

Epoxy, Polyurethane, Acrylic and Polyaspartic Coatings

1. Perdüre E02, 100% solids epoxy primer
2. Perdüre E32, Water emulsion primer
3. Perdüre E20, 100% solids epoxy bodycoat
4. Endüra E21, 100% solids epoxy primer/bodycoat
5. Perdüre NE25, Chemical resistant coating
6. Perdüre NE30, Novolac epoxy coating
7. Perdüre U45, Matte water based polyurethane topcoat
8. Perdüre U46, Gloss water based polyurethane topcoat
9. Perdüre U50, Solvent based polyurethane topcoat
10. Perdüre U50(HS), Moisture cured polyurethane topcoat
11. Perdüre P70, Polyaspartic polyurea coating
12. Perdüre A01, Solvent based acrylic sealer
13. Perdüre A03, Water based acrylic sealer

I. GENERAL INFORMATION

Düraamen Epoxy, Polyurethane and Polyaspartic coatings are high performance coating systems that provide protection against dirt and chemical penetration to concrete floors. They are available in various performance levels. Contact your Düraamen Representative for assistance with proper material choice for specific performance criteria.

II. SURFACE PREPARATION

Surface Preparation is the most critical portion of any resinous flooring system application. All substrates must be properly prepared as outlined in Düraamen's **TECHNICAL BULLETIN #1**. Specific attention should be paid to the following:

- A. **Concrete placement**
- B. **Curing and finishing techniques of the concrete substrate**
- C. **Age of concrete**
- D. **Previous contamination of the substrate**
- E. **Present condition of the substrate**
- F. **Surface profile required for the system (ICRI CSP 2-5 is typical, varies by system)**

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

Installation over existing resin coatings: The existing resin flooring or coating must have acceptable adhesion to the substrate and have similar physical properties to the new coating (e.g., epoxy over epoxy, urethane over epoxy/urethane, acrylic over acrylic, etc.). The hardness and physical condition of the existing coating will dictate the required surface preparation. Harder resins will require more extensive sanding or may require diamond grinding. The surface must be thoroughly cleaned of any dirt, oil or other contaminants, followed with aggressive sanding/grinding using 60-80 mesh sand paper, abrasive screen or diamonds. Vacuum and damp mop any dust. The goal is to impart a textured profile in the existing coating or floor system to provide a mechanical bond for the new resin application. Cracks and divots should be routed or chipped out and filled with epoxy resin. Acrylic coatings on exterior decks applied to a textured surface can not be sanded without removing the texture, pressure washing and solvent wiping may be the only viable option. The intercoat adhesion of acrylic coatings is not ideal even with sanding, which will dictate that more frequent reapplications be done in the future. Once every year or two is typical.

III. MATERIAL QUANTITIES

Düraamen's Epoxy, Urethane (Polyurethane) and Polyaspartic Coating coverages and number of coats depend upon desired film thickness. Typical coverage rates for a single coat are outlined below.

1. Perdüre E02, 100% Solids Epoxy Primer	250-300ft ² /gallon	4-5 mils DFT
2. Perdüre E32, Water based Epoxy Emulsion	300-350ft ² /gallon	2-3 mils DFT
3. Perdüre E20 <i>100% Solids Epoxy Coating</i>	100-160 ft ² /gallon	10-15 mils DFT
4. Endüra E21 <i>100% Solids Epoxy Primer/Coating</i>	100-250 ft ² /gallon	6-15 mils DFT
5. Perdüre NE25 <i>Chemical Resistant Coating</i>	100-160 ft ² /gallon	10-15 mils DFT
6. Perdüre NE30 <i>Epoxy Novolac Coating</i>	100-160 ft ² /gallon	10-15 mils DFT
7. Perdüre NE33 <i>Epoxy Novolac Coating</i>	100-160 ft ² /gallon	10-15 mils DFT
8. Perdüre U50 (<i>clear/pigmented</i>) <i>Urethane Coating</i>	250-300 ft ² /gallon	3-4 mils DFT
9. Perdüre U45 (<i>clear/pig.</i>) <i>Water-Based Urethane Coating</i>	300-350 ft ² /gallon	2 mils DFT
10. Perdüre U46 (<i>clear/pig.</i>) <i>Water-Based Urethane Coating</i>	300-350 ft ² /gallon	2 mils DFT
11. Perdüre U50(HS) (<i>clear/pigmented</i>) <i>Urethane Coating</i>	450-500 ft ² /gallon	3 mils DFT
12. Perdüre P70 (<i>clear/pig.</i>) <i>Polyaspartic Polyurea Coating</i>	100-160 ft ² /gallon	8-15 mils DFT
13. (Perdüre P70 may be applied at less thickness if thinned 10%-20% with MEK)		
14. Perdüre A01(<i>clear</i>) <i>Acrylic Sealer</i>	250-300 ft ² /gallon	0.5-1.5 mils DFT
15. Perdüre A03 (<i>clear</i>) <i>Acrylic Sealer</i>	300-400 ft ² /gallon	0.5-1 mil DFT

IV. INSTALLATION

A. Priming

Düraamen Engineered Products recommends that every flooring system be installed with a primer to insure maximum adhesion to the prepared substrate. Priming will also help to seal air in the concrete and prevent outgassing and air bubbling in the finished system. Either Perdüre E02, 100% solids *Epoxy Primer/Low Modulus Binder*, Endüra E21, *Epoxy Primer/Coating*, or *Perdüre E32, Water Emulsion Primer* can be used. Perdüre MVT or Perdüre MVT+ may be used if moisture vapor emission rate exceeds maximum limits (refer to Technical Bulletin #1). Contact Düraamen Company for details.

Using Perdüre E02 Primer/Low-Modulus Binder

1. Mixing
 - a. Stir each component prior to mixing.
 - b. Mix two (2) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - c. If thinning is desired, add no more than one pint of xylene or MEK per gallon of epoxy at time of mixing.
 - d. ***Do not mix more material than can be immediately poured out in ribbons and spread/backrolled within 30 minutes. Do not leave mixed material in the pail for longer than 5-10 minutes or working time will be significantly reduced!***
2. Application
 - a. Pour mixed resin onto the prepared concrete.
 - b. Spread with either a flat trowel or squeegee to a coverage of 250 to 275 ft² per gallon.
 - c. Back roll with a short nap roller.
 - d. Allow primer to cure 10-12 hours (at 75 degrees F) prior to topcoating. A fast cure formulation is available to reduce re-coat window to 4-8 hours. If primer is to be allowed to sit for longer than 24 hours, broadcast lightly with dry silica sand.

Using Endüra E21 Primer/Coating

1. Mixing

- a. Stir each component prior to mixing.
 - b. Mix four (4) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - c. If thinning is desired, add no more than one pint of xylene or MEK per gallon of epoxy at time of mixing.
 - d. **Do not mix more material than can be immediately poured out and spread/backrolled in 30 minutes. Do not leave mixed material in the pail for longer than 5-10 minutes or working time will be significantly reduced!**
2. Application
- a. Pour mixed resin onto the prepared concrete.
 - b. Spread with either a flat trowel or squeegee to a coverage of 250 to 275 ft² per gallon when using as primer.
 - c. Back roll with a short nap roller.
 - d. Allow primer to cure 12-16 hours prior to re-coating. A fast cure formulation is available to reduce re-coat window to 8-10 hours. If primer is to be allowed to sit for longer than 24 hours, broadcast lightly with dry silica sand.

Using Perdüre E32 Water Based Emulsion Primer – Use two coats for maximum reduction of outgassing.

1. Mixing
 - a. Stir each component prior to mixing.
 - b. Mix two (2) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - c. Allow 30 minutes for induction before applying
2. Application
 - a. Apply using a short nap roller at a spread rate of not less than 300 ft² per gallon.
 - b. As water leaves the system, the coating will become clear. Do not allow thick applications or puddles where coating remains white.
 - c. When surface becomes clear, the second coat may be applied (this will be one to four hours depending on flow of air and temperature).
 - d. Apply topcoat(s) in timeframe stated in the product data sheet.

To Use Perdüre **MVT Moisture Vapor Control Primer** or **Perdüre UMC** – Consult with Duraamen Technical Services for best practices.

B. Epoxy, Polyurethane, Polyaspartic, Acrylic Coatings

Note on Creating Texture: Non-Skid Additive (80/100 mesh or 20/30 mesh) or White Aluminum Oxide (80 mesh or 240 mesh) may be blended with the epoxy, Polyurethane, Polyaspartic or Acrylic resin used for the final topcoat to create a textured finish. Even if non-slip texture is not needed, a very light texture is recommended to improve the overall appearance. Typical mix design ranges from 3-12 ounces by volume per mixed gallon of resin depending on coating film thickness and texture desired. Experiment with samples to confirm the texture you want to achieve. When using the aluminum oxide, be sure to keep the grit periodically stirred up in the resin unless all of the resin is poured out immediately. You may also lightly broadcast the grit into the final topcoat and backroll it, but be careful to maintain a very consistent procedure or the texture will vary significantly. Consult with Duraamen Technical Services for additional recommendations.

1. **Perdüre E20, 100% Solids Epoxy Coating**
 - a. Mixing
 - i. Thoroughly mix each component prior to combining.
 - ii. Mix two (2) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - iii. **Do not mix more material than can be immediately poured out and spread/backrolled in 30-35 minutes. Do not leave mixed material in the pail for longer than 5-10 minutes or working time will be significantly reduced!**

- b. Application
 - i. Pour material onto floor in a line and spread with a roller or flat squeegee to a coverage of 160 ft²/gallon (or specified coverage rate). This will yield 10.0 mils dry film thickness.
 - ii. Back roll with a short nap roller to even the surface texture of the coating.
 - iii. Allow material to cure a minimum of 12 hours (at 70⁰ F) before applying a second coat. Two coats are recommended for superior protection against wear, impact, and chemical attack.
 - iv. Do not open to light foot traffic for 24 hours (at 70⁰ F). Full chemical cure and maximum resistance are achieved in five (5) days.
2. **Endüra E21, 100% Solids Epoxy Primer / Coating**
- a. Mixing
 - i. Thoroughly mix each component prior to combining.
 - ii. Mix four (4) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - iii. **Do not mix more material than can be immediately poured out and spread/backrolled in 30 minutes. Do not leave mixed material in the pail for longer than 10 minutes or working time will be significantly reduced!**
 - b. Application
 - i. Pour material onto floor in a line and spread with a roller or flat squeegee to a coverage of 160 ft²/gallon (or specified coverage rate). This will yield 10.0 mils dry film thickness.
 - ii. Back roll with a short nap roller to even the surface texture of the coating.
 - iii. Allow material to cure a minimum of 12-16 hours before applying a second coat. Two coats are recommended for superior protection against wear, impact, and chemical attack.
 - iv. Do not open to light foot traffic for 24 hours. Full chemical cure and maximum resistance are achieved in five (5) days.
3. **Perdüre NE25, Chemical Resistant Coating**
- a. Mixing
 - i. Thoroughly mix each component prior to combining.
 - ii. Mix two (2) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - iii. **Do not mix more material than can be immediately poured out and spread/backrolled in 20-25 minutes. Do not leave mixed material in the pail for longer than 5 minutes or working time will be significantly reduced!**
 - b. Application
 - i. Pour material onto floor in a line and spread with a roller or flat squeegee to a coverage of 100-160 ft²/gallon (or specified coverage rate). This will yield 10-15 mils dry film thickness.
 - ii. Back roll with a short nap roller to even the surface texture of the coating.
 - iii. Allow material to cure 12 to 16 hours before applying a second coat. Two coats are recommended for superior protection against wear, impact, and chemical attack.
 - iv. Do not open to light traffic for 24 hours. Full chemical cure and maximum resistance are achieved in five (5) days.
4. **Perdüre NE30, Novolac Epoxy Coating**
- a. Mixing
 - i. Thoroughly mix each component prior to combining.
 - ii. Mix two (2) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - iii. **Do not mix more material than can be immediately poured out and spread/backrolled in 20-25 minutes. Do not leave mixed material in the pail for longer than 5 minutes or working time will be significantly reduced!**
 - b. Application
 - i. Pour material onto floor in a line and spread with a flat or notched squeegee to a coverage of 100-160 ft²/gallon (or specified coverage rate). This will yield 10-15 mils dry film thickness.
 - ii. Back roll lightly with a 1/4"-3/8" short nap roller to even the surface texture of the coating.
 - iii. Allow material to cure 12 to 16 hours (at 75 degrees F) before applying a second coat. Two coats are recommended for superior protection against wear, impact, and chemical attack.

- iv. Do not open to light foot traffic for 24 hours. Full chemical cure and maximum resistance are achieved in five (5) days.

5. **Perdüre NE33, Epoxy Novolac Coating**

Note: **Perdüre NE33** has greater chemical resistance for certain chemicals as compared with **Perdüre NE30**. **Perdüre NE33** has higher viscosity and ideally should be stored in temperatures exceeding 75⁰ F to improve handling.

- a. Mixing
 - i. Thoroughly mix each component prior to combining.
 - ii. Mix two (2) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - iii. **Do not mix more material than can be immediately poured out and spread/backrolled in 20-25 minutes. Do not leave mixed material in the pail for longer than 5 minutes or working time will be significantly reduced!**
- b. Application
 - i. Pour material onto floor in a line and spread with a roller or flat squeegee to a coverage of 100-160 ft²/gallon (or specified coverage rate). This will yield 10-15 mils dry film thickness.
 - ii. Back roll with a short nap roller to even the surface texture of the coating.
 - iii. Allow material to cure 12 to 16 hours before applying a second coat. Two coats are recommended for superior protection against wear, impact, and chemical attack.
 - iv. Do not open to light traffic for 24 hours. Full chemical cure and maximum resistance are achieved in five (5) days.

7. **Perdüre U50, Aliphatic Polyurethane Coating (Clear/Pigmented, Gloss or Satin)**

- a. Mixing
 - i. Thoroughly mix each component prior to combining.
 - ii. Mix two (2) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - iii. **Do not mix more material than can be used in 60 minutes. Do not leave mixed material in the pail for more than 60 minutes!**
 - iv. **Important note for Satin Finish:** Add 10% SU-93 Thinner to reduce occurrence of roller/lap marks. Maintain a wet edge with previous batch or greater thickness at overlap will create a greater satin effect.
- b. Application
 - i. Pour material onto floor in a line and spread with a flat squeegee to a coverage of 250-300 ft²/gallon (or specified coverage rate). "Dip and roll" procedure may be used with small batches, use within 60 minutes. This will yield 3-4 mils dry film thickness. Note on finished appearance: Thinner application rates (>300 ft²/gallon) will result in a slight to prominent orange peel texture, thicker application rates (225-300 ft²/gallon) will yield a more smooth finish texture.
 - ii. Immediately and slowly back roll with a short nap mohair roller (cleaned of loose hair, lint) to even the surface texture of the coating. If crossrolling will also be done, do so immediately. Do not delay backrolling/crossrolling or excessive solvent may evaporate leading to formation of microbubbles. Do not overroll or rapidly roll the **Perdüre U50**.
 - iii. Allow material to cure 12 to 16 hours (at 75⁰ F) before applying a second coat. SU-93 Thinner and/or **Perdüre U50 Accelerator** may be used as conditions require, consult with **Düraamen Technical Service** for specific recommendations.
 - iv. Do not open to light foot traffic for 24 hours. Full chemical cure and maximum resistance are achieved in five (5) days.

8. **Perdüre U45 Water Based Aliphatic Polyurethane Coating (Clear/Pigmented, Matte)**

- a. Mixing
 - i. Thoroughly mix each component prior to combining.
 - ii. Mix four (4) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle. Allow material to sit for 15-20 minutes for viscosity adjustment (it will initially increase then decrease). DO NOT ADD WATER or NMP solvent unless approved by **Düraamen Technical Service**.
 - iii. **Do not mix more material than can be used in one hour.**

- b. Application
 - i. Apply at a coverage rate of 300-350 ft²/gallon. This will yield 1.5-2 mils dry film thickness. A thicker application rate MAY RESULT IN BUBBLING IN THE CURED FILM.
 - ii. Dip and roll procedure works well due to the extended pot life. Maintain a wet roller at all times, do not dry roll or apply too thin (greater than 350 ft²/gallon) to reduce occurrence of roller marks, lap marks or “skippers”. Back roll with a short nap roller to even the surface texture of the coating. When rolling back into previous batch of material, do not exceed 15 minutes from the time the previous batch was placed or lap marks may occur. If cross-rolling, do so immediately after backrolling.
 - iii. Allow material to cure 8 hours (at 75⁰ F) before applying a second coat. Two coats are recommended for consistent appearance, superior protection against wear, impact, and chemical attack.
 - iv. Do not open to light traffic for 24 hours. Full chemical cure and maximum resistance are achieved in five (5) days.

9. **Perdüre U46 *Water Based Aliphatic Polyurethane Coating (Clear/Pigmented, Gloss)***

- a. Mixing
 - i. Thoroughly mix each component prior to combining.
 - ii. Mix four (4) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle. Allow material to sit for 15-20 minutes for viscosity adjustment (it will initially increase then decrease). DO NOT ADD WATER or NMP solvent unless approved by Düramen Technical Service. If approved, up to 5% (by volume) water may be added.
 - iii. **Do not mix more material than can be used in one hours.**
- b. Application
 - i. Apply at a coverage rate of 300-350 ft²/gallon. This will yield 1.5-2 mils dry film thickness. A thicker application rate MAY RESULT IN BUBBLING IN THE CURED FILM.
 - ii. Dip and roll procedure works well due to the extended pot life. Maintain a wet roller at all times, do not dry roll or apply too thin (greater than 350 ft²/gallon) to reduce occurrence of roller marks, lap marks or “skippers”. Back roll with a short nap roller to even the surface texture of the coating. When rolling back into previous batch of material, do not exceed 15 minutes from the time the previous batch was placed or lap marks may occur. If cross-rolling, do so immediately after backrolling.
 - iii. Allow material to cure 10 hours (at 75⁰ F) before applying a second coat. Two coats may be necessary (depending on coverage rate) for consistent appearance, superior protection against wear, impact, and chemical attack.
 - iv. Do not open to light foot traffic for 24 hours. Full chemical cure and maximum resistance are achieved in five (5) days.

10. **Perdüre U50(HS) *Aliphatic Urethane Coating (Clear/Pigmented, Gloss or Satin)***

Important

Note: Perdüre U50(HS) Gloss and Satin are different formulations, which require different part B Hardeners, do NOT interchange part B's or cure problems will occur!

Important Note: This is a uniquely hard wearing and low odor polyurethane formulation. As a result, it has a tendency to “fish eye” or pull apart in some instances like epoxy coatings that is cured for more than 24 hours. It is advised to use some quantity of Non-Skid Additive (fine mesh) or 240 mesh aluminum oxide which helps to reduce this tendency. It is recommended to add 2-8 ounces by volume of Düramen NSA (fine) or 2-32 ounces by volume 240 mesh aluminum oxide. Also, consider applying Perdüre U50(HS) over epoxy basecoat that has been lightly broadcasted/backrolled with 30-60 grit silica sand, colored quartz or aluminum oxide granules.

- a. Mixing
 - i. Thoroughly mix each component prior to combining.
 - ii. Mix four (4) parts by volume of Part A with one (1) part by volume of Part B for three minutes with a low speed electric drill and mixing paddle (Jiffy mixer). Do not thin material. If adding Urethane Pigment Pack (UPP) or Satin Additive (SA), mix Part A and Part B for a minimum of 2 minutes before adding UPP or SA and continue mixing for 1-2 additional minutes.

Important: Do NOT add pigment pack before first thoroughly mixing Part A and Part B, otherwise color will be altered.

- ii-a. Urethane Pigment Pack Mix Ratio: 1 pint UPP per 1 gallon part A Perdüre U50(HS). White requires 2 pints UPP per 1 gallon part A, applied over white epoxy basecoat. Add UPP after first mixing part A and part B thoroughly.
- ii-b. Satin Finish: After mixing Part A and Part B as outlined above, add 1.0-1.5 gallons Satin Additive (SA) to 1.25 gallons mixed resin and continue mixing for 1-2 minutes. **Important:** If adding Urethane Pigment Pack (UPP), mix UPP with mixed resin BEFORE adding SA. **Important:** Be sure to maintain consistent mix ratio of SA to mixed resin from batch to batch to ensure consistent satin finish.
- ii-c. HTS Finish (240 mesh AL/OX): After mixing Part A and Part B as outlined above, for maximum wear resistance with Gloss Finish only add ½ gallon of Duramen 240 mesh aluminum oxide powder to 1.25 gallons mixed resin and continue mixing for 1-2 minutes. If using UPP or SA, mix those components prior to adding HTS additive. **Important:** Adding 8 ounces (by volume) up to ½ gallon of 240 mesh aluminum oxide to gloss finish will reduce gloss. If using Satin formulation, it is advised to use no more than ¼ gallon of 240 mesh aluminum oxide to higher viscosity of satin formulation. When using 240 mesh aluminum oxide, mix small batches (1.25 gallons) and remix as needed to keep grit suspended, particularly just prior to pouring into a paint pan if using “dip and roll” procedure.
- iii. **Do not mix more material than can be used in one hours.**

b. Application

- i. Pour material onto floor in a line and spread with a flat squeegee to a coverage of 450-500 ft²/gallon. This will yield 3 mils dry film thickness. Initially an “orange peel” texture will be evident if applying at correct thickness, which will slowly level out. Do not apply thicker than 3.5-4 mils DFT (350-400 ft²/gallon) or microbubbles may form. “Dip and roll” procedure may also be used, particularly when applied over broadcasted or troweled mortar systems with low spots, as this will reduce the risk of pooling the resin, causing microbubbles and a resulting white haze.
- ii. Immediately and slowly back roll with a lint-free short nap mohair roller to even the surface texture of the coating. Material must be **very thoroughly** rolled or “fish eyes” (i.e., material separation) may occur. Also, bear down on the roller handle with enough force that the handle bends slightly, to insure enough pressure is used, to help reduce material separation. Crossrolling is recommended, do this immediately. If resin begins to “fish eye” or pull apart, immediately re-roll, this can be performed up to 30 minutes after initial placement. Do not rapidly roll the Perdüre U50(HS) Polyurethane or microbubbles may form from air entrainment. **Important:** Change roller cover every 45-60 minutes, as accumulated older resin may cause reaction with fresh material, resulting in shortened working time and/or microbubbles. Apply material within the recommended thickness range and allow to cure tack free if topcoating.
- iii. Allow material to cure 8 to 10+ hours at 75°F, 50% RH before applying a second coat. Perdüre U50(HS) must be aggressively sanded (completely de-glossed) prior to application of a second topcoat or “fish eyes/crawling” may occur. Use diamond-impregnated buffer pad (100-150 grit is recommended), or resin-bond diamond plugs (100-150 grit), or 80-100 grit carborundum sand paper. **Important:** Perdüre U50(HS) is a moisture cure polyurethane, relative humidity will significantly affect cure speed. Relative humidity range must be 30%-90% RH, low RH will slow the cure rate. Note that very high humidity (90%+) may result in moisture condensation on the substrate, which can cause numerous small bubbles to form in the polyurethane.
- iv. Do not open to light foot traffic for 24 hours at 75°F, 50% RH. Do not open to vehicle traffic for 72+ hours at 75°F, 50% RH. Full chemical cure and maximum resistance are achieved in five to seven (5-7) days at 75°F, 50% RH.

11. Perdüre P70 **Polyaspartic Polyurea Coating (Clear/Pigmented, Gloss)**

Note: It is acceptable to apply Perdüre P70 as grout coat directly over a quartz or sand broadcast. Do not thin with solvent if used in this manner. If a second topcoat is applied, sanding the grout coat is not necessary.

a. Mixing

- i. Mix two (2) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - ii. Up to 15% solvent by volume (MEK or VOC compliant solvent available from Düramen) may be added to lengthen pot life and allow for application at 200-300 ft²/gallon.
 - iii. **Do not mix more material than can be immediately poured out in ribbons, spread and backrolled in 15 minutes, unless 10%-15% solvent is added which will increase pot life to 20+ minutes.**
- b. Application
- i. Immediately pour material onto floor in a ribbon and spread using a squeegee, notched squeegee or trowel at a coverage rate of 100-200 ft²/gallon. This will yield 8-15 mils dry film thickness. Applying at a thinner application rate (except when solvent is added), over rolling or backrolling too late MAY RESULT IN BUBBLING IN THE CURED FILM. "Dip and roll" procedure may be used if solvent is added.
 - ii. Immediately back roll gently with a short nap roller to even the surface texture of the coating.
 - iii. Allow material to cure 6 hours (at 75⁰F) before applying a second coat. First coat **must** be lightly sanded or screened before applying second coat, except when the prior coat is a grout coat over a full aggregate broadcast. Fast Cure formulation may be topcoated in 2-3 hours.
 - iv. Do not open to light foot traffic for 6 hours with Regular Cure (at 70-75⁰F) or 3 hours for Fast Cure. Vehicle traffic in 24-48 hours depending on applied thickness and temperature. Full chemical cure and maximum chemical resistance and hot tire resistance are achieved in 48 hours.

12. Perdüre A01 **Acrylic Sealer (Clear, Gloss)**

- a. Mixing
- i. Perdüre A01 is a single component solvent based acrylic, mix for two-three minutes with a low speed electric drill mixing paddle.
- b. Application
- i. Pour material into a paint pan, apply with 1/4"-3/8" nap roller using "dip and roll" technique at 250-500 ft² per gallon. Re-coat time is 2-4 hours at 75⁰F. Apply one or two coats as required to achieve desired finish.
 - ii. Do not open to light foot traffic for 24 hours (at 75⁰F). Vehicle traffic in 48 hours. Full chemical cure and maximum chemical resistance are achieved in 5 days.

14. Perdüre A03 **Acrylic Sealer (Clear, Gloss)**

- a. Mixing
- i. Perdüre A03 is a single component water based acrylic, mix for two-three minutes with a low speed electric drill mixing paddle.
- b. Application
- i. Pour material into a paint pan, apply with 1/4"-3/8" nap roller using "dip and roll" technique, lamb's wool applicator, or spray with low pressure pump at 300-400 ft² per gallon. Re-coat time is 1 hour at 75 degrees F. Good air movement and humidity control are necessary for proper drying with water based sealers. Apply one or two coats as required to achieve desired finish.
 - ii. Do not open to light foot traffic for 24 hours (at 75⁰F). Vehicle traffic in 48 hours. Full chemical cure and maximum chemical resistance are achieved in 5 days.