FAQ

RadonSeal®
Deep-Penetrating Concrete Sealer

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We Appreciate your Business!

Thank you for choosing RadonSeal to fulfill your concrete, brick, and masonry repair and sealing needs. We have compiled this FAQ sheet to address the most common questions and help you better understand the benefits of using RadonSeal Deep-Penetrating Concrete Sealer. We appreciate your dedication to quality solutions for your construction and home maintenance projects.

Will RadonSeal change the appearance of the concrete?

When applied to adequately porous concrete, the treated surface will exhibit no significant alteration in its appearance or profile. Before proceeding to cover a larger area, it is **advisable to conduct a preliminary application of RadonSeal on a small test area. This step ensures confirmation of surface suitability, aesthetic impact, and guarantees effective sealer penetration.** Penetrating sealers may encounter challenges in percolating through excessively smooth surfaces and reaching the underlying concrete. While not always mandatory, acid etching or mechanical abrasion can establish an appropriate surface profile. In instances where acidic etchers are utilized, it is crucial to rinse, neutralize, and remove any residues (indoors, preferably with a shop vac) before applying the sealer. Sealer that is unable to be absorbed below the concrete surface, or come into contact with acid cleaner residue may leave a white, glassy deposit on the surface.

How do I know if my concrete is porous enough?

Surface porosity is not a concern for poured concrete walls, concrete blocks, and the majority of outdoor concrete slabs (broom finished); however, it's essential to recognize that **indoor concrete slabs vary in porosity**. The level of porosity is influenced by several factors, including composition, craftsmanship, and finishing techniques. Machine troweling, burnishing, or polishing, result in concrete surfaces with "tight" caps that naturally repel liquids. These finishes are commonly found in walk-out basements, garage floors, and slab-on-grade construction. In cases where increased porosity is desired, chemical etching or mechanical abrasion may be necessary. To measure concrete surface porosity, conduct the Water Drop Test as per ASTM F 3191-16. Obtain an eyedropper, fill it with water and a drop of liquid soap, then shake. Apply a dozen drops per 1,000 sq. ft. of concrete. If eight or more are absorbed in under a minute, the concrete is porous. A wet spot larger than a dime suggest moderate porosity, and water beading indicates insufficient porosity.

Can RadonSeal be applied when the concrete wet?

Ensure the concrete is thoroughly dry before initiating the pre-wetting process and the subsequent application of RadonSeal. It's important to note that relying solely on the visual appearance of a dry surface may not provide an accurate indicator. In instances of prolonged heavy rainfall and excessive ground saturation, it may take an extended period for subterranean concrete and slab-on-grade construction to adequately dry. For optimal results, it is advisable to choose periods of drier weather for sealing concrete. When employing liquid cleaners, hose water, or pressure-washing to clean the concrete beforehand, it is recommended to do so at least 3+ days prior to the RadonSeal application. This time frame allows for the concrete to thoroughly dry. In situations where time is a constraint, waiting 1-2 days is acceptable. To expedite the drying process indoors, the use of fans, dehumidifiers, and heaters can be considered.

Should I first seal the concrete and then repair any cracks, or is it preferable to repair the cracks before applying the sealer?

Water leaks stemming from settling cracks in walls and slabs, cold joints, corner joints, mortar joints, floor-to-wall joints, wire ties, seepage around prior repairs, and pipe protrusions can be effectively addressed both **before or after** applying RadonSeal to seal the concrete.

I see efflorescence spots on the concrete after applying RadonSeal, is this normal?

Only for a limited number of applications. The purging of efflorescence is particularly pronounced in cases where RadonSeal is applied to highly porous cinder blocks or sections of concrete that have a history of persistent water seepage. RadonSeal has a unique ability to not only "clean" concrete, but also effectively eliminate various contaminants, including loose efflorescence, pet urine, and other impurities present within the concrete. During the curing process, RadonSeal reacts with lime and alkali, **expanding** within the pore spaces and capillaries of concrete, purging loose salts and minerals to the surface. The occurrence of purged efflorescence serves as a tangible indication that RadonSeal has actively engaged with the concrete substrate. In cases where purged efflorescence requires cleaning, do so using efflorescence cleaners, wire brushes, wire-wheel brushes, stiff bristle brushes, or brooms. Using cleaners will not negatively affect the sealer.

Does RadonSeal bead water?

RadonSeal is not designed to bead or repel surface water. RadonSeal penetrates deep into concrete (up to 4") providing an internal seal to concrete. Allowing for the safe passage of vehicular traffic, the use of paints, adhesives, epoxy, and concrete patching compounds to bond to the surface afterward.

I have water leaking between my foundation wall and floor. Will RadonSeal stop this?

Penetrating sealers do not seal cove-joint leaks. Water that builds up outside the foundation can seep between the joint where the wall sits on top of the footing. Subsequently, the water pushes upwards through the floor-to-wall joint and saturates the floor. The solution to this problem would be to fill the joint using ElastiPoxy Joint & Crack Filler Kit. If required, chase the joint 1/4" wide x 1/2" deep with a hand-held grinder or cold chisel and fill the joint using ElastiPoxy Joint & Crack Filler Kit.

Does RadonSeal waterproof basements?

RadonSeal is not a topical sealant or a coating system. RadonSeal seals microscopic pore spaces, capillaries, and fractures of concrete. Protecting concrete against the infiltration of water vapor and capillary water seepage (moisture, dampness). RadonSeal is not guaranteed to seal water leaks that are commonly due to structural defects or movement, separations, cracks, joints, holes, fissures, protrusions, seams, or corner joint areas requiring caulking, sealants, re-pointing, and patching.

What makes cinder blocks so hard to seal?

RadonSeal reacts with alkalis produced by the hydration of Portland cement inside concrete, but the composition of cinder blocks varies widely. Fly ash collected from power stations, as well as silica fume, calcined clay, and volcanic ash are used to substitute for up to 50% of Portland cement (the chemistry of fly ash depends on the coal, be it bituminous, sub-bituminous, or lignite). The concrete mix used to make cinder blocks has varied through time and region. Nowadays, you cannot tell if the walls in your basement are standard blocks or cinder blocks. Therefore, we recommend after applying RadonSeal Plus to cinder block foundation walls, you wait 10+ days and apply a secondary sealer, **Ion-Bond Armor Elastomeric Sealer**. Ion-Bond Armor does not depend on their chemical composition, and combined with RadonSeal, helps to further combat hard-to-seal substrates.

Can RadonSeal help at reducing radon levels?

Sealing concrete can aid in reducing the infiltration of soil gasses through concrete. Concrete is porous and carries water molecules and soil gases by concentration-driven diffusion. However, due to inconsistencies and variables in construction and materials, sealing the porosity of concrete alone may not sufficiently reduce radon levels. Like water intrusion, soil gases seek the path of least resistance. Elevated levels of radon can be commonly attributed to openings in basements and crawlspaces; cracks, holes, joints, corners, sump pits, open cell CMU walls, floor drains, pipe protrusions, and thin concrete, which require additional sealing. If your radon level exceeds 10 pCi/L (long-term testing), please phone us for expert mitigation advice.

Can RadonSeal be applied to the outside of foundation walls? How does RadonSeal help outdoor concrete?

RadonSeal is a longstanding product in the building industry. When required, it is used prior to the application of exterior bituminous damproofing coatings, which are required by building codes in most counties. Waterproofing membranes are used to bridge cracks, holes, seams, joints, and potential defects in concrete that water can easily penetrate. By neutralizing alkalis in concrete, RadonSeal helps to prolong the lifespan of coatings. Sealing outdoor concrete with RadonSeal helps to enhance the bonding and strengthen the concrete, which in turn, helps protect the rusting and expansion of rebar, and hardens the concrete surfaces. These benefits greatly reduce the likelihood of surface cracking, crazing, and surface deterioration due to freeze-thaw and road salts.

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