

# self leveling epoxy

# SLE and SLE-T systems

## application instructions



### PART 1 – INFORMATION & PREPARATION

#### general information

Perdüre SLE & SLE-T are resin flooring systems consisting of 100% solids epoxy resin and aggregates which provide heavy-duty protection at 1/4". When grouted and sealed this flooring system eliminates porosity and produces a dense, skid-inhibiting finish that will minimize dirt and chemical penetration. The chemical resistance and overall performance of Perdüre SLE & SLE-T can be increased by using different epoxy, polyurethane and polyaspartic top coats.

#### surface preparation

Surface Preparation is the most critical portion of any successful resinous flooring system application. All substrates must be properly prepared as outlined in Technical Bulletin-1. Specific attention should be paid to the following:

- Concrete Placement - An efficient vapor barrier should be directly under slabs on or below grade to prevent moisture migration
- Curing and Finishing techniques of the concrete substrate
- Age of concrete
- Previous contamination of the substrate
- Present condition of the substrate
- Make sure the floor is free of moisture vapor transmission

Also, the temperature conditions of the area to receive the flooring system should be checked. An optimum room temperature of 75°F with a slab temperature of 50°F is required for proper cure of the resin flooring system.

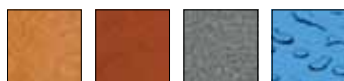
#### material quantities

GUIDELINE SYSTEM REQUIREMENTS FOR 1000FT <sup>2</sup> – 1/16" THICK		
Perdüre E02	100% solids epoxy primer	4.0 gal
Perdüre E10	100% solids epoxy body coat	22 gal
Filler	Self leveling filler	425 lbs
Perdüre E20a	100% solids epoxy coating	8-10 gal

Perdüre E20 can be replaced with Perdüre U50, Perdüre P70, Perdüre NE25 or Perdüre NE30. Consult your technical representative for suitability of the product.

GUIDELINE SYSTEM REQUIREMENTS FOR 1000FT <sup>2</sup> – 1/8" THICK BROADCAST SYSTEM		
Perdüre E02	100% solids epoxy primer	4.0 gal
Perdüre E10	100% solids epoxy body coat	22 gal
Filler	Self leveling filler	425 lbs
Sand	Broad cast sand, #30 mesh	500 lbs
Perdüre E20a	100% solids epoxy coating	8-10 gal
Perdüre U50	Solvent based polyurethane	3-4 gal

Perdüre E20 can be replaced with Perdüre U50, Perdüre P70, Perdüre NE25 or Perdüre NE30. Consult your technical representative for suitability of the product.



## Recommended Batch Quantities

- 1.25 gal unit of Perdüre E10
- 25 lbs of Self-leveling filler

Estimated batch coverage: - 60 ft<sup>2</sup>

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## PART 2—PRIMING

### 1. mixing endüra e02\*, low modulus epoxy primer

Stir each component prior to mixing.

Mix 2 parts by volume of Part A (base) with 1 part by volume of Part B (hardener) for 3 minutes with a low speed electric drill mixing paddle.

If thinning is desired, add no more than one pint of Xylene per gallon of epoxy at the time of mixing.

Mix only that amount of material that can be used in 20-25 minutes. Do not let mixed material sit in the mixing container longer than 5 minutes or working time will be significantly reduced.

\* If the moisture vapor emission rate or moisture content exceeds the stipulated maximums, use Perdüre MVT in lieu of Perdüre E02.

### 2. application

Pour primer onto the prepared concrete substrate.

Spread with either a flat trowel or squeegee to a coverage of 25'-275 ft<sup>2</sup> per gallon.

Backroll with a short nap roller.

Broadcast lightly with dry 30-mesh sand if allowed to cure longer than 24 hours before topcoating.

### 3. completion

Allow the primer to sit for 30 minutes. Trowelled slurry may be applied to wet primer for up to 5 hours after primer application. If primer is to be allowed to sit overnight or for prolonged periods, broadcast lightly with dry silica sand.

## Part 3—Application of Self-leveling Floor

### 1. mixing perdüre e10 epoxy binder and self leveling filler

Stir each component prior to mixing.

Mix 4 parts by volume of Part A (base) with 1 part by volume of Part B (hardener) for 3 minutes with a low speed electric drill mixing paddle.

Continue mixing while slowly adding self-leveling filler to the premixed Perdüre E10.

Continue mixing resin/filler for 3 to 4 minutes or until material is blended to a uniform consistency. The mix has the appearance of 'pancake batter'.

Mix only that amount of material that can be used in 20-25 minutes. Do not let mixed material sit in the mixing container longer than 5 minutes or working time will be significantly reduced.

### 2. application

Place mixture on primed surface and spread with 1/4" V-notched trowel or 1/4" V-notched squeegee pulling the material toward you in a "figure-8" pattern. Leave a 'wet line' or puddle of material between batches to avoid "knit-lines" in the finished system.

Back-roll system with a spiny roller while material is still wet. To minimize marks in finished system, the contractor should wear 'spiked' shoes while walking on wet material.

Allow the material to level for approximately 10 minutes. If surface or room temperatures are below 70°F, some of the self-leveling filler can be left out of the mix to improve fluidity of the mix. Slab and room temperature should be maintained at minimum 70°F and maximum 90°F for best results.

Termination points at the end of the day should be made at doorways, expansion joints, etc. If it is not possible to terminate at these points, 2" masking tape should be placed in a straight line at the ending point. Carefully trowel the material up to and slightly over the inside edge of the tape. Allow material to cure for about 30 minutes and remove the tape.

### 3. broadcast to excess (only for perdüre sle-t system)

If applying the Perdüre SLE system, proceed to the Step C (Grouting and Sealing).

Broadcast 30-mesh silica sand into the wet floor system until the surface of the system appears dry. Be careful not to clump the material or produce high spots. Approximately 4 to lbs of sand will be needed for 10 ft<sup>2</sup> of flooring. If terminating the system with tape as described above, broadcast sand up to the tape and remove after material cures 30 minutes. Remember to only walk on the wet surface while wearing spiked shoes!!! Do not walk on the floor after broadcasting.

4. allow the floor to cure overnight

Sweep excess sand with a stiff bristled broom or power vacuum. A light sanding or rubbing with a stone will aid in achieving a uniform 'sanded' surface.

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## **PART 4—APPLICATION OF GROUT COAT / TOP COAT**

The grouting and sealing a floor should be performed over the entire area receiving the system. The applicator should complete the self-leveling/broadcast portion of the application prior to grouting and sealing.

### **Grouting — Perdüre E20 – 100% solids epoxy coating**

(coverage rate shown for Perdüre SLE-T applications only)

#### **mixing**

Thoroughly mix each component prior to combining.

Mix 2 parts by volume of Part A (Resin) with 1 part by volume of Part B (Hardener) for 3 minutes with a low speed electric drill mixing paddle.

Do not mix more material than can be used in 30 minutes.

#### **application**

Pour material onto floor in a line and spread with a flat squeegee or trowel to a coverage of 80-100 ft<sup>2</sup>/gal, depending on desired finish texture.

Backroll with a short nap roller to even the surface texture of the coating.

Allow to cure 12-16 hours.

### **Sealing — Perdüre U50, Polyurethane topcoat**

#### **mixing**

Thoroughly mix each component prior to combining.

Mix 2 parts by volume of Part A (Resin) with 1 part by volume of Part B (Hardener) for 3 minutes with a low speed electric drill mixing paddle.

Do not mix more material than can be used in 45 minutes.

#### **application**

Pour material onto floor in a line and spread with a flat squeegee to a coverage of 250-300 ft<sup>2</sup>/gallon. This will yield 3 to 4 mils dry film thickness.

Slowly backroll with a short nap roller to even the surface texture of the coating. Do not backroll excessively.

Open to light traffic after 24 hours. Full chemical cure and maximum resistance are achieved in 5 days.

The applicator should complete the broadcast portion of the application prior to grouting. Thoroughly and lightly sand dry resin chips with pole sanders (36 grit sand paper) in two directions prior to grouting with Endüra P70 (or Endüra E10 and Endüra U50). A floor buffer with abrasive screen (60-80 grit) mounted to the white pad can also be used. Be very careful with this technique... keep the buffer moving at all times, left motion, pulling rather than pushing. Broom and vacuum the loose particles from the floor surface.