

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, and free from all dust, oil, grease, cement laitance, loosely adhering particles, curing compounds, and other contaminants.
2. Mechanical surface preparation by grinding, shot blasting, or scarifying must be carried out to remove all surface contamination and 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 and level. Vacuum Dewatered Flooring (VDF) concrete is strongly preferred as a base substrate because it provides a hard, dense, and smooth surface necessary for uniform coating application and finish quality.
4. Any cracks, potholes, or surface irregularities must be repaired using a suitable epoxy or cementitious repair mortar and 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) and 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 and proper material consumption @ 150–200 gms / Sq. Mtr (DFT 200 microns).
5. **Curing before next coat:** Allow the primer to cure and 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) and mix again thoroughly.
3. Mix for 5–7 minutes using a drill and 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 and 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, and 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 and 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 and use appropriate PPE, including goggles and 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) and 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 and 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 and 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, and 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 and trained contractors.
2. Hind PU Shield 1670 offers excellent UV resistance and color stability - suitable for both interior and 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, and clothes. In case of eye contact, rinse with cold running water for 10–15 minutes and 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	-

STRENGTH UPON STRENGTH