

FS-Coat™ HB

Heavy-Duty High-Build Epoxy Floor Coating

DESCRIPTION

FS-Coat™ HB is a three-component, 100% solids, high build self-leveling epoxy floor coating for heavy duty use in both commercial and industrial applications.

FS-Coat™ HB has a very low odour during application so it is ideal for industrial and commercial floors. The product is easy to apply and can be applied on concrete surfaces at a minimum of 20 mils film thickness by notched squeegee and roller. It cures to a hard glossy smooth (or non-slip) wearing protective surface with outstanding durability under heavy and harsh abrasive environments.

FS-Coat™ HB is ideal for repairing, restoring and leveling worn and eroded concrete floors to obtain a smooth, glossy attractive floor or if required a non-slip finish.

WHERE TO USE

FS-Coat™ HB is particularly designed for use in areas subjected to heavy duty forklift or vehicular traffic including; high traffic warehouses, industrial traffic aisles, hospitals, locker rooms, washrooms, fire stations, storage areas, workshops, auto body, aircraft hangers.

BENEFITS

- 100% solids, with low odour, zero VOC's
- FS-Coat™ HB is applied at a minimum of 20 mils in film thickness in a one-coat application
- Good gloss and colour retention
- Two-step application: Primer (FS-Coat 100) and top coat (FS-Coat™ HB)
- Very hard surface; superior scratch resistance
- Fast curing and development of strength; ideal for fast turnaround projects
- Excellent abrasion and impact resistance
- Resistance to water immersion
- Excellent water spotting resistance
- Resistant to chemicals, food acids, petroleum, oil and heavy industrial cleaners
- Does not support growth of bacteria or fungus
- Able to level highly eroded floor and fill deep holes in the floor
- Approved by "Canadian Food Inspection Agency"

HANDLING AND CURING PROPERTIES

Mixing Ratio, by volume	2 parts A: 1 part B
Viscosity (Mixed)/ Part A & B only	800 cps
Solids Content	100 %
Density/ A&B only:	1.2 kg/litre (10 lb./US gal)
Pot Life (working time)	15 minutes
Application Temperature	10°C- 30°C (50°F-86°F)
Thin Film Set Time @ 23°C (74°F)	12 hours
Foot Traffic @ 23°C (74°F)	16 hours
Vehicular Traffic @ 23°C (74°F)	24 hours
Full Cure and Maximum Resistance	7 days
Hardness (Shore D γ with Part C	
24 hours	72
7 days	84
Abrasion Resistance	36 mg loss
Taber Abrasion, C-17 Wheel, 1000 cycles	

SURFACE PREPARATION

FS-Coat™ HB should be applied over clean, sound, dust free surfaces. For best results, surface should be prepared as follows:

CONCRETE:

Shot blasting or equivalent to remove surface laitance, curing compounds or form oils. Concrete should be minimum 28 days old or have 3% or less moisture content. Moisture content can be determined using test method ASTM D4263.

NOTE:

FS-Coat™ HB requires FS-Coat™ 100 to be used as a primer when the concrete substrate is dry.

AREA PREPARATION

For optimal performance, both the coating and substrate should be maintained at 18° to 30° (60 to 86°F) for 24 hours prior to beginning work. The same temperature range should be maintained during mixing, application and cure.

Application in direct sunlight and rising surface temperatures may result in blistering of materials due to expansion of entrapped air or moisture in the substrate. Concrete that has been in direct sunlight must be shaded 24 hours prior to application and remain shaded until after the initial set.

APPLICATION

The mixing equipment used to mix the coating must be clean and free of any contaminants that may be present in the equipment from previously used products.

- Plug the drainage with a cloth or duct tape during the application
- Pre-mix component “A” of FS-Coat™ HB first to eliminate the possibility of settlement. Pour all of the liquid from Part “B” into Part A container.
- Mix thoroughly using a slow speed ½ inch drill motor with “jiffy” type blade for two minutes (minimum). Scrape the sides of the container and continue mixing until the colour is uniform.
- Very slowly, add Part C (filler) while mixing. Keep the mixing blade closer to the bottom at the point to prevent dust clouds. Once all aggregate is mixed, keep moving the mixing blade up and down while scraping the sides to ensure complete mix. Ensure no powder or dry spots are present and the mixture is fully uniform.
- Immediately pour all mixed coating onto the edges of prepared floor and spread the material evenly with a notched squeegee to a 20 mils film thickness. Back roll with a lint free short nap roller to even up the floor uniformly.
- Allow for FS-Coat™ HB to level to a smoother finish. Use spike roller over the entire wet surface to help eliminate any air bubbles (if needed). Continue in this fashion until complete.
- Allow to cure thoroughly overnight (16 hours) before exposing to foot or light duty traffic. It requires 24 hours for vehicular traffic and 7 days for full service. Keep water & detergent away from the floor until fully cured.

Non-Slip Finish:

- If a non-slip surface is required, a dry clean alumina aggregate (#20 or larger, depending on the level of non-slip needed) should be lightly broadcasted on the wet coating and back rolled immediately to encapsulate the aggregate onto the coating.

LIMITATIONS

- *Do not apply FS-Coat™ HB if the substrate and ambient temperatures are below 10°C (50°F)
- *Do not thin with solvents
- *Not recommended for areas subjected to steam cleaning, harsh chemicals or heavy impact.
- *Not recommended for exterior use.
- *Do not use over existing floor without testing both the intercoat adhesion as well as the adhesion of the existing floor to concrete.
- *Do not apply in areas where the humidity is greater than 85%.
- *Minimum thickness should be 20 mils.

COVERAGE

Approximate coverage per 19 kg unit for a proper self-leveling finish is 5 m² (200 ft²) at 20 mils in thickness. The thickness required will depend on the profile of the concrete substrate.

PACKAGING

11 litre/2.9 U.S. gal. units
7 kg of filler (Part C)

CLEAN UP

Clean all equipment and installation tools immediately with xylene.

SAFETY PRECAUTION

Consult the Materials Safety Data Sheet (MSDS) for specific instructions.

STORAGE

Stored in a heated warehouse. Do not freeze.

SHELF LIFE

1 year from the date of manufacture if kept in original unopened containers.