



Duraseal Plus™

**Breathable VOC Compliant Treatment for
Stone, Concrete, and Masonry Surfaces**

Manufactured by

**Enviroseal LLC
Farmers Market Rd., # 18
Fort Pierce, FL, 34982-USA
+1-772-323-5400
info@Enviroseal.com**

What is Duraseal Plus™?

- **Duraseal Plus™ is a VOC Compliant** penetrating silane and siloxane sealer used as a treatment for impregnating concrete and masonry surfaces. Duraseal Plus™ acts as a water repellent that reduces water and chloride intrusion to protect stone, concrete, and masonry surfaces from damage. It reduces capillary absorption and has very low odor making it ideal for interior and exterior applications. It penetrates deep into the pores for long term protection with just one application.
- **Duraseal Plus™ is easy to use and eco-friendly.** With <6 grams/liter VOC, Duraseal Plus™ is eco-friendly and allows vapor transmission making the substrate breathable. It is nonflammable, non-yellowing, and will not change the surface appearance or texture.
- **Duraseal Plus™** is excellent for use on precast and poured concrete, limestone, travertine, paver brick, grout, stone, and concrete wearing surfaces.



Water is the enemy

Concrete and stone have a low surface energy and water has a high surface energy. High surface energy liquids like water tend to “wet” low surface energy materials and cover the surface filling pores cracks.

Duraseal Plus™ works by changing the surface energy to resist water from being trapped within the substrate.

If water doesn't “wet” the surface, dirt and contaminants won't adsorb into the substrate keeping the surface clean and resisting structural failure.



Damage to structural materials from water penetration

Duraseal Plus™ will help prevent

- *Corrosion of reinforcement steel bars in concrete*
- *Freeze thaw damage (spalling, cracking)*
- *Efflorescence*
- *Micro-organism growth*
- *Loss of thermal efficiency*
- *Dissolution of binder*
- *Dimensional instability (composites)*
- *Chemical attacks (acid, sulfate attack)*

Concrete is a porous material and water permeates into it. Water adsorption will decrease the durability and life cycle of concrete if not treated.



Primary causes of reinforced concrete failure

The two most common causes of failure are carbonation and chloride contamination of the concrete. Both lead to corrosion of the embedded steel reinforcement and as the steel corrodes it expands and exerts pressure on the concrete, eventually the concrete cracks and spalls



Corrosion of Steel Reinforcement

Corrosion of reinforcing steel is the leading cause of deterioration in concrete. When steel corrodes, rust occupies a greater volume than the steel. This expansion creates tensile stresses in the concrete, which eventually cause cracking, delamination, and spalling.

Carbonation of Concrete

CO₂ dissolves into the cement and forms carbonic acid. The acid neutralizes free Calcium Hydroxide which lowers the pH of concrete.

Efflorescence

Transport of salts and evaporation of water results in salt crystallization at surface. Much like Freeze/thaw damage, the growth of salt crystals can exert substantial pressure and cause spalling and cracking.

Use Duraseal Plus™ on Concrete, Precast, Stone, and Bricks

- **Excellent Performance** that penetrates deep by chemically reacting in the pores and capillaries that creates a long-lasting hydrophobic surface that beads water
- **100% Breathable** allows vapor to escape
- **Helps Stop Moisture Intrusion** and resists wind-driven rain, prevents freeze-thaw damage, spalling, pitting and cracking.
- **Resists Organic Growth** like mold, mildew, lichen, and efflorescence keeping the surface clean



Typical application rates



Concrete pavers
Coverage: 150 Sf/gal



Limestone
Coverage: 200 Sf/gal



Precast
Coverage: 100 Sf/gal



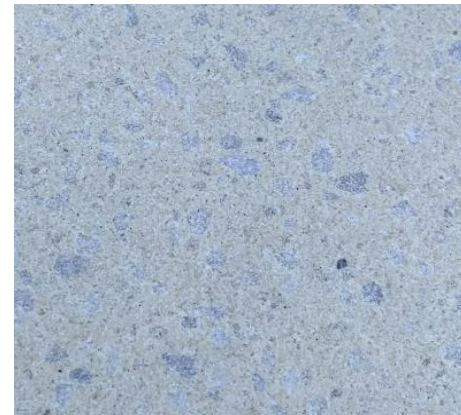
Poured concrete
Coverage: 100 Sf/gal



Marble
300 to 400 Sf/gal



Clay brick
Coverage: 75 Sf/gal



High PSI concrete
Coverage: 200 Sf/gal



Cultured stone
Coverage: 60 Sf/gal



**Previous
applications of
Duraseal Plus™**











Duraseal Plus™ Packaging

- *5-Gallon pails*
- *55-Gallon Drums*
- *275-Gallon Totes*

**Contact Enviroseal for
factory direct pricing**



275-Gallon Totes



5-Gallon Buckets



55-Gallon Drums

Commitment to Customer Service



Enviroseal

500 Farmers Market Rd. # 18
Fort Pierce, FL, 34982
+772-323-5400 – 800-775-9474

www.enviroseal.com

info@enviroseal.com

Enviroseal has a high degree of customer service and is committed to recognizing our customer's needs. Our services include custom blending, Door to Door Transportation, Private Labeling, and on-site technical advice. For over twenty-five years, Enviroseal has been a pioneer in protective coatings.

For projects around the globe or around the corner, we guarantee that each customer will receive the best product at the best price and the highest level of customer service.

