

SewperCoat Applicator Guidelines/Best Practices

Surface Prep

Ensure substrate is clean and free of laitance, loose material, fully or partly corroded materials, formwork removal oil, and all existing coating and lining materials. This is done by first sandblasting and then power washing the substrate. In some cases sandblasting will not be needed for rehab work. It is recommended to use a power washer with 4000-5000psi (276-345 bar), but the use of a common 3500psi (241 bar) pressure washer from a local DIY can be used.

The substrate should be prepared to a minimum degree of roughness. Recommend at least a 4 on the ICRI CSP rating (Concrete Surface Profile)

The substrate should be presoaked with water prior to the application of the lining materials. The substrate should be moist/humid but without surface water. In no instance shall the lining materials be applied in an area where running water exists. This can be completed during the cleaning phase using the pressure washer.

*NOTE: If applying to a new structure (concrete, brick, or block construction), the same criteria for sub-surface cleanliness, roughness, and saturation are still applicable. New construction has to be sandblasted with either medium coarse blast media or coal slag abrasive “Black Beauty.”

Inflow and Infiltration Prevention

If inflow or infiltration is observed within the structure after surface preparation is completed; a rapid setting water plug specifically for infiltration control should be used to stop minor infiltrations.

Mixing

Prior to the feeding the SewperCoat® material into the hopper, any agglomerated particles should be removed. The hopper should be wet down as well as water run through the hose lines. Once completed priming material should be run through the hoses as well.

For wet gunning, each batch of material should be entirely discharged before recharging with fresh material. Mixing equipment shall be cleaned at regular intervals to remove all adherent materials.

For dry gunning, continuously regulate the water content so that the applied materials consistently achieves proper compaction with as low a percentage of rebound as they can manage with no visible “sag”.

*NOTE: Re-mixing or tempering shall not be permitted. Rebound materials shall not be reused. This ONLY for Dry-Gunning! In Wet-Gunning the rebound is typically used for bench work.

Application of Product

Application order (i.e. bottom to top, top to bottom, etc.) can be determined by the applicator for each jobsite.

The spray nozzle should be as nearly perpendicular to the surface as practical.

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Wet gunning: the nozzle is held as close as possible to the working substrate.

Dry gunning: the nozzle is held at least 12 inches (0.3m) from the working substrate
(Except for applications in confined areas).

Prior to application the applicator must determine operating procedures for placement in confined spaces, extended distances or around unusual obstructions where placement velocity and mix consistency may need to be adjusted.

The applicator will ensure that all material is fed to the nozzle uniformly, and that the operating air pressure is consistent and provides adequate nozzle velocity for proper compaction. If the flow of material at the nozzle is not uniform and non-consistent material becomes evident, the nozzle man should direct the nozzle away from the work until the faulty conditions are corrected.

In general, the maximum thickness for one layer should not exceed one inch. If the specified thickness is too large for one layer, the time interval between successive layers of material application must be sufficient to allow “tackiness” to develop but not final set.

*NOTE: If final set does occur, the surface must be prepared as described earlier in order to provide a sufficient bond with the previous application.

*NOTE: SewperCoat[®] should not be applied to a frozen surface or to a surface that may freeze within 24 hours of application.

Surface finish

For wet gunning, the material is lightly troweled after the product has been applied. The trowel is used primarily for compaction and seating the material on and in to the substrate. It is also used for moderate leveling of the material. Over scratching can cause material to pull away from the substrate. Once trowel finished, a wet brush is used to finish the surface giving the notable brushed finish of SewperCoat[®]

For dry gunning, the material is left largely as a gunned finish. The trowel finishing should be kept to a minimum, to “cut back” uneven areas. For this, the surface shall be trued with a thin-edge screed to remove high areas and expose low areas. Low areas shall be properly filled with additional material to insure a true and flat surface.

Curing

If the material has been applied and finished in accordance with the requirements, but it has been determined that the environment is not moist enough for natural curing. The contractor will be required to either apply a curing compound to all coated surfaces or set-up a moist environment. Curing compound must be approved by the asset manager prior to use. When moist curing is selected, it should be implemented the surface has hardened. Moist curing can consist of the use of soaker hoses, water sprinklers, or vapor/misting machines. Regardless of delivery method, moist curing should continue for a minimum of 18 hours.