



THORSEAL® WATERPROOF CEMENT-BASED COATING

Thorseal® is a cement based, micro-porous (breathing), seamless coating used to fill, seal, waterproof and protect a variety of substrates including cast-in-place and pre-cast concrete, brick, common building and split-faced block, stucco, unglazed terra cotta, porous stone, shotcrete, gunite and other masonry substrates. It may be used on interior or exterior, above or below grade applications on new construction or in renovation and restoration projects. Thorseal® is highly resistant to standing water or wind driven rain and is intended for use on vertical, overhead and non-traffic bearing horizontal surfaces.

Thorseal® is also an ideal alternative to mechanical finishing or rubbing of concrete. The two coat application of Thorseal® will add a significant degree of protection from the deleterious effects of carbonation on steel reinforced concrete. Two coats of Thorseal® (40 mils) is the equivalent to 3/4" of new concrete cover as a barrier to carbon dioxide gas. Thorseal® has also been shown to act as a barrier to the infiltration of radon gas and can be used on below ground structures as a barrier coating in conjunction with radon abatement systems.

Clean & Prepare Surface

All surfaces to be coated must be clean and structurally sound. Chip, sand or shotblast, wet blast or high pressure water wash (4,000 - 10,000 psi) to remove all foreign matter, dust, dirt, paints, oils, grease, coatings, laitance or any other surface contaminants. All static cracks or breaks, voids or honeycombing larger than 1/32" should be cut out and repaired with WATERPLUG® or a THORITE®/ACRYL® 60 mixture. Form ties and other metal fragments must be removed and patched with a THORITE®/ACRYL® 60 mixture. If any doubt exists about the suitability of a substrate to receive Thorseal®, then a bond test should be carried out. Consult the Thorseal® technical bulletin for further details. On block or masonry substrates, relieve excess water pressure in the substrate by tapping in weep holes at the base before applying Thorseal®.

Mixing

Thorseal® powder may be mixed by hand or by using a power mixer fitted with a mixing paddle. Power mixing is always preferable. Mix the Thorseal® powder using a solution consisting of ACRYL 60 diluted with water, usually 1 part ACRYL® 60 to 3 parts clean water. For improved curing, better physical properties and improved bonding capability in extreme environments or on dense or questionable surfaces, reduce the dilution ratio to 1:2 or 1:1. A 50 lb. (22.7 kg) bag of Thorseal® requires approximately 6-8 quarts of mixing liquid. Mix the material until a consistency of smooth, heavy batter is achieved. Allow the mixed Thorseal®/ACRYL® 60 to rest undisturbed for a minimum of 10 minutes to fully wet out all the powder. Remix the wet material and then apply to the substrate. When remixing, a small amount of mixing solution may be added for better workability.

Must NOT be applied to painted surfaces.



Add ACRYL® 60 for peak performance



Gray finish

Application

Thorseal® may be applied by spray, tampico fiber brush or broom. Spray application is recommended for large projects generally using a plasterer's type spray gun, a diaphragm type or rotor-stator type pump. The substrate must be completely dampened before application starts to prevent surface drag on the material and eliminate flash setting. Apply the material on the substrate filling all pores and voids. It is essential that the first coat is well brushed into the substrate even if the application is by spray-gun. The first coat should be applied at 2 lbs. per sq. yard (225 sq. ft./50 lb. bag at 25 mils dry film thickness). Finish the coat with smooth horizontal strokes. Allow the material 24 hours to cure before applying second coat. The second coat should be applied at 1 lb. per sq. yard (450 sq. ft./50 lb. bag at 15 mils dry film thickness). On block or masonry walls, allow 5-7 days before applying the second coat to eliminate joint read through. After the second coat has hardened, plug any weep holes using WATERPLUG® and then coat with Thorseal®. For specific application guidelines, call 1 (440) 786-2100 or go to www.thoroproducts.com

Limitations

Do not apply Thorseal® to surfaces that have not been properly cleaned or are unsound. Do not apply Thorseal® in rain or when rain is expected before initial set has taken place. Do not apply Thorseal® to frozen or frost filled surfaces or when the temperature is below 40°F (4.4°C) or is expected to fall below 40°F (4.4°C) within 24 hours. For additional limitations, call 1 (216) 839-7171 or go to www.thoroproducts.com