MOXIE SHIELD 1300

BRICK SEALER

FREQUENTLY ASKED QUESTIONS

Architects · Engineers · Contractors · Producers · Owners · Specifiers

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PRODUCT OVERVIEW

Moxie Shield 1300 Brick Sealer

Moxie Shield 1300 Brick Sealer is a professional-grade penetrating surface sealer formulated for natural brick and ornamental masonry. Ideal for historic preservation, exterior facades, and decorative installations requiring long-term water protection on vertical, above-grade applications.

Moxie Shield 1300 Brick Sealer is applied to the surface of brick and mortar and reacts to form a silicone resin at the surface of the substrate. This treatment creates a breathable, water-repellent barrier that reduces liquid water absorption while allowing moisture vapour transmission. Designed for exposed environments, it helps limit efflorescence, alkali attack, freeze-thaw deterioration, and surface staining without altering the masonry's natural appearance.

50+	**Up to 3/4”**	**VOC = 0**	**ASTM**
Years in the field	Penetration depth	EPA 24 certified	C666 / D3960

ARCHITECTS

Questions for Architects

Substrate compatibility, facade aesthetics, historic preservation, and assembly-level moisture strategy.

ARCHITECTS

What brick and masonry surface types is Moxie Shield 1300 Brick Sealer formulated for?

Moxie Shield 1300 Brick Sealer is formulated for the full range of natural and manufactured brick surfaces — traditional fired brick, handmade and reclaimed brick, ornamental brickwork, brick veneer, and hardscape masonry including brick walls and paving. It is suitable for interior and exterior applications, above grade, across the full range of brick densities from hard-fired new units to porous, weathered historic brick.

ARCHITECTS

Will it change the appearance or color of the brick?

No. Moxie Shield 1300 Brick Sealer does not alter the natural color, texture, or surface character of brick or mortar. The treated surface looks identical to the untreated surface — protection is invisible by design. This is essential for historically sensitive applications, decorative brickwork, and architecturally exposed facades.

ARCHITECTS

Is it appropriate for historic preservation and restoration work?

Yes — and historic brick is among its most important applications. Historic fired brick is typically softer, more porous, and more vulnerable to moisture damage than modern manufactured brick. Moxie Shield 1300 Brick Sealer's breathable chemistry protects the substrate without trapping moisture and without altering appearance.

ARCHITECTS

What vertical assembly types is it designed for?

Moxie Shield 1300 Brick Sealer is designed for vertical, above-grade applications — exterior brick facades, cladding, ornamental brickwork, columns, and exposed retaining walls with brick face. It is also specified for hardscape brick walls and paving in exposed environments. For below-grade applications or horizontal concrete slabs with brick pavers, consult Moxie's technical team for appropriate product selection.

ENGINEERS

Questions for Engineers

Chemistry, penetration depth, durability testing, and substrate-specific performance.

ENGINEERS

What is the mechanism of action — how does the silicone resin form and bond within brick?

Moxie Shield 1300 Brick Sealer is a water-based inorganic sealer. When applied to brick or mortar, it penetrates into the surface and undergoes a condensation reaction with moisture and the silicate minerals within the substrate, converting from liquid to a hard silicone resin within 24 hours. This resin bonds within the pore walls at the molecular level – not only on the surface – creating a hydrophobic internal zone that repels liquid water while leaving vapour transmission pathways intact. The inorganic, zero-VOC chemistry outperforms silane/siloxane sealers formulated with alcohol or petroleum solvents in documented testing.

ENGINEERS

What penetration depth is achieved, and how does it vary by brick type?

Moxie Shield 1300 Brick Sealer achieves a water-repellent zone up to 3/4 inch deep in porous brick and mortar, ranging down to 1/4 inch in dense, fine-pored brick masonry products. Coverage rates reflect this variation: 75 to 100 sq ft per gallon for hard-fired new brick, and 50 to 75 sq ft per gallon for porous, weathered brick.

ENGINEERS

What ASTM standards compliance has been tested and documented?

Moxie Shield 1300 Brick Sealer is tested and compliant with ASTM C666 (freeze-thaw resistance) and ASTM D3960 (VOC content). It meets EPA USDA VOC = 0 and is USDA approved for use in food processing areas. It also complies with OSHA 29 CFR 1910. All compliance documentation is available upon request.

ENGINEERS

How does it address efflorescence, alkali attack, and chloride penetration in brick?

By eliminating liquid water ingress, Moxie Shield 1300 Brick Sealer removes the transport mechanism for efflorescence salts. The same hydrophobic barrier limits alkali attack and internal chloride penetration — significant for brick facades in coastal environments and structures where de-icing salts are in play.

ENGINEERS

What freeze-thaw performance data exists, and why is it particularly relevant for brick?

Moxie Shield 1300 Brick Sealer is ASTM C666 tested for freeze-thaw resistance. Brick — particularly older, more porous units — is highly susceptible to freeze-thaw spalling because absorbed water expands approximately 9% upon freezing, fracturing the substrate from within. By significantly reducing liquid water absorption, Moxie Shield 1300 Brick Sealer limits the volume of water available to freeze, dramatically reducing flaking, scaling, and spalling.

CONTRACTORS & APPLICATORS

Questions for Contractors and Applicators

Surface prep, mortar age requirements, two-coat method, coverage, and critical warnings.

CONTRACTORS & APPLICATORS

What is the mortar age requirement, and what happens if it isn't met?

New brick mortar must age a minimum of 30 days before application of Moxie Shield 1300 Brick Sealer. Additionally, new mortar residue must be pressure washed from the brick surface before treatment. Moxie Shield 1300 Brick Sealer will react with any mortar residue remaining on the surface and produce a white surface — a permanent, visible defect. On new construction, confirm mortar cure and clean the surface thoroughly before scheduling application.

CONTRACTORS & APPLICATORS

What is the correct application method and what equipment is required?

Apply using an airless or low-pressure (MESTO type) sprayer for best results. A brush or roller may also be used. Do not use compressed air — the product will foam. Saturate the surface thoroughly, allowing a rundown of 12 inches during application. Work in 5-foot segments on large areas. Coverage rate is 50 to 100 sq ft per gallon for two coats — plan accordingly for hard-fired new brick (75 to 100 sq ft) vs. porous weathered brick (50 to 75 sq ft).

CONTRACTORS & APPLICATORS

What is the wet-on-wet requirement and why is it critical?

The second coat must be applied while the first coat is still damp. Do not allow the first coat to dry before applying the second — if it does, the surface will white over. Work in sections of no more than 50 sq ft at a time on porous substrates to maintain proper timing.

CONTRACTORS & APPLICATORS

What surface preparation is required, and what conditions prevent application?

All cracks and construction faults must be repaired before treatment. The surface must be thoroughly cleaned and power washed — no detergents. Allow a minimum of 48 to 72 hours drying time.
Do not apply to moist or wet surfaces, in rain, in direct sunlight, in windy conditions, or when ambient temperatures are below 50 degrees F / 10 degrees C.

CONTRACTORS & APPLICATORS

Are there adjacent materials or surfaces that must be protected during application?

Yes. Due to the high pH of the formulation, Moxie Shield 1300 Brick Sealer must not come in contact with glass, porcelain, ceramic tile, aluminum, zinc, or galvanized steel. Contact will permanently etch or erode these materials. Any accidental contact must be rinsed immediately with running water or removed with a damp cloth. The product must not contact plant life or leather.

Questions for Brick Producers and Manufacturers

Factory application, market differentiation, packaging, and supply.

BRICK PRODUCERS AND MANUFACTURERS

Can Moxie Shield 1300 Brick Sealer be applied at the manufacturing facility rather than in the field?

Factory pre-application is viable for brick and ornamental masonry producers who want to offer pre-treated, moisture-protected units as a product differentiation. Factory application provides controlled substrate conditions, consistent coverage rates, and eliminates the mortar residue and cure timing variables that complicate field application on new construction. Contact Moxie's technical team to discuss factory application parameters, flash times, and supply logistics.

BRICK PRODUCERS AND MANUFACTURERS

What market segments represent the strongest opportunity for pre-treated brick products?

The documented application range spans natural and manufactured brick, ornamental brickwork, fire and police stations, churches and religious buildings, historical preservation projects, hospitality and hotels, K-12 and university facilities, high-end residential, hardscape walls and paving, municipal buildings, and retail shopping centers.

BRICK PRODUCERS AND MANUFACTURERS

How does pre-treatment affect brick unit consistency and compatibility with mortar systems?

Because Moxie Shield 1300 Brick Sealer is a surface treatment that does not alter surface appearance, it introduces no visible variation between treated and untreated units. However, the treated hydrophobic surface will affect mortar bond at the unit faces — coordinate with mortar system suppliers and confirm compatibility before implementing a factory pre-treatment program.

BRICK PRODUCERS AND MANUFACTURERS

What packaging formats are available for production-scale supply?

Moxie Shield 1300 Brick Sealer is available in 1-gallon pails, 5-gallon pails, 55-gallon drums, and 275-gallon totes. Contact Moxie's sales team at (844) 845-1975 or sales@moxieinternational.com to discuss volume pricing, supply logistics, and production-scale onboarding.

Questions for Owners

Why brick fails, what protection prevents, and what 50 years of performance means.

OWNERS

Why does brick need to be sealed, and what happens when it isn't?

Brick is porous by nature. Unsealed, it absorbs rainwater, wind-driven moisture, and atmospheric contaminants that progressively damage both the brick and the mortar joints from within. The visible consequences — efflorescence, surface staining, biological growth, freeze-thaw spalling, and mortar deterioration — are early indicators of deeper moisture damage that accelerates over time. For historic or architecturally significant brick, remediation is expensive and often imperfect. Preventive treatment costs a fraction of what restoration does.

OWNERS

What does Moxie Shield 1300 Brick Sealer specifically protect against?

It creates a breathable, penetrating water-repellent barrier up to 3/4 inch deep within the brick and mortar that resists liquid water absorption — including wind-driven rain — while allowing the wall assembly to breathe. Specifically, it limits efflorescence, surface staining, mildew and fungus growth, lichen and moss accumulation, freeze-thaw flaking and spalling, and internal chloride penetration.

OWNERS

How long has this product been proven in the field?

Moxie Shield 1300 Brick Sealer has over 50 years of documented field performance on building and construction materials — longer than any comparable product in this category. That history spans brick facades, historic preservation projects, civic and institutional buildings, coastal properties, and cold-climate structures where freeze-thaw durability is critical. References are available upon request.

OWNERS

Will treatment change how my building looks?

No. Moxie Shield 1300 Brick Sealer is completely invisible after application. The brick looks exactly as it did before — same color, same texture, same character. Over time, treated masonry retains its original appearance significantly longer, with less staining, less biological growth, and reduced weathering.

SPECIFIERS

Questions for Specifiers

Specification language, compliance documentation, and substitution resistance for brick water repellent treatment.

SPECIFIERS

Which CSI division and section does Moxie Shield 1300 Brick Sealer fall under?

Moxie Shield 1300 Brick Sealer is specified under Division 04 — Masonry, typically within Section 04 01 00 (Maintenance of Masonry) or Section 04 21 00 (Clay Unit Masonry) for new construction. For restoration projects it may also appear within Division 07 — Thermal and Moisture Protection sections covering water repellents. Moxie's technical team can provide application-specific CSI specification language.

SPECIFIERS

What ASTM and regulatory compliance documentation is available for submittals?

Moxie Shield 1300 Brick Sealer has documented compliance with ASTM C666 and ASTM D3960. It meets EPA USDA VOC = 0, is USDA approved for food processing areas, and complies with OSHA 29 CFR 1910. All documentation is available upon request from Moxie's technical team.

SPECIFIERS

How do I write a substitution-resistant specification for this product?

Specify the concurrent performance thresholds— breathable, inorganic, zero VOC, ASTM C666 compliant, and visually transparent. Additionally, require a minimum of 50 years of documented field performance in brick applications — a threshold Moxie Shield 1300 Brick Sealer exceeds with over 50 years on record. No comparable product has an equivalent performance history.

SPECIFIERS

Is Moxie Shield 1300 Brick Sealer appropriate for LEED projects?

Yes. Moxie Shield 1300 Brick Sealer qualifies for LEED credits through its zero VOC formulation, non-toxic and non-hazardous inorganic chemistry, and contribution to building durability and extended masonry lifecycle. LEED documentation is available to support your submittal package.

SPECIFIERS

Are there project references and prior specification records available?

Yes. With over 50 years of documented field use spanning historic preservation, civic, institutional, religious, hospitality, residential, and commercial projects, Moxie Shield 1300 Brick Sealer has one of the longest reference lists in its category. Contact Moxie's sales team at (844) 845-1975 or sales@moxieinternational.com.

SPECIFICATION SUPPORT

Documents available on request

Product Data Sheet
Full technical specifications

Safety Data Sheet (SDS)
Handling, pH, and compatibility warnings

ASTM C666 Compliance
Freeze-thaw resistance testing

ASTM D3960 / VOC Documentation
EPA VOC = 0 certification

USDA Food Processing Approval
Non-toxic, non-hazardous certification

LEED Documentation
Credit qualification and calculation sheet

Application Procedures Sheet
Two-coat wet-on-wet method and mortar age guide

Coverage Rate Guide
Hard-fired vs. porous brick by porosity

Surface Compatibility Warning Sheet
Materials to protect during application

CSI Specification Language
Div. 04 and Div. 07 formats

Project References
50+ years across historic, civic, commercial, and residential