A-Tech Hydra-Block Penetrating Concrete & Masonry Sealer

Description and Uses

A-Tech Hydra-Block penetrating concrete and masonry sealer is a ready to use water-based solution of sodium silicate. Hydra-Block penetrates into the concrete or masonry substrate and fills microspcopic capillairies. Sodium silicate reacts with free lime in the substrate to form a chemically hardened surface. This prevents water, water vapor and gas from being transmitted through the substrate. Reduces substrate dusting. Sodium silicates have been used to aid in the curing process for surfaces scheduled to receive subsequent penetrating treatments and/or specialty coatings. No surface preparation is required when using Hydra-Block as a curing aid. Apply Hydra-Block to freshly poured concrete immediately following the final finish operations when the surface has stiffened sufficiently to support applicator. The substrate color will not change or have a shiny appearance.

Hydra-Block Prevents and Inhibits

- Moisture penetration
- Vapor transimission
- Dusting
- High humidity
- Spalling
- Efflorescence

Advantages

- Water-based
- Vapor impermeable
- VOC compliant
- Substrate traction remains the same
- No color change
- Chemical bond to substrate

Where to use

- Concrete basement interior walls and floors
- Concrete block basement interior walls and floors
- Interior masonry

Active Content: Water-based sodium silicate

Limitations

Test a 3' x 3' sample of the substrate to be sprayed with Hydra-Block for compatibility. 12 month shelf life in a sealed container. Will not seal cracks in concrete, masonry or mortar.

Not for use on colored concrete. Will stain glass, metal and other trim. Clean immediately with water. Not for use in areas where vapor permeability is desired. If vapor permeability is desired, use A-Tech Concrete Sealer or A-Tech Brick and Masonry Sealer.

Coverage (Sq. Ft/Gal)

| Clay brick | 150-200 |
|---------------------|---------|
| Stucco, Rough Stone | 100-200 |
| Concrete | 150-200 |
| Precast Concrete | 150-200 |
| Concrete Block | 100-140 |

Drying Time

Will dry clear and transparent in 1-2 hours @720 F.

Clean Up

Equipment- Soapy water

Cover and protect all glass, metal and vegetation from overspray.

Clean overspray immediately with soap and water

Application Instructions

Air and surface temperature must be above freezing during application and for three days after application. Do not apply to hot surfaces or in direct sunlight. Ready to use. Do not dilute. Apply using a low pressure sprayer with fan pattern tip.

- 1. Remove any paint, sealers, or adhesives on substrate. Clean off any oil, dirt, rust or wax. Remove existing efflorescence or laitance. Mask glass, metal, tiles and plants to prevent overspray.
- 2. Lightly dampen substrate with water using a mop or sprayer.
- 3. Shake or stir Hydra-Block before using
- 4. Concrete Application-Use 2 -3 light coats. Concrete Block Application-Use 3-4 light coats. Clay Brick Application-Use 2-3 light coats.
- 5. Spray a section at a time. After spraying for 20-30 minutes return to original area and re-apply when surface is still damp.
- 6a. **Horizontal Application**-Spray sealer in a fine mist until the surface is saturated. Re-apply to fast drying areas to maintain a wet look. Do not allow to puddle or run. Spread any puddles with a roller. Wipe off excess with a wet rag within 10 minutes of application.
- 6b. **Wall Application** Begin at bottom and work your way up the wall. Do not allow product to run. Spray sealer in a fine mist until the surface is saturated. Re-apply to fast drying areas to maintain a wet look. Wipe off excess with a wet rag within 10 minutes of application.

Drying Time

Will dry clear and transparent in 1-2 hours @72°F. Allow to dry 24 hours before allowing traffic.

Clean Up

Equipment- Soapy water

Warning

- Use with adequate ventilation
- Keep out of reach of children
- Do not take internally
- In case of ingestion call a physician, do not induce vomiting

Warranty

Applied Technologies warrants that for a period of 12 months from the date of manufacture or for the duration of the published shelf life, whichever is less, that at the time of shipment, the product is free of manufacturing defects and conforms to published specifications in force on the date of acceptance by "the company" of the order. Applied Technologies shall only be held liable under this warranty if the material has been stored, used and applied in accordance with Applied's instructions in the products technical data sheet.

If Applied Technologies, in its sole discretion determines that the product breached the above warranty it will in its sole discretion replace the non-conforming product, refund the purchase price or issue a credit to the buyer of the product. The dollar value of Applied's liability and the buyer's remedy under this limited warranty shall not exceed the purchase price of the material in question. This is the only warranty extended by Applied. There are no other warranties including implied warranties of merchantability and fitness for a particular use and purpose. Applied specifically disclaims liability for any incidental, consequential or other damages including but not limited to, loss of profits or damages to a structure or its contents.

THE FOREGOING WARRANTY SHALL BE EXCLUDSIVE AND IN LIEU OF AN OTHER WARRANTY, EXPRESS OR IMPLIED INCLUDING WARRANTIES OF MERCHANTIBLITY AND FITNESS FOR A PARTICULAR USE AND PURPOSE AND ALL OTHER WARRANTIES OTHERWISE ARISING BE OPERATION OF LAW, COURSE OR DEALING, CUSTOM, TRADE OR OTHERWISE





800-472-0603

Penetrating Concrete Sealers | Brick & Paver Sealers | Basement Waterproofing and Concrete Repairs

RadonSeal Deep-Penetrating Concrete Sealers

Your Damp Basement Solution

RadonSeal Deep-Penetrating Concrete Sealer has been the leading concrete sealer for commercial and residential projects since the late 1990's. It is a reactive, internal sealer, for poured concrete, heavyweight concrete blocks, mortar, and other cementitious materials. Unlike the majority of concrete sealers sold in stores, RadonSeal is not a surface sealant. It seals the matrix of concrete without coating the surface and can be safely used on heavy foot-and-vehicular traffic areas.



RadonSeal works by being absorbed by <u>porous concrete</u>, penetrating deep below the surface (up to 4"), chemically reacting with free lime and alkali, expanding inside the pores and capillaries, and curing as a hardened silicate mineral. It is like injecting more cement into the concrete!

Once cured, the sealer is permanent and will protect basement, slab-on-grade, and subteranean concrete against capillary water seepage, efflorescence, water vapor, and even <u>radon gas</u>. RadonSeal also strengthens, densifies, and hardens outdoor concrete, protecting surfaces against freeze-thaw, cracking, crazing, spalls, and minor defects.

RadonSeal is the Only Concrete Sealer Backed by a Lifetime Money-Back Guarantee!

RadonSeal does not change the appearance or friction of the concrete (slip-resistant). Unlike <u>common sealers</u> (topical clear sealers) and waterproofing paints, RadonSeal can never peel, delaminate, or wear away. It cannot be pushed out from inside the pores by negative-side pressure. The seal becomes integral to the concrete itself and no reapplication is ever needed! Applying RadonSeal to indoor and outdoor concrete surfaces provides several important benefits:

- Concrete Waterproofing Mitigates capillary water seepage, protects outdoor concrete against freeze-thaw and road salts.
- Efflorescence Reacts with alkalis and can stop or reduce unsightly "white powder" and salt deposits.
- Eco-Friendly No solvents, zero VOCs, no fumes or noxious odors.
- User-Friendly Safe to use indoors. Easily applied by a common hand-pump "garden" sprayer.
- Vapor Transmission Reduces humidity by restricting water vapor inflow.
- Radon Mitigation Restricts the infiltration of soil gasses through concrete capillaries and pores.
- Musty Odors Helps to alleviate musty basement odors by reducing humidity.
- Mold Remediation Aids in the prevention of mold and mildew growth.
- Reduces Cracking Bonds and strengthens concrete, prevents the rusting and expansion of rebar.
- Concrete Hardener Hardens the surface "flint-hard", greatly reduces dusting and crazing.
- Neutralizes Alkalis Ideal for high pH fish and koi ponds, dog kennels, and stables.
- **Deep-Cleans** Purges contaminants, minor oil spills, old efflorescence, and animal urine from inside concrete slabs.
- Nuetralizes Alkali Use in fish ponds, kennel floors, and stables because it neutralizes alkalis and surfaces caustic to animals.

Unsure if RadonSeal is not the correct sealer for your project? Review our Sealers Guide

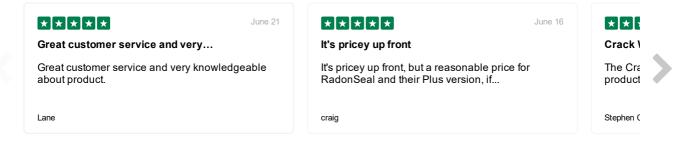
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RadonSeal® Standard and Plus Concrete Sealers



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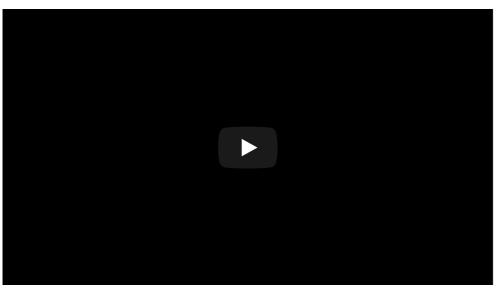


Rated 8.8 out of 10 based on 595 reviews. See some of the reviews here

RadonSeal Standard and RadonSeal Plus

STANDARD – Recommended for indoor poured concrete such as basement floors and walls, foundation slabs, and garage floors less than 20 years old. Also use on outdoor concrete (<u>driveways</u>, sidewalks, walls, rooftops, decks) less than 2 years old.

PLUS – Recommended for sealing older and more porous concrete, such as <u>concrete blocks</u>, <u>cinder blocks</u>, poured indoor concrete over 20 years old or poured outdoor concrete more than 2 years old. It carries more active minerals for larger pores in concrete.



Coverage

The approximate coverage rates below take into account the number of recommended applications. Coverage rate varies depending on the porosity and composition of the concrete. Concrete with larger pores or more alkalis will consume more sealer. Cinder blocks being much more porous, have the lowest coverage per pail.

- POURED CONCRETE 1,000 sq. ft./5-gal. pail in 2 applications,
- HEAVYWEIGHT CONCRETE BLOCKS 500 sq. ft./5-gal. pail in 3 applications,
- CINDER BLOCKS 400 sq. ft./5-gal. pail in 4 applications.

EXAMPLE 1 – A typical basement (floor 800-1,000 sq. ft., 8-ft. POURED CONCRETE WALLS) would need TWO (2) 5-gallon pails to cover both the floor and foundation walls.

EXAMPLE 2 – A typical basement (floor 800-1,000 sq. ft., 8-ft. CONCRET BLOCK WALLS) will need TWO (2) 5-gallon pails of RadonSeal Plus for the walls and ONE (1) 5-gallon pail of RadonSeal Standard or Plus for the floor.

Application

Conditions – The concrete must be dry inside. After a heavy rain, let outdoor concrete dry for at least 2 days. Avoid heavy rain for 24 hours after the application. Air and surface temperatures must be above freezing during the application and for three days after. Mask or remove glass, aluminum, metals, tiles, and plants.

Preparation – To apply RadonSeal, the concrete surface must be bare and porous – paint, old sealers, adhesives, oil, efflorescence, grease, etc., must be removed prior to application. Vacuum excessive dust, dirt, or loose particles. Allow concrete to dry for 3 days after power washing. If the concrete is polished or troweled very hard, you have to make the surface porous by acid etching or grinding.

How To Remove Efflorescence Safely

RadonSeal can applied with a low-pressure sprayer like the hand-pump "garden sprayer," a paint roller (3/4" nap), or with a brush. Adjust nozzle on pump sprayer to a fan pattern. Shake or roll the pail before use. Pull out the pouring spout and fill the pump sprayer.

- 1. Dampen the Concrete use the sprayer or a mop and a bucket to dampen the concrete surface with water (it breaks surface tension).
- 2. Apply RadonSeal in a Continuous Glistening Film avoid puddles, do not over-apply. Spread out any puddles with a roller.
- **3. Apply the Next Application** after about 30 minutes of spraying, return to the beginning of the section while still damp and apply a second coat. **Concrete blocks require 3 back-to-back applications and cinder blocks 4 applications.**

The sealer should absorb within about 10 minutes (the surface still looks damp but there is no glistening film). If the concrete is unusually porous or alkaline, it will absorb very fast, letting you know that it needs more sealer – spray on another application.

- **4. Wash the Concrete Floor** Two to three hours after the final application, rinse the surface with water and scrub with a stiff-bristle brush or push broom, shop vac and let dry. Washing the concrete will remove any unabsorbed sealer which would leave glassy or whitish areas. It will also ensure that the surface will remain porous for painting, coating, adhesives, and surface levelers. If needed, sweep off any efflorescence or contaminants purged by RadonSeal in a couple days.
 - RadonSeal Application Instructions
 - RadonSeal Standard Pail Label
 - RadonSeal Plus Pail Label



What People Are Saying



Don

★ ★ ★ ★ ★ January 17

Excellent sealer for my new concrete block foundation walls. Hard to believe, but the water seepage has stopped.

lan

★★★★ January 6

No problems so far. Application was just as described and worked well. Not sure how well product seals so far but the basement does not have a dungeon smell any more.. But that may also be due to the extensive cleaning prior to application:)

Don

★★★★★ January 5

Fast delivery. A BREEZE TO APPLY !!! And works as advertised. Excellent performance products.

Product Uses

RadonSeal Concrete Sealer is most commomly applied to mitigate moisture in basement concrete and to strengthen commericial/industriall concrete, but is effective for sealing and preserving a wide range of cementitious materials; retaining walls, garage floors, driveways, sidewalks, patios, koi ponds, carports, parking garages, building facades, concrete rooftops, decking, concrete columns, warehouse floors, storage tanks, concrete curbs, cooling towers, water treatment plants, and concrete bridges.

- POURED CONCRETE New or old, basement walls and floors, building facades, fish/koi ponds, retaining walls, seawalls.
- CONCRETE SLABS Warehouse floors, garage slabs, carports, driveways, sidewalks, curbs, parking lots, patios.
- CONCRETE BLOCKS, CINDER BLOCKS Foundation walls, retaining walls, building walls.
- MORTAR Mortar between blocks, porous mortar in older stone foundations.
- **LIMESTONE** Walls, floors, building blocks, facades, interior or exterior.
- STUCCO Porous stucco applied over concrete.

Limitations

RadonSeal does seal hydraulic cement, patching compounds, surface levelers, lightweight blocks, decorative blocks, split-face blocks, "popcorn" blocks, haydite blocks, and is not intended for use on stamped concrete, acid-stained concrete, and colored concrete.

RadonSeal may be less effective when applied to fiber reinforced concrete, thin concrete floors (<2"), <u>cinder blocks</u>, and unsound concrete. Concrete over sinkholes and/or channelized underground streams that cause continious dampness.

Please review RadonSeal Uses, Limitations, and Application detailed webpage.

Reduce Basement Humidity, Efflorescence, and Water Vapor

RadonSeal is the strongest formulated silicate-based sealer because it penetrates deeper, carries more active minerals, and seals tighter than other concrete sealers. Penetration does not depend on gravity because RadonSeal penetrates by capillary action – also used on walls and ceilings.

In case of basement walls, it is commonly applied from the inside to seal against capillary water seepage, water vapor, and soil gas from the ground. However, if there is an opportunity to apply it to both sides, it has the added advantage of preserving the exterior surface of the concrete and extending the life of any waterproofing coating by protecting it against saponification caused by alkalis from the concrete.

Waterproofing Guarantee

Please review the RadonSeal Waterproofing Guarantee in detail.

Protect Your Home Against Radon

Radon gas gets in through the concrete and openings in basements, crawlspace, or foundation slab. Radon gas kills over 21,000 people in the U.S. every year. After smoking, radon is the second leading cause of lung cancer deaths in the U.S. "Radon in homes causes more deaths than fires, drownings and airplane crashes combined" - EPA

The health risks are proportional to the radon level in your home. There is no "safe" radon level. Seventy-percent of radon-attributed deaths are caused by homes with radon below 4 pCi/L, which is the US EPA's "Action Level." The health risk is proportional to the radon level in your home. Always reduce radon to a practical minimum! RadonSeal provides an effective mitigation method that can help aid and/or reduce radon levels in your home. In comparison to fan-based mitigation, it can sometimes save on the initial cost and operating costs year after year.

Radon Reduction Guarantee

Please review the RadonSeal Radon Reduction Guarantee in detail.

Use RadonSeal Before Painting or Installing Flooring

RadonSeal leaves the surface paintable. It is recommended for sealing concrete before applying paints, adhesives, epoxy or urethane coatings, "wet-look" sealers, concrete overlays, surface levelers, or moisture-sensitive flooring. RadonSeal can help to greatly reduce the wicking of water, water vapor, and efflorescence from pushing off or cracking paints and coatings. As it purges minerals from inside the capillaries, it opens up the pores and is often used by flooring contractors as a primer.

For more info on how RadonSeal® works, efflorescence, the "alkali attack," how to protect concrete, paints, and flooring against deterioration, visit <u>RadonSeal - Your First Choice for Sealing Concrete</u>.

Use as a Concrete Densifier

RadonSeal will make concrete denser and stronger (up to 40% in flexural strength). It makes concrete surfaces resistant to abrasion and surface defects. Use on concrete to reduce concrete dusting, concrete crumbling, and overall wear.

Feedback from Customers

- "...water was actually puddling in the middle of the room, coming up from under the concrete floor. I used the Radon seal and to my amazement...no more water in fact no more moisture! That was 5 years ago." Tom F., Atlanta, GA
- "My cinder block wall was seeping water, so I sealed it with Drylock. But after several months, efflorescence pushed it out ...painted it again two times, but it always peeled and leaked again...your RadonSeal...pushed out rivers of efflorescence from the concrete and it is now bone-dry" Brian D., NC
- "...finishing my basement and had great concerns about damp basement air, mold and mildew, and of course radon. Particularly, since we have a newborn in the house. My radon is now very low and the basement feels dry." Mark W., MA
- "...relative humidity in the basement rooms would constantly hover between low 80% to high 70%...a definite "musty smell"...Since applying the RadonSeal...humidity is holding at 44 to 46% without the use of the dehumidifier!" Jim M., GA
- "...RadonSeal Plus to the block walls and (2) coats to the floor of my very damp basement...went from 5.1 pCi/L to 0.3 pCi/L" Traci T., DE

See more <u>Testimonials</u>

SDS | PDS | BROCHURE

- RadonSeal Concrete Sealer SDS
- RadonSeal Concrete Sealer PDS
- RadonSeal Product Brochure

The Chemistry Behind RadonSeal

The history of penetrating silicate concrete sealers dates back to Germany in World War II, when they were used to strengthen quickly poured, thin military runways. After the war, the Army Corps of Engineers started using the sealers for the preservation of concrete dams and bridges. As the technology evolved, the use of silicate concrete sealers expanded from preserving structural concrete to waterproofing outdoor and indoor concrete. Somewhat diluted, they are also used as "surface hardeners."

During the last couple of decades, penetrating silicate concrete sealers have become widely used in the US and abroad, be it at Disney World or Sydney Opera House. Many architects specify them for major buildings. The sealers have been successfully used on thousands of major concrete structures and buildings.

How Does RadonSeal Work? When concrete cures, it produces "free lime" as a by-product of hydration. RadonSeal reacts with the free lime and alkalis inside concrete and expands inside the capillaries. It forms a silicate mineral – it's like injecting Portland cement into the concrete. Simply, it results in a higher grade of concrete that is denser, stronger, and tighter.

RadonSeal waterproofs concrete internally but usually it **does not make its surface "bead" water**, it does not make it slippery when wet, and leaves it paintable. It will absorb individual water drops (it "wets") but larger puddles will remain, because the concrete is waterproof.

RadonSeal - Your First Step When Moving

The RadonSeal spray-on application makes it easy for a do-it-yourself home repair or home improvement project.

Selling Your Home

Before putting the house on the market, seal all the concrete in your basement with RadonSeal® to avoid any last-minute glitches at closing! Buyers are wary of fresh paint. Stop moisture problems and musty odors. Play it safe and reduce radon to a minimum – radon levels fluctuate widely and a bad short-term radon test could scuttle the closing.

Buying A Home

If there is a radon or moisture problem, negotiate a discount for conventional radon mitigation or waterproofing. Then, do it yourself with RadonSeal and save! In any case, protect your family's health by reducing dampness and radon to a practical minimum.

Newly Built Homes

Now is the best time to preserve the concrete and prevent future moisture or radon problems. In a finished basement, the floor-to-wall joints are unreachable. Sealing the basement is particularly important in today's energy-efficient homes, which draw not-so-fresh air from the ground through the porous concrete.

Architects | Builders | Contractors

RadonSeal prevents or solves problems with moisture, molds, and radon in residential, institutional or commercial buildings like schools, apartments, hospitals, and hotels. It preserves commercial and industrial concrete assets indoors and outdoors – warehouses, factory floors and walls, cooling towers, water treatment plants, and bridges.

It also protects parking areas, garages, and factory floors against oil spills and most chemicals. Info for builders and contractors on RadonSeal Commercial Applications. RadonSeal reduces costs and warranty callbacks, improves results, adds value, and increases customer satisfaction for a variety of contractors:

- Waterproofing Contractors
- Radon Mitigation Contractors
- Building Contractors
- Basement Remodeling Contractors
- Flooring Contractors
- Architects
- Painting Contractors

How RadonSeal Can Help with LEED Certification

RadonSeal's state-of-the-art concrete and masonry sealers can earn your project valuable credits towards LEED certification.

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