



GENERAL INFO

Surface Preparation

The concrete or concrete block surface to receive the PENETRON® system must be structurally sound and should be free from dirt, soil, oil, form release agents, laitance and/or any other foreign materials, which may impair the bond, penetration and or overall performance of the PENETRON® materials.

Extremely smooth concrete surfaces must be waterblasted, sandblasted or acid etched. Concrete surfaces should have an open capillary system.

Form ties with insets will be removed and where form ties are without insets, the concrete will be chipped back approximately one (1) inch. Rout out visible cracks exceeding 0.01" in size to a depth of 3/4" (1.9 cm) to 1" (2.54 cm). Also rout out honeycombed pockets and faulty construction joints to sound concrete. Construction joints are routed or provided with a formed 3/4" (1.9 cm) X 3/4" (1.9 cm) reglet.

Wet down surface lightly prior to the application of the PENETRON® system. Moisture must be present in the concrete strata to assure maximum chemical penetration. Surfaces should be damp when the PENETRON® coatings are applied. The surface to be treated should never have a shiny appearance.

How To Mix

PENETRON®:

Brush Application:

1.5 lbs./sq. yd. 5 parts PENETRON® to 2 3/4 to 3 1/4 parts water.

2.0 lbs./sq. yd 3 parts PENETRON® to 1 part water.

(See Video in DOWNLOADS at <http://www.penetron.com/download.htm>)

Spray Application:

1.5 lbs./sq. yd. 5 parts PENETRON® to 2 3/4 to 3 1/4 parts water.

Varies with climate and spray equipment.

(See Video in DOWNLOADS at <http://www.penetron.com/download.htm>)

PENETRON® should be mixed to the consistency of thick latex paint. Stir the slurry mixture frequently during the application and prepare only as much as can be applied within a 30 minute period.

PENECRETE: Add water to PENECRETE powder, until a medium stiff consistency is obtained.

Prepare only as much PENECRETE mortar as can be applied within a 35 minute period.

PENEPLUG: Pour a handful and mix in a small container (bowl/pail) (gloves must be worn). Add just enough water (drops) to form a mix that is drypack/dry earth consistency.

PENETRON® APPLICATION

Apply PENETRON® coating by masonry type brush (artificial fibers, if available) (See Video in DOWNLOADS at <http://www.penetron.com/download.htm>)

For spray applications, drop hopper or piston pump type equipment is recommended.

(See Video in DOWNLOADS at <http://www.penetron.com/download.htm>)

Prior to application of PENETRON® coatings, fill form tie holes, routed out cracks, honeycombed pockets, reglets and seal strips at construction joints with PENECRETE mortar in laminating layers of 1" (2.54 cm) to 1 1/4" (3.17 cm). Prime concrete surfaces of these areas with one slurry coat of PENETRON® prior to applying PENECRETE mortar.

PENETRON® slurry must be applied to damp concrete and concrete block surfaces only in specified quantities: One coat should have a thickness of just under 1.2mm. Second coat should be applied when first coat is dry to the touch. A light misting of water may be required between coats in hot/dry climates.

For horizontal concrete surfaces apply PENETRON® slurry in one (1) coat with stiff bristle brush/broom or squeegee.

Dry sprinkle PENETRON® or PENETRON® PLUS on "still plastic" concrete by broadcasting or use of a fine mesh sieve in quantities that are specified. Work PENETRON® powdered slab surface with wood float or power trowel until required finish has been achieved. Working (mud) slab applications contact PENETRON® Representative.

PENECRETE APPLICATION

Mix PENECRETE by hand or paddle mixer to a stiff mortar consistency. Apply by brush, the bonding coat of PENETRON® slurry. Apply PENECRETE mortar. Depth of PENECRETE application should not exceed 1 1/4" (3.17 cm). Time elapsed between bonding coat and PENECRETE mortar should not exceed 6 hours.

(See Video in DOWNLOADS at <http://www.penetron.com/download.htm>)

PENEPLUG APPLICATION

After following mixing procedure, quickly form into a wedge and force it into the leak. Apply as much pressure as possible by standing on and/or tapping hard with a wedge of wood & hammer. After leak has stopped, fill void to surface with PENECRETE mortar.

COVERAGE

Horizontal concrete surfaces PENETRON® at 1.4kg to 1.6kg/sq.m. Applied in one (1) slurry coat or powder application, when concrete reaches initial set. Trowel or float to specified finish. PENETRON® PLUS powder application at 0.5kg per sq. meter, when concrete reaches initial set. Trowel or float to specified finish.

Fresh concrete is placed, consolidated and leveled.

Wait until concrete can be walked on leaving an indentation of 1/4" to 3/8", then float open surface. Concrete should be free of bleed water and be able to support the weight of a man and power trowel before power floating.

Immediately after floating open the surface, apply the Dry Shake material at specified rates by hand or mechanical spreader. Material must be spread evenly. As soon as Dry Shake material has absorbed moisture from base slab, it should be power floated into the surface.

When concrete has hardened sufficiently, power trowel surface to desired finish.
PENETRON® PLUS: Suggested application is 0.5 kg. per square meter.
PENETRON®: Suggested application is 1.4-1.6kg. per square meter.

Vertical or concrete block surfaces: PENETRON® at 1.4kg to 1.6kg/sq.m. total. Applied in two (2) coats (0.8kg. per coat).

CURING

Except for extremely hot weather and very low humidity, curing of the PENETRON® system is not required. In these extreme conditions curing must begin as soon as the PENETRON® coating has hardened sufficiently so as not to

be damaged, by a light mist spraying of water. Under most conditions it is sufficient to mist the areas treated with PENETRON® three times a day for the first day. In extremely hot climates spraying may be required more frequently and for several days.

PENETRON® PLUS (trowel applied): Follow concrete specifications for curing procedures.

NEUTRALIZATION

Treated surfaces to receive paints or other protective coating should be neutralized with a vinegar water solution or a muriatic acid/water solution (1 to 10). Rinse all treated surfaces thoroughly with water. For application on cisterns and drinking water reservoirs, follow EPA requirements. Special tanks, aquariums, and industrial or processing installations, please contact PENETRON® Representative.

TEMPERATURE REQUIREMENT

The PENETRON® system can be applied in coating or in mortar form when the temperature is above 32 degrees Fahrenheit or 0 degrees Centigrade.

PENETRON® PLUS (trowel applied) can be applied in temperatures where concrete can be placed. Follow concrete specifications for protection requirements according to standard concrete procedures.

CAUTION

Use rubber gloves during mixing and application. Use goggles during spraying and overhead applications. The effect of PENETRON® on the skin can be neutralized with a vinegar (household strength) and water solution.

PENETRON® PRODUCTS ARE NON-TOXIC.