

HF-500 FLOOR TOP

SELF LEVELING, POLYMER MODIFIED, POLISHABLE CEMENT TOPPING FOR FLOOR LEVELING & RESURFACING

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. As a resurfacing overlayment, *HF-500 Floor Top* produces a light, whitish gray colored smooth, uniform surface which accepts stains well and polishes easily the next day to a high luster. As an underlayment, *HF-500 Floor Top* exhibits high flowability and strong bond to cover uneven grades, depressions and voids for subsequent tile or carpet installations over existing or old concrete.

BENEFITS:

- ➤ High early strength gain allows pedestrian traffic in approx. 6-8 hours, coatings in approx. 12-14 hours, and grinding or polishing at 24 hours.
- Specialty cement and polymer-based composition can be used indoors or outdoors.
- Light color accepts stains, dyes and integral colors easily for decorative applications.
- Can provide a new, fresh appearance to old, dull looking concrete without subsequent or tear-out costs.

LEED CREDIT CONSIDERATIONS: Materials and Resources: **MR Credit 1.2**-Building re-use. Indoor Environmental Quality. **MR Credits 5.2:** Regional materials- Greater than 20% extracted, processed and manufactured regionally at production location: Lemont, Illinois 60439. 90% Content- Harvested within 500 miles.

COMPOSITION: HF-500 Floor Top contains specialty hydraulic cements, polymer bonding agents, leveling and flow control additives, and rheology modifiers.

TECHNICAL DATA:

WORKING PROPERTIES:	APPROXIMATE VALUES AT 70°F (21°C)*:
WORK TIME:	30 Minutes
FLOW (SELF HEAL) TIME:	15 Minutes
COVERAGE:	40 sq. ft @ 1/8 inch, 20 sq. ft. @ 1/4 inch, 10 sq. ft. @ 1/2 inch
YIELD:	0.42 cubic feet per 45 lb. bag
PEDESTRIAN TRAFFIC:	Typically, 6-8 hours
COATINGS AND STAINS:	Typically, 12-14 hours
VEHICLE TRAFFIC:	Typically, 3-4 days

PERFORMANCE PROPERTIES:	APPROXIMATE VALUES AT 70°F (21°C)*:
INITIAL SET (PER ASTM C-266):	1 hour
FINAL SET (PER ASTM C-266):	2 hours
COMPRESSIVE STRENGTH (PER ASTM C-109):	8 hours = 2000 psi, 1 day = 3500 psi, 3 days = 4500 psi, 28 days = 6200 psi
SLANT SHEAR BOND (PER ASTM C-882)	7 days = 2120 psi, 28 days = 2850 psi
FLEXURAL STRENGTH (PER ASTM C-348):	7 days = 800 psi, 28 days = 1825 psi
TENSILE STRENGTH (PER ASTM C-307):	7 days = 200 psi, 28 days = 360 psi

^{*}Results based on recommended water to powder ratio of 23% = 5.0 quarts/ 45 lb. bag *HF Floor Top*

APPLICATIONS: *HF-500 Floor Top* can be used in both indoor or outdoor applications and can be installed from a minimum 1/8 inch average depth up to 1 inch thickness, with thicker applications possible by use of pea gravel addition. *HF-500 Floor Top* is ideal for new or old construction, restoration finishes over un-level or rough finished concrete, wooden floors, or as a sub-floor finish.

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, lose or weak materials need to be removed. Clean the concrete surface to be repaired by mechanical abrasion or scarification methods, removing dust, dirt, gypsum-based patching compounds, grease, oil, curing compound, sealers and all other contaminates or foreign material. Profile or roughen smooth or steel troweled surfaces before applying *HF-500 Floor Top*. 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 *Speccopatch® RS* or an appropriate patching material to contain loss or runoff.

WOODEN FLOORS – The flooring shall be constructed to allow no movements or deflections once *HF-500 Floor Top* is applied that would promote cracking. Remove all grease, dust, oil, wax, varnish, and other contaminants from the floor that would prohibit bond. It may be necessary to sand down the wood to roughen the surface and remove the 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: After adequate surface preparation, all sub-floors should be dry and need to be primed thoroughly with *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. To insure good adhesion, the *Speccobond* should be pre-tested on the substrate before applying the *HF-500 Floor Top*. Apply the primer to a small "test" area by brush or broom, let dry, and then using a sharp knife cut an "X" through the primer. If the *Speccobond* primer peels up upon scraping, the substrate is not suitable for application. If the *Speccobond* is only scratched, then the surface is acceptable. Apply the *Speccobond* solution liberally to the entire area to be coated at an approximate rate of 200-300 square feet per gallon (4.9-7.4 m2/L) 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. Allow 2-3 hours of dry time between coats. The drying 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 completely 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 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 **5.00 quarts (4.72Liters) 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. 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 may promote additional bleeding and segregation of the mix. *HF-500 Floor Top* should be placed in a continuous operation by either pouring out onto the primed area or pumping with standard pump equipment. The material will seek its own level but can be spread easily along with a spike roller or gauging rake. The surface will be suitable for foot traffic in 4-5 hours. Consult related floor covering manufacturers for internal moisture level requirements before installing any vinyl tile, carpet, linoleum, wood parquet, or epoxy flooring.

LIMITATIONS: 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.







GHS HAZARD RATINGS: DANGER:







WARNINGS: HEALTH HAZARD & IRRITANT: THIS PRODUCT CONTAINS BOTH PORTLAND CEMENT & CRYSTALLINE SILICA (A KNOWN CARCINOGEN). IT IS ESTABLISHED THAT PROLONGED BREATHING OF CRYSTALLINE SILICA DUST OVER TIME WILL INCREASE THE RISK OF SERIOUS LUNG DISEASE (SILICOSIS). REFER TO PRODUCT S.D.S. (SAFETY DATA SHEET) FOR FIRST AID INFORMATION, OR ANY RELATED HEALTH AND SAFETY INFORMATION BEFORE USING THIS PRODUCT. FOR MEDICAL EMERGENCIES ONLY, CALL INFOTRAC AT 800-535-5053.

CAUTIONS: The area to be repaired or covered should be tightly formed and restricted to "contain" the material from excessive runoff. Make sure all drains, vents, or floor openings are covered or sealed to prevent intake of the *HF-500 Floor Top*. Do not apply *HF-500 Floor Top* to existing floors with highly oil-soaked surfaces unless the concrete is scarified or abraded down completely to an oil free surface. The use of standard degreasing chemicals or steam cleaners is usually not sufficient in oil saturated substrates to allow a good bond to the primer and the *HF-500 Floor Top*. Do not apply the *HF-500 Floor Top* if the temperature is 50°F (10°C) and dropping or above 80° F (26.7°C) and rising. Do not apply to frozen or frost filled surfaces. Do not apply in submerged or continuously wet environments, as the *Speccobond* primer integrity can be affected by re-hydrolysis. Protect from excessive sun and wind exposure, as well as temperature extremes that could prevent inadequate curing.

FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. Avoid Inhalation of these dusts and any prolonged, direct contact with skin. Wear chemical resistant gloves, safety goggles, and O.S.H.A. /N.I.O.S.H. approved respirator during mixing and placement. Keep away from food and drink. Wash hands thoroughly after use and before eating. Do not take internally.

NPCS HMIS SAFETY RATINGS: HEALTH = 2, FLAMMABILITY = 0, REACTIVITY = 0, PROTECTION = E

PACKAGING: 45 lb. (20.45 kg) bags

STORAGE: 40°F to 90°F in a dry, climate protected warehouse.

SHELF LIFE: 1 year properly stored

FREIGHT CLASS: Item #42130, Sub 0, Freight Class 50 -Cement based overlayment material in bags

WARRANTY: Specco Industries Inc (Specco) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Specco, no other representations or statements made by Specco or its representatives, in writing or orally, shall alter this warranty. SPECCO MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Specco product fails to conform with this warranty, Specco will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Specco does not authorize anyone on its behalf to make any written or oral statements which in any way alter Specco's installation information or instructions in its product literature or on its packaging labels. Specco explicitly excludes any written or oral statements or implied warranty on the performance of an applied/installed product manufactured or sold by or through Specco. Specco has no control over Specco application standards adherence, site conditions, atmospheric variations, installer/applicator skill level or the determination of the suitability of any Specco products for a specific intended purpose. Buyer shall be solely responsible for determining the suitability of Specco's products for the Buyer's intended purposes. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind.

REVISED: 08-02-19



