shall be responsible for protecting all existing adjacent materials such as doors, windows, flashings, roofing, and other existing material assembles.

B. Contractor shall be responsible for the repair of all damaged adjacent materials due to the execution of the cleaning work at no additional expense to the Owner. Repairs shall be made by qualified mechanics skilled in the type of repairs required, to the satisfaction of the owner’s representative.

C. Protect adjacent areas and surfaces not being cleaned with barriers suitable for the chemical cleaners being used. Cover air intakes, air conditioning vents and similar openings that may come in contact with the chemical cleaners, residues, and their fumes. Leave covers in place throughout the cleaning process.

D. Protect trees, plants, foliage, storm sewers, and surrounding surfaces from paint removers, neutralizers, residue, and rinse waters.

E. Take appropriate precautions to avoid harm to building occupants, pedestrians and nearby property. Terminate work when wind drift may injure passerby or damage vehicles and adjacent property.

F. Safety: For any number of reasons it is essential to maintain a high degrees of worker and occupant safety while working with hazardous materials. Most of the processes used to remove lead paint on this scale will require a full time industrial hygienist to test air quality and lead levels in all persons entering the contaminated area.

2. PRODUCTS

2.1. MATERIALS

A. Chemical Strippers

1. Environmentally safe, water based paint strippers, free of flammable solvents and fumes, caustics and MUST NOT contain N Methyl Pyrrolidone (NMP). Products must work on epoxy paints, cementitious paints, exotic coatings, and oil-base coatings. Acceptable products available through Cathedral Stone Products; contact Technical Reps - Tel: 410-782-9150; fax: 410-782-9155; website: cathedralstone.com email: info@cathedralstone.com.

B. Specialty Materials For Delicate Items

1. Product(s) shall be chosen based upon test samples prepared by Contractor on-site.

C. Miscellaneous Equipment

1. Stiff natural bristle brushes

2. Soft clean rags

3. Clean, potable water

4. Rubber gloves

5. Eye and skin protection

6. Putty knives or paint scrapers, metal, and plastic.

7. Airless Spray equipment with adjustable pressure (between 100-600 psi.) and a 0.19” or larger fan tip outfitted with chemical resistant packings. Titan 640i or larger pump or equal

8. Standard Pressure washers with tip pressures no greater than 3600 psi at the tip

9. Wire Brush (for removing rust bloom only; for metal surfaces; NEVER ON MASONRY).

3. EXECUTION

3.1. PREPRATION

A. Protect adjacent surfaces with paper, drop cloths, and other means. Special protection should be applied to window, concrete mosaic ceiling, and other historic material should be applied.

B. When removing paint from metallic surfaces make sure surface has been mechanically cleaned free of rust with wire brush. Prime rusted areas as soon as possible to prevent recurrence of rust bloom.

1. Refer to Part B Specifications, Section 02064 for removal requirements involving lead-based paint.

3.2. GENERAL APPLICATION OF INITIAL CHEMICAL TREATMENT (for paint removal from concrete, excluding metal railings)

A. Follow manufacturers’ instructions.

B. Plan to remove paint in sections that can easily be applied in one working shift.

C. Clearly mark or identify time of application and dwell time.

D. Remove paint stripper in the same sequence of sections in which it was applied.

E. The contractor shall have adequate staff available to monitor the process at the end of the dwell time cycle and who will be available to remove the paint stripper. Do not leave chemicals on the building past their designated dwell time.

F. General Instructions For Gel Based Paint Removal Products:

1. Rely on information from test panels to determine which chemical product to use.

2. Determine the dry film thickness of the coating to be removed.

3. Cover adjacent areas during spray application. Typical masking is required for only the adjacent 3 feet.

4. Cover ground directly beneath application to collect drips from application of stripper and to collect removed paint.

5. Apply with airless spray equipment or brush approximately 30-50% thicker than the film thickness of the coating to be removed. (Test patches will make the determination of application thickness). Covering of the stripper application is only required for applications in direct sunlight, high wind, high heat (greater than 85°F), or if inclement weather is expected to prevent stripper from drying or being washed off. Only if required, use 1 mil polyethylene plastic or other suitable material, otherwise leave uncovered. DO NOT rub or work plastic covering into surface of the stripper, merely hang plastic barrier covering over surface. Dwell time can be between 4-24 hours depending on the thickness and type of coating being removed. Remove plastic covering (if applied) and remove coating with suitable hand tools such as scrapers.

6. Leave on for up to 24 hours or longer according to test patch findings. Typical architectural coatings are removed by late afternoon application of stripper and removal the next morning. Typical architectural applications require two (2) applications.

7. Remove as much residue as possible with tools before clean-up procedure.

8. Collect paint and remaining residue, put into plastic bags and dispose of in compliance with Federal, State and local regulations. Never dispose of stripper or stripper residue in steel drums unless completely dry.

9. Rinse surface with pressure washer and surfactant cleaner, working from the bottom up. Collect water if required by environmental guidelines. If location does not allow pressure washing, clean all surfaces with clean rags saturated in denatured alcohol, cycling rags often, to remove any stripper residue. Dispose of rags in accordance with Federal, State and Local regulations.

3.3. GEL PAINT REMOVAL PRODUCT CONTAINMENT & REMOVAL (IF REQUIRED)

A. Use the following outline to develop a containment area:

1. First Layer: Canvas painter’s drop cloth. These are used to cushion the polyethylene that will be installed on top.

2. Second layer: clear polyethylene at least 6 mil. X 20’ x 100’ to be installed above the canvas.

3. Third layer: Black 6-mil. X 20’ x 100’, construction grade to be installed on top of both the canvas and clear polyethylene.

4. Install as follows:

a. At base of building, take spray adhesive and spray underside 4 to 6” on all horizontal

surfaces. Spray vertical surfaces if horizontal surfaces are rough or have loose material.

b. Once dry, take duct tape and apply it smoothly from the point where the vertical and horizontal surfaces converge for a distance of approximately 6".

c. Let tape dry to surface sprayed with adhesive. Bond between tape and spray adhesive should be firm and without voids.

d. Lay out a layer of canvas from the edge where both vertical and horizontal surfaces meet. Do this for a distance of at least 10' away from all vertical surfaces.

e. Lay out a layer of polyethylene plastic. Using a roll of 4" duct tape, apply 2" of the roll along the edge of the clear polyethylene and attach the remaining 2" width of tape to the previously applied duct tape (see direction 2) that has been attached to the base of the building.

f. Apply the final layer of black 6 mil. Polyethylene plastic over the layer of clear plastic and the layer of canvas (using the technique described in direction 4).

g. Outside of the containment area, take 4" plastic in 10' sections and roll the clear black polyethylene over tubes and under so that when you have finished it will be possible to contain all liquids used in the stripping procedure.

5. Up to two applications of the chemical removal product may be made on the building with no additional charge to the Owner.

3.4. PAINT REMOVALL AND SURFACE PREP

A. No work shall commence until methods and materials for each type of cleaning are approved by the owner's representative as determined by test panels. Repeat test panels as required to demonstrate means and methods to acceptable levels as determined by the owner's representative.

B. **Pressure washing shall be at a pressure, which will not damage the surface, yet provide effective removal.**

C. Personnel performing cleaning operations shall at adhere to the Personnel Protective Equipment (PPE) stipulated on the SDS for products being used.

D. Exercise caution during cleaning operations to avoid wind drift of materials to adjacent properties. Persons, or cars below. Schedule cleaning operations for times or days when risk to pedestrians or vehicles is at a minimum.

E. Generally, treat surfaces by directing low pressure water washing over the surface as determined by test panels.

F. Use only methods and materials determined during testing phase and approved by owner's representative. Clean surface to degree accepted by owner's representative. Do not permit cleaning to continue if methods and materials employed results in any permanent damage to surfaces.

G. Do not proceed with surface preparation until proper protection has been installed for adjacent materials.

H. Contractor shall reclaim, characterize and dispose of all removed paint and stripper residue used in conjunction with this project in accordance with applicable laws. Disposal sites shall be approved by the owner's representative.

3.5. CLEAN UP

A. During the work, remove from the site discarded cleaning and coating materials, rubbish, cans and rags at the end of each workday.

B. Upon completion of work, remove all protective coverings and coatings, and clean window glass and other spattered surfaces. Remove spattered coatings by proper methods as recommended by manufacturer, using care not to damage adjacent surfaces.

4. CONTRACTOR QUALITY CONTROL

4.1. QUALITY CONTROL

A. The implementation of a Contractor Quality Control Program does not relieve the Contractor from the responsibility to provide work in accordance with the Contract Documents, applicable codes, regulations, and governing authorities. The Contractor Quality Control Program shall include, but not be limited to, the elements herein. These elements are provided only as a minimum starting point for the Contractor to use to generate the complete Contractor's Quality Control Program. Conform to all applicable provisions of Section 01400 CONTRACTOR QUALITY CONTROL.

END OF SECTION
03/2025

Cathedral Stone® Products, Inc.
7266 Park Circle Drive, Hanover, Maryland 21076

(800) 684-0901
FAX: (410) 782-9155
cathedralstone.com

March 2025

Cathedral Stone Products, Inc.

Stripper product data sheets to lift existing color off brownstone/masonry

jahn MASONRY RESTORATION SYSTEMS

PRODUCT DATA SHEET

Light Duty Paint Remover

(Fast Acting Paint Stripper)

This water based paint remover is biodegradable, non-toxic, user friendly and environmentally safe. It is extremely effective in removing the tough, high performance coatings. This remover will effectively lift highly cross-linked urethane and epoxy top coats and primers, alkyds, non-skid coatings (100% solid content) and the toughest of industrial coatings. It is also capable of lifting fuel resistant primers, inorganic zinc primers and coal tar epoxies.

FEATURES AND BENEFITS

- Water Based
- Fully Biodegradable
- Non Flammable
- Contains no TAPs or HAPs(Toxic/ Hazardous Air Pollutants)
- Non-carcinogenic, non-toxic
- Easy clean up with running water
- Low VOCs
- Non-ozone-depleting
- Not regulated by authorities for transportation / storage
- Not regulated by authorities for worker health and safety
- Low and inoffensive odor
- Cost Effective:
  - Requires much less chemical to achieve desired results
  - Reduces man-hours
  - Reduces cost of waste disposal
  - Reduces down time since other work at site can continue while stripper does its job
  - Lowers insurance costs for worker safety and storage hazards

APPLICATION PROCEDURES

Test Area

Always prepare a test area prior to full application. This will indicate the time required for project completion and suitability of product for the paint and the substrate.

Equipment and Tools

This product is engineered for airless spray application. Use only airless equipment with chemical resistant packing. Equip the sprayer with a tip size of 0.019 inches or larger. (Example: a 519 or 425 tip). Other equipment: brushes, rollers, scraper, masking tape, plastic (polyethylene) sheet, pressure washer, electric drill with mixer, empty pails for clean-up, water. Roller application should be used ONLY for horizontal surfaces.

PREPARATION

Masking:

Cover / protect areas where stripping is not desired, including adjoining surfaces where over spray may travel. Plastic (polyethylene) sheets make a very effective barrier. If using masking tape, apply two layers of tape and remove the top layer immediately after application as the remover may soak through the tape, damaging paint under it. Plants should be covered or washed thoroughly before and during application.

Mixing:

If on visual examination, water appears to have separated out of the product, thoroughly mix the stripper with a drill until it becomes homogeneous once again. DO NOT SHAKE. DO NOT DILUTE.

Equipment:

Ensure application equipment is free of any previously applied products or chemicals or solvents (especially mineral spirits).

Application

Always Apply a thick, even layer of stripper onto the coating being removed. An airless sprayer is the most effective means of application. Always start the sprayer pump at the lowest pressure setting and slowly build up the pressure until an adequate fan pattern has been generated. The minimum wet film thickness should be 15 mils (300 microns). The stripper must be applied 30%-50% thicker than the coating to be removed, i.e., 10 mils of coating requires 13-15 mils of stripper to be removed effectively. High pressure is neither required nor desired. High pressure and narrow tip sizes will break the stripper's emulsion and will reduce its effectiveness. When trying to build up films thicker than 30 mils (600 microns), it is advisable to build the stripper film in two separate applications. First apply a light coat of approximately 10 mils (250 microns), allow it to dwell for about 30 minutes and then build the rest of the stripper film thickness in the second application. Once applied, leave the stripper alone, as agitation slows down penetration. Brushing and rolling should be avoided because these methods produce a lower film build and inconsistent thickness of stripper.

Dwell Time

The time required for penetration varies according to the type of paint, and the temperature. Most paint systems require 1 to 6 hours. Leave the stripper overnight for best results.

Re-Application

When there are multiple layers of paint, it is quite likely that there is poor inter coat adhesion between some layers. Premature lifting may occur at this interface. If this happens, remove the lifted layers and reapply the stripper. Do not allow the stripper to dry out. The stripper is designed to remain wet and effective over extended periods of time (up to 48 hours), but excessive sunshine, windy conditions or insufficient stripper thickness can cause early drying. If the stripper starts to dry, reapply a light coating and allow extra time for completion.

REMOVAL AND CLEANUP

Removal of lifted paint can be completed by scraper, squeegee, wet/dry vacuum suction system or by pressure wash. The stripped surface must be rinsed with water or denatured alcohol to remove all chemical residues before repainting. When rinsing, always work from the bottom to the top. Any water that runs down the substrate will deactivate the stripper and allow the paint to re-adhere, therefore never work from the top to the bottom. Collect lifted paint and dispose of in accordance with local government regulations. Do not collect and/or store removed paint and stripper waste residue in metal containers. Clean up spray equipment by running water or denatured alcohol through the equipment soon after the spraying has been completed.

SAFETY REQUIREMENTS

Proper safety procedures should be followed at all times while handling this product. Refer to the Material Safety Data Sheet for important health/safety information before use.

Continue page 2 . . .

PRODUCT DATA SHEET

Light Duty Paint Remover

(Fast Acting Paint Stripper)

This water based paint remover is biodegradable, non-toxic, user friendly and environmentally safe. It is extremely effective in removing the tough, high performance coatings. This remover will effectively lift highly cross-linked urethane and epoxy top coats and primers, alkyds, non-skid coatings (100% solid content) and the toughest of industrial coatings. It is also capable of lifting fuel resistant primers, inorganic zinc primers and coal tar epoxies.

Continued . . .

Limitations

Surface temperatures should be 65°to 95°F (20° to 32°C). The product performs effectively at lower temperatures (even at 32°F, O°C), but the dwell time increases.

PACKAGING AND COVERAGE

Packaging: 5-gallon pails.
The product is engineered for thick film build up on vertical and overhead surfaces. The desirable wet film thickness of stripper is approximately one and a half times the dry film thickness of the paint. Minimum wet film thickness should be 15 mils (300 microns). The stripper must be applied 30%-50% thicker than the coating to be removed, i.e.,10 mils of coating requires 13-15 mils of stripper to be removed effectively. Typically, coverage is approximately 40 to 90 sq. ft./ US gallon (1 to 2.2 sq. m/L)

TECHNICAL DATA

Appearance	White foamed emulsion
Specific Gravity	1
Boiling Point	92.8°C
pH (direct reading)	4.4

DO NOT ALLOW PRODUCT TO FREEZE!

Cathedral Stone Products, Inc.

jahn MASONRY RESTORATION SYSTEMS

PRODUCT DATA SHEET

Heavy Duty Paint Remover

(Industrial & Architectural Paint Stripper)

This water based paint remover is biodegradable, non-toxic, user friendly and environmentally safe. It is extremely effective in removing the toughest industrial coatings like epoxies and urethanes from metal and concrete. This remover will effectively lift urethanes, latex, alkyd paints, lead based paints and varnish as well as most two-component epoxy coatings and fusion bonded epoxies from all types of substrates, including steel, aluminum, metal alloys, concrete, and masonry.

FEATURES AND BENEFITS

- Water Based
- Fully Biodegradable
- Non Flammable
- Contains no TAPs or HAPs (Toxic/ Hazardous Air Pollutants)
- Non-carcinogenic, non-toxic
- Easy clean up with running water
- Low VOCs
- Non-ozone-depleting
- Low and inoffensive odor
- Will not burn skin
- Cost Effective:
  - Requires much less chemical to achieve desired results
  - Reduces man-hours
  - Reduces cost of waste disposal
  - Reduces down time since other work at site can continue while stripper does its job
  - Lowers insurance costs for worker safety and storage hazards

APPLICATION PROCEDURES

Test Area

Always prepare a test area prior to full application. This will indicate the time required for project completion and suitability of product for the paint and the substrate.

Equipment and Tools

This product is engineered for airless spray application. Use only airless equipment with chemical resistant packing. Equip the sprayer with a tip size of 0.019 inches or larger. (Example: a 519 or 425 tip). Other equipment: brushes, rollers, scraper, masking tape, plastic (polyethylene) sheet, pressure washer, electric drill with mixer, empty pails for clean-up, water. Roller application should be used ONLY for horizontal surfaces.

PREPARATION

Masking:

Cover / protect areas where stripping is not desired, including adjoining surfaces where over spray may travel. Plastic (polyethylene) sheets make a very effective barrier. If using masking tape, apply two layers of tape and remove the top layer immediately after application as the remover may soak through the tape, damaging paint under it. Plants should be covered or washed thoroughly before and during application.

Mixing:

If on visual examination, water appears to have separated out of the product, thoroughly mix the stripper with a drill until it becomes homogeneous once again. DO NOT SHAKE. DO NOT DILUTE.

Equipment:

Ensure application equipment is free of any previously applied products or chemicals or solvents (especially mineral spirits).

APPLICATION

Apply a thick, even layer of stripper onto the coating being removed. An airless sprayer is the most effective means of application. Always start the sprayer pump at the lowest pressure setting and slowly build up the pressure until an adequate fan pattern has been generated. The minimum wet film thickness should be 15 mils (300 microns). The stripper must be applied 30%-50% thicker than the coating to be removed, i.e., 10 mils of coating requires 13-15 mils of stripper to be removed effectively. High pressure is neither required nor desired. High pressure and narrow tip sizes will break the stripper's emulsion and will reduce its effectiveness. When trying to build up films thicker than 30 mils (600 microns), it is advisable to build the stripper film in two separate applications. First apply a light coat of approximately 10 mils (250 microns), allow it to dwell for about 30 minutes and then build the rest of the stripper film thickness in the second application. Once applied, leave the stripper alone, as agitation slows down penetration. Brushing and rolling should be avoided because these methods produce a lower film build and inconsistent thickness of stripper.

DWELL TIME

The time required for penetration varies according to the type of paint, and the temperature. Most paint systems require 1 to 6 hours. Leave the stripper overnight for best results.

RE-APPLICATION

When there are multiple layers of paint, it is quite likely that there is poor inter coat adhesion between some layers. Premature lifting may occur at this interface. If this happens, remove the lifted layers and reapply the stripper. Do not allow the stripper to dry out. The stripper is designed to remain wet and effective over extended periods of time (up to 48 hours), but excessive sunshine, windy conditions or insufficient stripper thickness can cause early drying. If the stripper starts to dry, reapply a light coating and allow extra time for completion.

REMOVAL AND CLEANUP

Removal of lifted paint can be completed by scraper, squeegee, wet/dry vacuum suction system or by pressure wash. The stripped surface must be rinsed with water or denatured alcohol to remove all chemical residues before repainting. When rinsing, always work from the bottom to the top. Any water that runs down the substrate will deactivate the stripper and allow the paint to re-adhere, therefore never work from the top to the bottom. Collect lifted paint and dispose of in accordance with local government regulations. Do not collect and/or store removed paint and stripper waste residue in metal containers. Clean up spray equipment by running water or denatured alcohol through the equipment soon after the spraying has been completed.

SAFETY REQUIREMENTS

Proper safety procedures should be followed at all times while handling this product. Refer to the Material Safety Data Sheet for important health/safety information before use.

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PRODUCT DATA SHEET

Heavy Duty Paint Remover

(Industrial & Architectural Paint Stripper)

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Continued . . .

Limitations

Surface temperatures should be 65°to 95°F (20° to 32°C). The product performs effectively at lower temperatures (even at 32°F, O°C), but the dwell time increases.

PACKAGING AND COVERAGE

Packaging: 5-gallon pails.
The product is engineered for thick film build up on vertical and overhead surfaces. The desirable wet film thickness of stripper is approximately one and a half times the dry film thickness of the paint. Minimum wet film thickness should be 15 mils (300 microns). The stripper must be applied 30%-50% thicker than the coating to be removed, i.e.,10 mils of coating requires 13-15 mils of stripper to be removed effectively. Typically, coverage is approximately 40 to 90 sq. ft./ US gallon (1 to 2.2 sq. m/L)

TECHNICAL DATA

Appearance	White foamed emulsion
Specific Gravity	1
Boiling Point	99.3°C
Freezing Point	N/A
pH (direct reading)	2.6

DO NOT ALLOW PRODUCT TO FREEZE!

Cathedral Stone Products, Inc.
7866 Park Circle Drive
Hanover, MD 21076
410-782-9150
cathedralstone.com

Staining product specifications to lift to re-stain masonry/brownstone

Cathedral Stone Products, Inc.

GUIDELINE FOR WRITING SPECIFICATIONS

POTASSIUM SILICATE COATING & STAIN
(Division 09900 – Paints and Coatings)

1. GENERAL

1.1. SUMMARY OF WORK

A. For coating masonry, stucco and plaster surfaces.

1.2. SUBMITTAL

A. Submit the following items in time to prevent delay of the work and to allow adequate time for review and resubmittals, if needed; do not order materials or start work before receiving the written approval: Cathedral Stone Products, Inc., 7266 Park Circle Drive, Hanover, MD 21076.

B. Samples shall be submitted for color matching to the same address.

C. Samples of all specified materials and Safety Data Sheets (SDS) as appropriate.

D. Apply coating samples on the masonry to be coated. Do not apply samples to plywood or other non-masonry surfaces.

E. Written verification from the Contractor that all specified items will be used. Provide purchase orders, shipping tickets, receipts, etc. to prove that the specified materials were ordered and received.

1.3. QUALITY ASSURANCE/TEST REQUIREMENTS

A. Installer Qualifications: Company specializing in commercial painting and finishing with three years documented experience and approved by the coating manufacturer.

B. Coating Samples: Prepare a sample of each type of repair listed below. Prepare, install, and finish each sample according to the specifications. **All samples must be applied to masonry**. Prepare samples in an area where they will be exposed to the same conditions as will be present on the building during curing. **Allow samples to cure at least three days (or longer, if possible) before obtaining Owner's approval for color match. Samples should be viewed from a minimum distance of 18-22 feet.**

1.4. DELIVERY, STORAGE, AND HANDLING

A. Materials are to be delivered, stored, and handled to protect them from damage, extreme temperature, and moisture in accordance with Manufacturer's written instructions.

B. Deliver and store material in Manufacturer's original, unopened containers with the production date shown on the container or packaging.

C. Comply with the Manufacturer's written specifications and recommendations for mixing, application, and curing coatings.

1.5. PROTECTION/SITE CONDITIONS

A. Mock-ups: Cold Weather Requirements: Do not work in temperatures below 45° F, when the substrate is colder than 45° F, or when the temperature is expected to fall below 45° F for 48 hours after installation of the coating. Building an enclosure and heating areas to maintain this temperature

temperature may only be done with the written approval of the Specifier.

B. Hot Weather Requirements: Protect coating from direct sunlight and wind. Do not use or prepare coating when ambient air temperature is above 90° F.

C. Foul weather requirements: Do not work when precipitation is expected within 48 hours of installation. The coating needs adequate time to bond to the substrate. Moisture disrupts the curing process.

D. Ambient Conditions/Dew point: Do not install CSP Potassium Silicate Coatings when the temperature is expected to reach the dew point within 24 hours. The air temperature, relative humidity, dew point temperature and surface temperature of the substrate should be monitored to determine feasibility of application. For more information on calculating the dew point, resource Using Coatings Inspection Instruments by William D. Corbett © 2002 available at www.kta.com.

2. PRODUCTS

2.1. COATING MANUFACTURER

A.Manufactured by Cathedral Stone® Products, Inc., 7266 Park Circle Drive, Hanover, MD 27016; tel. (410) 782-9150; fax. (410) 782-9155; website: www.cathedralstone.com email: info@cathedralstone.com. Cathedral Stone Coatings are distributed in a two-component system. Mix component A (colored paint) with component B (Cathedral Stone Fixative) in the desired proportions before installation.

B. Substitutions: If proposed equal is submitted, lab test to establish equivalent performance levels. Use an independent testing laboratory, as determined by the Specifier, and paid for by the submitting party.

3. EXECUTION

3.1. WORKMANSHIP

A. Do not use any additives in the coating system.

3.2. PREPARATION FOR REPAIRS

A. Do not start work until surfaces to be coated are in proper condition to produce finished surfaces of uniform, satisfactory appearance.

B. Mildew, algae and fungus should be removed by methods recommended by the coating manufacturer.

C. Remove dust and loose particulate matter from surfaces to receive coatings immediately prior to coating application.

D. Protect all non-masonry surfaces such as: glass, wood, metal, etc. (CSP Potassium Silicate Coatings will permanently bond to glass if allowed to dry.)

E. Cracks and spalls must be repaired and cured prior to coating application.

F. To ensure even penetration of the coating, make sure any masonry repairs have been made with repair materials that are compatible to the substrate.

G. Remove any previous or existing coatings before application of new mineral coating.

H. CSP Potassium Silicate Coating & Stain is designed for vertical surfaces only. Horizontal surfaces, especially where water can pool, are not suitable for application.

I. Note**: Substrate must be completely dry before coating. Do not work when precipitation is expected within 48 hours of installation. The coating needs adequate time to bond to the substrate. Moisture disrupts the curing process.

J. Note**. Verify ambient conditions are conducive to application of coating (see section 1.5 Protection/Site Conditions).

3.3. MIXING COATING SYSTEM

A. It is recommended that proper eye protection be worn during mixing in case of accidental splashing. Mix component A (colored paint) with component B (Cathedral Stone Fixative) in the desired proportions before installation.

3.4. APPLICATION OF CSP POTASSIUM SILICATE COATING

A. Apply each coat of CSP Coating by brush, roller or spray making sure to work the material into the pores of the masonry. The coating is designed to be absorbed into the masonry so it should not be applied in thick layers. Brush application increases the absorption of the coating into the masonry. This feature results in a longer lasting, more durable coating.

B. Maintain a wet edge! “Cutting in” is not recommended, as the colors of the paint vary if a wet edge is not maintained. Be sure to work wet into wet and corner-to-corner.

C. "Box-mix" paint. "Boxing" is pouring the contents of one paint can into a large bucket and then pouring the contents of another paint can into the same bucket. This way, the paint is blended even though you may buy different "batches". Boxing is especially recommended for mixed colors.

D. Allow manufacturer’s specified drying time, and ensure correct coating adhesion, for each coat before applying the next coat.

E. Do not apply succeeding coat until Architect has approved previous coat; only Architect-approved coats will be considered in determining number of coats applied.

F. Where coating application abuts other materials or other coating color, terminate coating, making clean sharp termination line without coating overlap.

G. Where color changes occur between adjoining spaces, through framed openings that are of same color as adjoining surfaces, change color at outside stop corner nearest to face of closed door.

3.5. CLEAN UP

A. Place tools immediately in clean water when pausing work (15-30 minutes or more). Clean tools with clean water immediately after finishing work. Dried CSP Potassium Silicate Coatings are insoluble in water. CSP Coatings can be removed from non-porous surfaces with clean water while still wet.

END OF SECTION
03/2025

Cathedral Stone® Products, Inc.
7266 Park Circle Drive, Hanover, Maryland 21076

(800) 684-0901
FAX: (410) 782-9155
cathedralstone.com

Cathedral Stone Products, Inc.

Staining product data sheets to lift to re-stain masonry/brownstone

jahn MASONRY RESTORATION SYSTEMS

PRODUCT DATA SHEET

Potassium Silicate Coating / Liquid Silicate

Cathedral Stone Products has developed a Potassium Silicate Coating for use on all masonry (mineral surfaces) and over latex and acrylic coatings. If necessary, dilute the Potassium Silicate Coating with Liquid Silicate to adjust the translucency of the coating. Potassium Silicate Coating is highly durable and weather-resistant, making it well-suited for exterior applications. The key characteristic of Potassium Silicate Coating is its chemical bond with the substrate, such as masonry or concrete, which is fundamentally different from the way conventional paints adhere to surfaces. Unlike latex and acrylic coatings, Potassium Silicate Coating forms a molecular bond with the masonry substrate.

FEATURES AND BENEFITS

- Bonds to masonry
- Will never peel
- 92 perm (elastomeric/acrylic = 7-8 perm)
- Color fast
- Protects steel reinforcement
- Will not burn
- Not affected by freeze/thaw
- Water Repellent
- No VOCs

KEY CHARACTERISTICS

Weather Resistance: Potassium silicate paint is extremely resistant to weathering. When applied, it penetrates the substrate and reacts chemically to form a micro-crystalline structure that is both breathable and water-repellent. This unique property allows moisture vapor from inside the structure to escape while preventing water from penetrating the surface, reducing the risk of damage from freeze-thaw cycles and damp.

Fire Resistance: Potassium Silicate Coatings are non-combustible and fire retardant, meaning they do not ignite or support combustion, and they form a protective layer that insulates the substrate from heat and flame. They also produce zero flame spread and zero smoke, achieving a high fire rating.

UV Stability: The paint is highly UV stable, meaning it doesn't degrade or fade when exposed to sunlight over time. This stability is due to the inorganic nature of the silicate paints, which lack the organic compounds found in traditional paints that can break down under UV exposure.

Alkaline Nature: The alkaline nature of potassium silicate paint provides natural protection against mold, mildew, and fungi, which are less likely to grow on alkaline surfaces. This makes the paint especially useful in humid or wet climates.

Longevity: Potassium silicate paints are known for their long lifespan, often lasting several decades before needing a repaint. This longevity is attributed to their strong chemical bond with the substrate and resistance to environmental factors.

Limitations: While highly durable, potassium silicate paints are not suitable for all surfaces. They are primarily used on mineral substrates and may not adhere well or react properly with non-mineral surfaces like wood or metal. Additionally, pre-existing paints or treatments on the surface can interfere with the chemical bonding process necessary for the paint to adhere properly.

Viscosity: The viscosity is 1694 cP with a range of 1344 to 2044 cP depending on the pigment used.

APPLICATION PROCEDURES

Diluting Potassium Silicate Coating

Dilute the Potassium Silicate Coating with Liquid Silicate to adjust translucency of the coating.

Surface Preparation

Potassium Silicate Coating should only be used by experienced users. Potassium Silicate Coating can be applied to any sound masonry or plaster surface. (Do not use on wood, plastic, or apply over oil or gloss coating.) The surface must be clean, solid, dry and free from efflorescence. The surface must be completely dry at the time of application. Potassium Silicate Coating is designed for vertical surfaces only. Horizontal surfaces, especially where water can pool, are not suitable for application. Cracks and spalls must be repaired and cured before coating. Cracks can be filled with Jahn M30 or M40 mortars. To ensure even penetration of the coating, make sure repairs use materials that are compatible to the substrate. Temperature (ambient and substrate) must be at least 45° F (8° C) and below 90° F (32° C). Do not apply when precipitation is expected within 48 hours of application. Do not apply when the temperature is expected to reach the dew point within 24 hours. Protect adjoining surfaces from splashes. Potassium Silicate Coating can only be removed while wet. Once Potassium Silicate Coating dries it CANNOT be removed.

Mixing

Do not mix Potassium Silicate Coating with water. If CSP Coating needs to be thinned out, add Cathedral Stone's Liquid Silicate until the desired consistency is reached. Mix Potassium Silicate Coating with a drill prior to use. When installing multiple units of coating, be sure to "box-mix". ("Box-mixing" is the blending of coating by pouring alternately between two containers.) This will help alleviate minor color inconsistencies between batches.

Substrate absorption definition: The absorption must not be too high or too low for the coating to be applied correctly. Absorption can be tested by applying small amounts of water (drops) on the vertical surface to be coated.

- Low absorption can be defined as water laying or beading on the surface of the substrate (masonry must be etched in cases of low absorption).
- High absorption can be defined as water being absorbed so quickly that all traces of water seem to disappear rapidly.
- Normal absorption can be defined as the water absorbing into the substrate without beading on the surface.

Application

Protect all areas not to be coated prior to application. Substrate must be completely dry before coating. Do not work when precipitation is expected within 48 hours of installation. The coating needs adequate time to bond to the substrate and moisture disrupts this curing process. Apply liberally and spread well, filling all pores and cracks. Work wet into wet. Potassium Silicate Coating should be applied with a short bristle brush. Brushing increases the absorption of the coating into the masonry, resulting in a longer lasting, more durable coating. Spraying and rolling the coating is possible. Allow the first coat to dry of at least 12 hours. Apply a second coat in the same fashion; work wet into wet.

Important Points

- Make sure the substrate is completely dry and there is no expected dew
- Protect coatings from all forms of moisture: rain, dew, snow, etc. for 48 hours.
- Temperature must be at least 45°F (8°C)
- Protect any surfaces not to be coated
- Do not add water to Potassium Silicate Coating
- Always work wet into wet

Clean Up

Place tools immediately in clean water when pausing work (15-30 minutes or more). Clean tools with clean water immediately after finishing work. Dried Potassium Silicate Coating is insoluble in water. Potassium Silicate Coating can be removed from non-porous surfaces with clean water while still wet.

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Product Data Sheet
Potassium Silicate Coating
Feb 2024, version 03.0

PRODUCT DATA SHEET

Potassium Silicate Coating / Liquid Silicate

Cathedral Stone Products has developed a Potassium Silicate Coating for use on all masonry (mineral surfaces) and over latex and acrylic coatings. If necessary, dilute the Potassium Silicate Coating with Liquid Silicate to adjust the translucency of the coating. Potassium Silicate Coating is highly durable and weather-resistant, making it well-suited for exterior applications. The key characteristic of Potassium Silicate Coating is its chemical bond with the substrate, such as masonry or concrete, which is fundamentally different from the way conventional paints adhere to surfaces. Unlike latex and acrylic coatings, Potassium Silicate Coating forms a molecular bond with the masonry substrate.

PACKAGING

Consists of 25 kg of Potassium Silicate Coating in a 6-gallon plastic pail.

COVERAGE

Coverage depends on the absorption and structure of the substrate. Determine coverage with a trial application.

One unit of Cathedral Stone's Potassium Silicate Coating (approx. 5.0 gallons) will cover approx. 1200 sq. ft. (6 to 7 mils thick) for a single coat and approx. 750 sq. ft. (10 to 11 mils thick) when two coats are applied. Coverage rates will generally be higher with darker colored coatings.

SAFETY INFORMATION

Eye protection should be worn during mixing to protect from splashing. Avoid contact with skin and mucous membranes. Work in well ventilated areas.

STORAGE AND SHELF LIFE

Store in a dry area, away from direct sunlight. Storage conditions should be in the range of 40° - 80° F with low to average humidity. Average shelf life is six months in original, unopened packaging.

WARNING

Not for internal consumption. Keep out of the reach of children and animals.