

### SEALING PARKING GARAGE FLOORS

#### Selecting the Sealer

RadonSeal is a deep-penetrating concrete sealer. It is waterborne, nontoxic, nonflammable, and non-hazardous. This silicate-based reactive sealer is formulated to seal bare, structurally sound concrete against water intrusion, to stop efflorescence, and to protect concrete against road salts, freeze-thaw damage, pitting and spalling. It hardens the surface, protecting the concrete against abrasion, dusting, and wear.

RadonSeal penetrates up to 4" deep into concrete, bonds, strengthens and waterproofs concrete, encapsulates rebar reinforcement, and reduces cracking. It also prevents the growth of fungi, mold, and mildew.

**RadonSeal Standard** is the best choice for poured concrete in good condition that is less than 10 to 15 years old.

**RadonSeal Plus** contains more minerals for sealing more porous concrete over 10 to 15 years old, or concrete that is already leaking, deteriorated or leached out.

#### Delivery, Storage and Handling

Materials shall be delivered in their original unopened containers and stored in clean, dry areas away from direct sun at 40° to 80° F until ready for use. Protect from freezing during shipping or storage.

#### Project Conditions

**Weather Conditions:** Do not apply the sealer in snow, rain, fog, or mist, or when such conditions are expected within 3 days. Ambient air temperatures shall be at least 35° F at installation time.

**Substrate Conditions:** Temperature of the concrete shall be above freezing during the application and for at least 72 hours afterwards.

Do not apply RadonSeal to hot concrete in direct sunlight. Avoid windy conditions to minimize over-spraying.

#### Preparation and Surface Cleaning

In case of **newly poured concrete**, allow at least 28 days to cure.

Remove any **molds, mildew, or algae**. Mild cases may be cleaned with a detergent and a chlorine bleach solution. Or spray on our Efflorescence Cleaner to kill large growths. Wear goggles, gloves, and protective clothing.

Concrete surfaces must be sufficiently clean to allow RadonSeal to penetrate into the concrete.

RadonSeal can be applied only on bare (unpainted) concrete surfaces. Remove any **paints, surface sealers, or mastics**. Available methods: shot-blasting, sand- or water-blasting, floor grinders, paint stripper, or Novion Universal Concrete Sealer.

Special surface preparation is normally not required, but **oil slicks** should be cleaned with proper solvents, laundry soap in hot water, or Novion Universal Concrete Sealer.

**Efflorescence** (white mineral deposits) can build up and prevent the absorption of RadonSeal. Scrub off light efflorescence with a stainless steel wire brush. More extensive efflorescence can be removed by acid etching, followed by neutralization with ammonia solution and a thorough rinsing. Or to avoid hazardous acids, use our Efflorescence Cleaner, which dissolves efflorescence, neutralizes alkalis, and requires no cleaning before applying RadonSeal.

**Very dirty concrete** may require etching with muriatic acid, commonly available in hardware stores. Neutralize the residue with ammonia solution and thoroughly hose off.

Damp concrete is acceptable, but not active **water seepage**, water-saturated concrete, or standing water.

Mask **glass and aluminum**. Also mask copper, ceramic tiles, and fixtures or just wipe off any over-spray right after the application.

Cover up near-by **vegetation**, plants and shrubs. Move or cover near-by automobiles and similar objects to protect against over-spray.

**Pressure-wash** the deck (3,000 psi) to remove all dirt and residues. Squeegee or mop any water puddles or accumulated water.

### Spray Equipment

Use a hand-pump or battery-powered pesticide sprayer. Or an airless sprayer set at 40-60 psi with a lacquer tip and a long hose (100-150 ft.) for mobility. A sprayer nozzle with a fan pattern is more controllable than conical pattern.

### Sealer Application

**Dampen** the concrete to reduce surface tension and help the sealer penetrate deeper. Spray with water or flood the surface, squeegee off puddles, and let partially dry for 30 minutes.

Safety glasses and breathing mask recommended, particularly when spraying overhead. If splashed in the eyes, wash out with clean water. If swallowed, do not induce vomiting, but drink water for dilution and consult a physician.

Spray the sealer in a thin continuous film - **do not over-apply**, do not let the sealer run or puddle. Spread out any puddles with a broom, or pressure wash off the surface film while still soft.

Spray on RadonSeal in **3 successive applications** about 20–30 minutes apart, while the concrete is still damp. Spray a section at a time.

### Coverage Rates

#### Newer Parking Garages

RadonSeal Standard is used only on newer parking garages when the concrete is relatively new (say 10–15 years) and in good shape. Spray at a rate of 375–300 sq. ft./gal. for each application - estimated total consumption 125–100 sq. ft./gal.

#### Older Parking Garages

RadonSeal Plus is used on older parking garages and when the concrete is well worn, deteriorated, and very porous. Spray at a rate of 300–225 sq. ft./gal. for each application - estimated total consumption 100–75 sq. ft./gal.

Surface coverage depends on the concrete's porosity and composition. Concretes with more pores or alkalis consume more sealer.

### Clean-up

The concrete will appear dry in a couple hours and is usable for traffic.

Wipe off unwanted over-spray. Clean spraying equipment with warm water.

In about 6 to 12 hours after the application, flood the surface with water to help the sealer set, and scrub with a commercial scrubber or stiff deck brush to remove any residue to assure a paintable surface.

Within the first several days, RadonSeal will purge minerals, dirt, and efflorescence from the concrete – shop-vac or pressure-wash it off.