

PU PROTECTIVE FLOOR COATING SYSTEM

PRIMER + BASE COAT + 2 FINISH COATS

HIND ERS PRIME + HIND ERS UL 1mm + HIND PU SHIELD 1670 (2 FINISH COATS)

APPLICATION INSTRUCTIONS

STEP - 1

SURFACE PREPARATION & FLOOR SUBSTRATE REQUIREMENTS

1. The concrete floor surface must be sound, fully cured, clean, dry, & free from all dust, oil, grease, cement laitance, loosely adhering particles, curing compounds, & other contaminants.
2. Mechanical surface preparation by grinding, shot blasting, or scarifying must be carried out to remove all surface contamination & achieve a sound, open substrate. Vacuum clean thoroughly after mechanical preparation.
3. **Surface Smoothness – VDF Preferred:** For best results with Hind PU Shield 1670 applied at 70–100 microns DFT per coat, the concrete floor must be smooth & level. Vacuum Dewatered Flooring (VDF) concrete is strongly preferred as a base substrate because it provides a hard, dense, & smooth surface necessary for uniform coating application & finish quality.
4. Any cracks, potholes, or surface irregularities must be repaired using a suitable epoxy or cementitious repair mortar & allowed to cure completely before commencement of coating.
5. The surface moisture content must be within acceptable limits before application. Ensure the substrate is completely dry before priming.

STEP - 2

PRIMING - HINDERS PRIME

1. Mix Component-A (Resin) & Component-B (Hardener) in a 1:1 ratio by volume using a mechanical stirrer at 300–350 RPM for 2–5 minutes until a uniform, homogeneous mix is obtained.
2. Apply the mixed Hind ERS Prime uniformly on the well-prepared dry surface using a standard paint brush, good quality lamb wool roller, or airless spray equipment.
3. For porous surfaces, two coats of primer may be required. Allow each coat to cure sufficiently before applying the next.
4. Ensure continuous film formation & proper material consumption @ 150–200 gms / Sq. Mtr (DFT 200 microns).
5. **Curing before next coat:** Allow the primer to cure & become tack-free (minimum 6 hours, preferably 24 hours) before applying the Hind ERS UL base coat. 6. Clean all tools immediately after use with Xylene, Toluene, or a suitable solvent.

STEP - 3

BASE COAT - HINDERS UL (1MM)

Mixing Procedure:

1. Mix Component-B (Hardener) with Component-A (Resin) first.
2. Add Component-C (Special Filler) & mix again thoroughly.
3. Mix for 5–7 minutes using a drill & paddle at a maximum 500 RPM until a smooth, homogeneous mix is achieved.

Application Procedure:

1. **Primer curing:** Ensure Hind ERS Prime coat is fully tack-free (min. 6 hrs, preferably 24 hrs) before applying the base coat.
2. Pour & spread the mixed Hind ERS UL evenly on the primed surface in a single coat to achieve a uniform 1mm thickness. The material is self-leveling – allow it to self-level uniformly.
3. Ensure the applied coat is smooth, level, & free from voids or bubbles. This coat must provide a perfectly flat surface for the PU Shield finish coats.
4. **Curing before finish coats:** Allow the base coat to cure for a minimum of 24 hours before applying the first coat of Hind PU Shield 1670.
5. Clean all tools immediately after use with a suitable solvent.

STEP - 4

FIRST FINISH COAT – HIND PU SHIELD 1670

Mixing Procedure:

1. Mix Component-A (Resin / Colour Paste) in the vessel until a uniform colour is obtained.
2. Add Component-B (Hardener) in the ratio 100:20 by weight & stir well until a homogeneous mixture is obtained.
3. **Pot Life:** Approximately 30–60 minutes at 30°C. Use the mixed material within the pot life.

Application Procedure:

1. Ensure the primer (or base coat if applied) is fully cured before applying the first finish coat.
2. Apply the mixed Hind PU Shield 1670 uniformly over the prepared surface using a roller, brush, or squeegee to achieve a DFT of 70–100 microns.
3. If spraying, ensure good exhaust provision & use appropriate PPE, including goggles & a breathing mask.
4. Ensure uniform, even coverage across the entire surface with no missed areas.
5. **Curing before second coat:** Surface dry in 30–40 minutes. Allow the first coat to cure for 12–16 hours (recoat time) before applying the second coat.
6. Clean all tools immediately after use with thinner or a suitable solvent.

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SECOND FINISH COAT – HIND PU SHIELD 1670

Mixing Procedure:

1. Follow the same mixing procedure as the first coat. Mix Component-A until a uniform color is obtained, then add Component-B (100:20 ratio by weight) & stir until a homogeneous mixture is achieved.
2. **Pot Life:** Approximately 30–60 minutes at 30°C. Mix only the quantity that can be applied within the pot life.

Application Procedure:

1. Confirm the first coat has cured for the required 12–16 hours & is fully dry before applying the second coat.
2. Apply the second coat of Hind PU Shield 1670 uniformly over the first coat using a roller, brush, or squeegee to achieve a DFT of 70–100 microns.
3. Apply in a direction perpendicular to the first coat to ensure uniform film build & consistent coverage.
4. **Total System DFT:** Ensure the total Dry Film Thickness (DFT) of the two-coat system is 140–200 microns.
5. Protect the coated surface from dust, moisture, rain, & traffic during the curing period.
6. **Final Curing:** Surface dry in 30–40 minutes. Hard dry in 24 hours. Light foot traffic / light load permitted after 24–36 hours. Full traffic load permitted after 72 hours.
7. Clean all tools immediately after use with thinner or a suitable solvent.

IMPORTANT NOTES:

1. The PU Shield system must be installed by approved & trained contractors.
2. Hind PU Shield 1670 offers excellent UV resistance & color stability - suitable for both interior & exterior floor applications.
3. Store products in a well-ventilated place, protected from direct sunlight. Shelf life is 1 year from the date of manufacture in sealed, unopened containers.
4. While handling, avoid all contact with eyes, skin, & clothes. In case of eye contact, rinse with cold running water for 10–15 minutes & seek immediate medical attention.

MATERIAL COVERAGE SUMMARY

Product / Layer	Pack Size	DFT / Thickness	Coverage
Hind ERS Prime (Primer)	2 Kg / 4 Kg / 20 Kg	200 Microns DFT	150–200 gm / Sq. Mtr
Hind ERS UL (Base Coat)	6 Kg / 24 Kg	1.0mm	1.5 Kg / m ²
Hind PU Shield 1670 - 1st Coat	As Required	70 - 100 Microns DFT	4 - 6 m ² / Kg
Hind PU Shield 1670 - 2nd Coat	As Required	70 - 100 Microns DFT	4 - 6 m ² / Kg
Total PU Shield DFT	-	140 - 200 Microns	-

IMPORTANT NOTE – SCRATCH COAT / PUTTY COAT:

The application of Epoxy & PU flooring & coatings is highly sensitive to surface conditions. Depending on the substrate porosity, texture, & site conditions, a Scratch Coat / Putty Coat may be necessary over the primer or underlayment surface before applying the final top coat.

A Scratch Coat / Putty Coat is a thin additional layer of the topcoat material, applied to seal any residual surface irregularities, micro-pores, or voids. This step ensures a superior, uniform finish on the final coat by significantly reducing the risk of pinholes, surface defects, & uneven appearance in the cured system.

The necessity of a Scratch Coat / Putty Coat is to be assessed by the applicator based on the actual site surface conditions prior to application of the final topcoat.