



MOXIE SHIELD 1200

STUCCO & PLASTER SEALER

FREQUENTLY ASKED QUESTIONS

Architects · Engineers · Contractors · Producers · Owners · Specifiers



What's Inside

Architects

- Stucco and plaster surface compatibility
- Appearance preservation and decorative finishes
- Historical building restoration suitability
- Wind-driven rain performance
- Coastal and high-humidity environments

Engineers

- Mechanism of action — silicon resin formation
- Penetration depth vs. silane/siloxane sealers
- ASTM compliance — C666, D3960
- Efflorescence, alkali attack, and chloride penetration
- Freeze-thaw durability characteristics

Contractors & Applicators

- Application method and equipment
- Critical wet-on-wet two-coat requirement
- Surface preparation and drying time
- Adjacent material protection and compatibility warnings
- Storage, handling, and shelf life

Stucco Producers & Specialty Applicators

- Relationship to Moxie Shield 1800 for new construction
- Market segments and building types
- Compatibility with coating and finish programs
- Packaging formats and supply

Owners

- Why stucco fails without treatment
- What Moxie Shield 1200 protects against
- Existing buildings vs. new construction
- Appearance after treatment
- Manufacturer guarantee

Specifiers

- CSI division and section placement
- ASTM and regulatory compliance documentation
- Performance-based specification language
- Substitution resistance — what alternatives fail
- LEED credit qualification
- Project references and prior specifications

PRODUCT OVERVIEW

Moxie Shield 1200 Stucco & Plaster Sealer

Moxie Shield 1200 Stucco & Plaster Sealer penetrates porous cementitious substrates and reacts to form a hard silicone resin within the material. This internal treatment creates a breathable, water-repellent barrier that reduces liquid water absorption while allowing moisture vapour transmission. It delivers vapourproofing and waterproofing protection suitable for wind-driven rain and exposed vertical facades.

The water-based, zero-VOC formulation helps reduce efflorescence, alkali attack, surface staining, and freeze-thaw deterioration while preserving the original appearance of stucco and plaster. Designed for above-grade applications, Moxie Shield 1200 supports long-term durability without reliance on surface films that can crack or peel.

50+

Years in the field

Up to 3/4"

Penetration depth

VOC = 0

EPA 24 certified

ASTM

C156 / C666 / D3960

ARCHITECTS

Questions for Architects

Material compatibility, facade performance, historical applications, and design intent.

ARCHITECTS

What stucco and plaster surface types is Moxie Shield 1200 formulated for?

Moxie Shield 1200 is formulated for all types of stucco and plaster surfaces — traditional three-coat and one-coat stucco systems, EIFS base coats, ornamental stucco, and cementitious plaster. It is suitable for both interior and exterior applications, above grade, and performs across the full range of stucco finish textures from open, porous finishes to dense fine-grained masonry products. Treatment penetration depth ranges from up to 3/4 inch for porous stucco and mortar down to 1/4 inch for dense, fine-pored substrates.

ARCHITECTS

Will it alter the appearance, color, or texture of the stucco finish?

No. Moxie Shield 1200 is a penetrating treatment, not a surface coating or film. It does not change the color, sheen, or texture of the stucco finish. The treated surface is visually identical to the untreated surface. This is a critical performance point for historically sensitive work, decorative finishes, and architecturally exposed facades where finish specification is non-negotiable.

ARCHITECTS

Is it appropriate for historical building restoration?

Yes — and it is particularly well-suited for it. Historical stucco and plaster assemblies are often irreplaceable, and their long-term survival depends on moisture management without surface alteration. Moxie Shield 1200's penetrating chemistry preserves original material appearance, is non-toxic and non-hazardous, and provides breathable protection that allows trapped moisture to exit the substrate. It has been successfully used in historical restoration applications across civic, religious, and institutional building types.

ARCHITECTS

How does it perform against wind-driven rain?

Moxie Shield 1200 is specifically rated for wind-driven rain conditions. The treated substrate creates a water-repellent zone up to 3/4 inch deep that resists lateral moisture penetration under pressure — the primary failure mode in exposed coastal and high-rise applications. This depth of protection significantly outperforms surface-only treatments that rely on intact film continuity and are vulnerable to cracking, peeling, and joint failure under dynamic wind loads.

ARCHITECTS

Can it be used in coastal or high-humidity environments?

Yes. Moxie Shield 1200 is specifically listed for coastal area use and has a recommended application profile for marine-adjacent and high-humidity environments. It reduces internal chloride penetration, resists biological surface growth (mildew, fungus, lichen, moss), and maintains surface integrity under sustained moisture exposure. For new construction in these environments, Moxie also recommends considering Moxie Shield 1800 Admixture added to the stucco mix at the batch stage for integral protection from the ground up.

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 within the substrate?

Moxie Shield 1200 is a water-based inorganic sealer. When applied to stucco or plaster, it penetrates the pore structure and undergoes a chemical reaction with moisture and the cementitious substrate to convert from liquid to a hard silicone resin within 24 hours. This resin bonds within the pore walls rather than on the surface, creating a hydrophobic internal zone that repels liquid water while leaving vapour transmission pathways intact. The chemistry is inorganic and zero VOC — no alcohol or petroleum solvents are involved, which distinguishes its performance profile from conventional silane/siloxane sealers.

ENGINEERS

What penetration depth is achieved, and how does it compare to silane/siloxane sealers?

Moxie Shield 1200 achieves a water-repellent zone up to 3/4 inch deep in porous stucco and mortar, ranging to 1/4 inch in dense, fine-pored substrates. Internal test data shows superior performance over silane/siloxane sealers formulated with alcohol or petroleum solvents. This depth of penetration is a significant durability advantage — surface wear, UV degradation, and carbonation fronts must travel further before reaching the protected zone, extending effective service life.

ENGINEERS

What ASTM standards compliance has been tested?

Moxie Shield 1200 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 — a regulatory benchmark that reflects the non-toxic, non-hazardous chemistry of the formulation. It also complies with OSHA 29 CFR 1910.

ENGINEERS

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

By eliminating the liquid water transport pathway within the stucco substrate, Moxie Shield 1200 removes the primary mechanism for all three. Efflorescence requires migrating water to carry soluble salts to the surface — treated substrates dramatically reduce this migration. Alkali attack depends on moisture activation of reactive compounds within the cementitious matrix — reduced moisture ingress limits this reaction. Internal chloride reduction is documented and is particularly significant for stucco over steel-framed or reinforced substrates in coastal and de-icing salt environments.

ENGINEERS

What are its freeze-thaw durability characteristics?

Moxie Shield 1200 is ASTM C666 tested for freeze-thaw resistance. By significantly reducing liquid water absorption within the stucco, it limits the volume of water available to freeze within the pore structure — the primary cause of flaking, scaling, and spalling in freeze-thaw cycling environments. The treated substrate also benefits from the silicone resin's resistance to thermal cycling, maintaining its hydrophobic properties across repeated freeze-thaw events.

Questions for Contractors and Applicators

Surface prep, two-coat application method, critical do's and don'ts, and coverage.

& 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. Critically: do not use compressed air for application — the product will foam. Saturate the surface thoroughly, allowing a rundown of 12 inches during application to confirm adequate coverage. For large areas, work in 5-foot segments to maintain wet-on-wet timing between coats. Coverage rate is 50 to 100 sq ft per gallon for two coats, depending on substrate porosity.

CONTRACTORS & APPLICATORS

What is the wet-on-wet requirement, and why does it matter?

This is the single most important application detail. 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 likely white over, similar to a whitewashed finish. This is not a cosmetic preference; the wet-on-wet method ensures the second coat penetrates into the substrate alongside the first rather than being blocked by a partially cured surface layer. Work in manageable sections — no more than 50 sq ft at a time — to maintain proper timing.

CONTRACTORS & APPLICATORS

What surface preparation is required before application?

All construction faults and cracks must be repaired before treatment. The surface must be thoroughly cleaned and power washed — do not use detergents. Allow a minimum of 48 to 72 hours of drying time after cleaning or rainfall before application. The substrate must be clean and dry at the time of application. Do not apply to damp or moist 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 surfaces or materials that Moxie Shield 1200 must not contact?

Yes — this is critical for job site management. Due to the high pH of the formulation, Moxie Shield 1200 must not come in contact with glass, porcelain, ceramic tile, aluminum, zinc, or galvanized steel. Contact with these materials will permanently etch or erode the surface. Any accidental contact must be rinsed with running water or removed with a damp cloth immediately. The product must also not contact plant life or leather. Mask and protect adjacent materials before application.

CONTRACTORS & APPLICATORS

What are the storage and handling requirements?

Store in clean steel or plastic containers, sealed, above 40 degrees F / 4.5 degrees C. Do not allow the product to freeze — this is critical; freezing will compromise the formulation. Keep separate from acids, reactive metals, and ammonium salts. The product has indefinite shelf life when stored correctly. Avoid contact with eyes, skin, and clothing during application; wear masks and gloves. The formulation is non-toxic, non-flammable, and not regulated as hazardous for transportation under DOT.

Questions for Stucco Producers and Specialty Applicators

Integration with new construction stucco systems, product positioning, and supply.

STUCCO PRODUCERS AND SPECIALTY APPLICATORS

How does Moxie Shield 1200 relate to Moxie Shield 1800 for new construction stucco applications?

The two products address different points in the construction sequence. For new construction, Moxie recommends Moxie Shield 1800 Admixture added directly to the stucco mix at the batch stage — providing integral protection throughout the full thickness of the applied stucco from day one. Moxie Shield 1200 is the post-application solution: a penetrating sealer for existing stucco surfaces, remediation of unprotected new construction, or any situation where integral treatment at the mix stage was not used. The two products are complementary and can be used together for maximum protection on critical applications.

STUCCO PRODUCERS AND SPECIALTY APPLICATORS

What building types and market segments is Moxie Shield 1200 specified for?

The documented application range is broad: single and multi-family residential, coastal properties, fire and police stations, hospitals and healthcare facilities, hospitality and hotels, K-12 education and universities, high-rise and office towers, municipal buildings, retail centers, warehouse and industrial facilities, and historical building restoration. This breadth reflects the universal need for stucco moisture protection across climate zones and building types — stucco is the predominant exterior finish in most Western markets, and virtually every aging stucco building is a candidate for treatment.

STUCCO PRODUCERS AND SPECIALTY APPLICATORS

Is Moxie Shield 1200 compatible with standard stucco finish systems and coating programs?

Yes. Because it is a penetrating treatment that does not alter surface appearance or create a surface film, Moxie Shield 1200 does not interfere with subsequent coating or finish programs. It can be applied as a standalone treatment or as a preparatory step that extends the performance life of topical coatings by reducing the moisture cycling that causes paint and coating failures in stucco substrates.

STUCCO PRODUCERS AND SPECIALTY APPLICATORS

What packaging formats are available for production-scale or project-scale supply?

Moxie Shield 1200 is available in 1-gallon pails, 5-gallon pails, 55-gallon drums, and 275-gallon totes — covering project needs from small residential jobs to large commercial contracts. Contact the Moxie sales team at (844) 845-1975 or sales@moxieinternational.com to discuss volume pricing and logistics.

Questions for Owners

Why stucco fails, what protection costs vs. remediation, and what to expect.

OWNERS

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

Stucco is inherently porous. Unsealed, it absorbs rainwater, wind-driven moisture, and atmospheric contaminants that progressively damage the material and the wall assembly behind it. The visible consequences — efflorescence streaking, surface staining, biological growth, freeze-thaw spalling, and paint or coating failure — are early warnings of deeper moisture damage that is expensive to remediate. Left untreated, stucco moisture infiltration can reach the substrate, framing, and insulation, creating mold, corrosion, and structural repair costs that dwarf the cost of preventive treatment.

OWNERS

What does Moxie Shield 1200 actually protect against?

It creates a penetrating water-repellent barrier up to 3/4 inch deep within the stucco that resists liquid water absorption — including wind-driven rain — while allowing the wall to breathe. This limits efflorescence and alkali attack, surface staining from rust, clay, and waterborne contaminants, mildew and fungus growth, lichen and moss accumulation, freeze-thaw flaking and spalling, and the general weathering that degrades stucco appearance and integrity over time. It maintains the original color and cleanliness of the stucco surface, reducing maintenance and cleaning costs.

OWNERS

Is this the right product for an existing building, or only for new construction?

Moxie Shield 1200 is designed specifically for existing stucco surfaces. For owners of older buildings — whether residential, commercial, or institutional — it is the primary remediation and protection tool. For new construction where integral protection at the mix stage was not specified, it also provides effective post-application protection. It is suitable for interior and exterior applications, decorative finishes, and historical restoration work where the original surface appearance must be preserved.

OWNERS

Will treatment change how my building looks?

No. Moxie Shield 1200 is completely invisible after application. The stucco looks exactly as it did before treatment — same color, same texture, same finish. The functional change is that water beads and runs off the surface rather than being absorbed. Over time, the building maintains its original appearance significantly longer than untreated stucco, with fewer stains, less biological growth, and reduced weathering.

OWNERS

What does the manufacturer guarantee?

Moxie Shield 1200 is guaranteed to perform and be manufactured per the specifications contained in Moxie Engineering documentation. With over 40 years of proven field performance on building and construction materials, that guarantee is backed by a track record, not just a warranty clause. Contact the sales team at (844) 845-1975 or sales@moxieinternational.com to discuss project-specific warranty terms.

Questions for Specifiers

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

SPECIFIERS

Which CSI division and section does Moxie Shield 1200 fall under?

Moxie Shield 1200 is specified under Division 09 — Finishes, within sections covering stucco and plaster systems, or under Division 07 — Thermal and Moisture Protection, within sections covering water repellents and penetrating sealers. For restoration projects, it may also appear under Division 04 — Masonry. Moxie's technical team can provide application-specific CSI specification language for your project type and division structure.

SPECIFIERS

What ASTM and regulatory compliance documentation is available for submittals?

Moxie Shield 1200 has documented compliance with ASTM C666 (freeze-thaw resistance), and ASTM D3960 (VOC content). It meets EPA USDA VOC = 0, is USDA approved for use in food processing areas, and complies with OSHA 29 CFR 1910. This compliance profile supports submittals for both standard commercial projects and those with sustainability or occupant health requirements. All documentation is available upon request.

SPECIFIERS

How do I write a performance-based specification that excludes film-forming sealers?

Specify: penetrating water repellent chemistry forming a silicon resin bond within the substrate (not a surface film), minimum penetration depth of 1/2 inch in standard stucco substrates, zero VOC formulation per ASTM D3960, breathable (vapour-open) treatment preserving moisture vapour transmission, ASTM C666 freeze-thaw compliance, and no visible alteration of surface color or texture. Film-forming acrylic and elastomeric sealers — the most common substitution attempts — create surface films that crack, peel, and trap moisture, and cannot meet these criteria. Moxie Shield 1200 meets all of them.

SPECIFIERS

What makes this substitution-resistant, and what alternatives would fail the specification?

The combination of zero VOC inorganic chemistry, documented penetration depth, ASTM C666 freeze-thaw compliance, and breathable (non-film-forming) performance is a set of concurrent requirements that acrylic, elastomeric, and solvent-based silane/siloxane sealers cannot collectively meet. Surface coatings fail on the breathability and penetration depth criteria. Solvent-based sealers fail on VOC and inorganic chemistry. Moxie Shield 1200 is among a narrow class of products that satisfy all criteria simultaneously, and the only one with 40 years of documented field performance in stucco applications.

SPECIFIERS

Is Moxie Shield 1200 appropriate to specify for LEED projects?

Yes. Moxie Shield 1200 qualifies for LEED credits through its zero VOC formulation (EPA 24 VOC = 0), non-toxic and non-hazardous chemistry, and its contribution to building durability and extended lifecycle — all relevant to Materials and Resources and Indoor Environmental Quality credit categories. LEED documentation is available to support your submittal package.

SPECIFIERS

Are there project references and prior specification records available?

Yes. Moxie Shield 1200 has over 40 years of documented field use across residential, commercial, institutional, hospitality, healthcare, municipal, and historical restoration project types. References from architects, specifiers, and contractors are available upon request. Contact Moxie's sales team at (844) 845-1975 or sales@moxieinternational.com.

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 guide

Coverage Rate Guide

By substrate type and porosity

Surface Compatibility Warning Sheet

Materials to protect during application

CSI Specification Language

Div. 07 and Div. 09 formats

Project References

Architects, specifiers, contractors, restoration specialists