

## APPLICATION GUIDELINES

### HF-500 FLOOR TOP

#### SELF LEVELING, POLYMER MODIFIED, POLISHABLE CEMENT TOPPING FOR FLOOR LEVELING AND RESURFACING

**PRODUCT DESCRIPTION:** Specco HF-500 Floor Top is a high performance, pourable, non-shrinking, polymer modified high strength cement which can be used as a floor topping resurfacer or as an underlayment.

**SURFACE PREPARATION:**

**CONCRETE FLOORS:** HF-500 Floor Top should be applied to only clean, dry, non-dusting, primed, sound surfaces that are at least 28 days old. Over-watered, frozen, loose or weak materials need to be removed. Profile or roughen smooth or steel troweled surfaces before applying HF-500 Floor Top. Acid Etching the substrate is not recommended. Clean the concrete surface to be repaired by mechanical abrasion or scarification methods, removing dust, dirt, gypsum based patching compounds, grease, oil, curing compounds, sealers, and all other contaminants. *Prior to applying the HF-500 Floor Top, it is mandatory to patch or fill any joints, cracks, gaps or openings in the surface with Specco Speccrete Speccopatch RS, or Specco B-50 Epoxy grout, or any related patching material to contain loss or runoff.*

**WOOD FLOORS:** The flooring should be constructed to allow no movements or deflections after the HF-500 Floor Top is applied to eliminate any chance of cracking. Remove all grease, dust, oil, wax, varnish, and other contaminants. Do not use cleaning solvents or strippers. Nail down any loose corners or edges showing movement. Patch any joints, cracks, gaps or openings between the wood pieces as mentioned above to prevent runoff.

**PRIMING:**

**PRE-TEST:** *After adequate surface preparation, all sub-floors should be dry and need to be primed thoroughly with Specco Speccobond before application of HF-500 Floor Top.* Priming the sub-floor prevents absorption of hydration water from the HF-500 Floor Top that could affect bond and strength properties. A primer application can help prevent unwanted pinholes and bubbles from forming, as porous substrates have trapped air that can release when a topping is poured on, migrating to the surface. To insure good adhesion, the Speccobond should be pre-tested on the substrate before applying the HF-500 Floor Top. Apply the Speccobond to a small "test" area by brush or broom, let dry, and then using a sharp knife, cut an "X" through the film. If the Speccobond primer peels easily upon scraping, the substrate is not suitable for application. If the Speccobond is only scratched, then the surface is acceptable.

**PRIMER APPLICATION:** Apply the Speccobond solution liberally to the entire area to be coated at an approximate rate of 200-300 sq. ft per gallon depending on the absorption or porosity of the substrate. Brush or mop the primer into the surface taking care to seal all the pores in the concrete and to avoid any "puddling" of the primer. A continuous film should be obtained without any "pinholes" or air openings on the surface, which indicate high porosity. Very porous or absorbent substrates may require 2 coats of primer to seal effectively, with the first coat diluted 1 to 1 by volume with potable water for better penetration, and the second coat applied "as is". Allow 2-3 hours of dry time between coats. The dry time of the Speccobond solution will vary with temperature, humidity, wind, or ventilation procedures used during the time of installation. Increase airflow by use of fans to help speed dry time if necessary. Allow the Speccobond to dry to a "tacky to touch" consistency before applying HF-500 Floor Top. Primed surfaces are usable up to 24 hours and should not be walked on or subjected to traffic. If the HF-500 Floor Top application exceeds 24 hours, then another coat of Speccobond should be diluted 1 to 1 with potable water, and then re-applied to the area.

**MIXING DIRECTIONS:** Mix HF-500 Floor Top using a heavy duty (1/2 inch plus) electric drill or paddle mixer at slow speed. One 45 lb bag of HF-500 Floor Top will require approximately 5.3-5.5 quarts of water. Place the pre-measured, clean potable water into a mixing pail with a 5 gallon minimum capacity. Gradually add the HF-500 Floor Top to the mixing pail, mix thoroughly to a lump-free consistency, and place within 20-30 minutes. Note- the material will appear slightly "thick" at first, but will "wet out" and gain flow after 1-2 minutes of mixing. Do not add any additional or excessive water, as this will decrease ultimate compressive and bond strengths, and promote additional bleeding and segregation of the mix.

**AGGREGATE EXTENSION:** For applications over 1 inch, 3/8 inch clean, washed pea gravel may be added at a rate of 22.5 lb/ 45 lb bag of HF-500 Floor Top. Place the extended material to ½ inch below the desired floor level and then place the remaining neat (no extension aggregate) HF-500 Floor Top on top of this within 24 hours of the initial placement.

**PLACEMENT:** HF-500 Floor Top should be placed in a continuous operation by either pouring onto the primed area or pumping with standard pump equipment. The material will seek its own level and typically should not be disturbed, troweled or raked. A porcupine type roller can be utilized if there is any entrapped air in the mix. If using spike or gauging rakes, take care not to leave any waves or ridges in the final grade. The surface will be suitable for floor traffic in 6-8 hours. Consult related floor covering manufacturers for internal moisture level requirements before installing any vinyl tile, carpet, linoleum, wood parquet, or epoxy flooring.

**CURING:** If HF-500 Floor Top is applied in normal conditions up to 70°F, no wet curing is required. If used in temperatures above 75°F, or exposed to excessively dry, windy, hot conditions that are open to direct sunlight, apply a fine wet mist of water after final set or as soon as the water spray will not mar or deform the surface. Continue misting with water for 1-2 hours after final set to ensure adequate hydration.

**MASTICS, SEALING, STAINING:** Wait a minimum of 6 hours if applying subsequent flooring mastics or adhesives to the HF-500 Floor Top if it is to be used as an underlayment. If HF-500 Floor Top is to be used as a topping, wait a minimum of 12-14 hours before applying any stains, sealers or dyes.

**POLISHING:** After 24 hours, the surface can be polished with traditional grinding equipment.

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