

# **Pecora-Deck HB1000 100% Solids, Two Part, High Build, Industrial Grade, POLYURETHANE DECK COATING**



## **TRAINING MANUAL**

# PECORA DECK HB1000 TRAINING MANUAL

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***The information presented here are guidelines only. Deviation from published application procedures may be required per project specifications and/or site conditions and must be approved by Pecora Technical Services.***

**SECTION #1**

**PECORA DECK HB1000  
COATING SYSTEMS  
&  
APPLICATION GUIDELINES**

## Pecora-Deck HB1000 Industrial Deck Coating System

**Pecora-Deck HB1000** is a two component, self-leveling, fast curing, high solids, high-build, monolithic, weather/UV resistant, industrial grade, polyurethane traffic membrane applied as a protective coating for concrete and plywood traffic bearing surfaces. Pecora-Deck HB1000 may be applied as a standalone industrial coating or incorporated into a complete waterproofing system that includes the Pecora-Deck line of elastomeric base coats as well as a hybrid polyurethane/epoxy system that includes the Pecora Dynapoxy Low-Mod epoxy coating. HB1000 is a high-build system that may be applied at a wet film thickness of ~12 to 125 mils depending on the intended system and anticipated performance. HB1000 is approved for exposure to a variety of traffic including pedestrian and vehicular including industrial equipment such as fork lifts.

Pecora-Deck HB1000 is available in factory tinted and field tintable versions. The field tintable version utilizes a neutral base and the **Pecora Deck-Pack Colorpack System** that includes over 40 standard colors. Use one (1) Deck-Pack of colorant per pail of field tintable deck coating neutral base. Custom colors are also available and may be provided in alternate packaging.

**Silica Sand Aggregate** is highly recommended for use within the traffic bearing deck coating system in order to provide adequate dry/wet traction for both pedestrian and vehicular traffic. Angular, clean and kiln dried silica sand type aggregates are recommended. Aggregate mesh size will vary and will be determined by deck coating system application (i.e. pedestrian, vehicular, etc.). Refer to the individual application instructions for aggregate size recommendations.

### Optional HB1000 Waterproofing System Components

**Pecora-Deck 802 and 802 FC Base Coats** are waterproofing membranes that are designed to have tenacious adhesion to the concrete or plywood substrates in order to prevent water migration in the event of physical abuse or damage to the installed system. High elongation and tear strength combine to make a tough, resilient material able to bridge cracks that may develop in the substrate. A coating primer will be required for use over the substrate prior to the application of the base coat. **Pecora P-801VOC, P-808 and Healer Sealer** are available and represent the approved deck coating primers. A self-priming additive (SPA) is also available and is incorporated into the base coat immediately prior to use which will eliminate the need for the afore-mentioned primers in select applications.

### Optional HB1000 Hybrid Epoxy System Components

**Dynapoxy Low-Mod Epoxy** is a solvent-free, moisture insensitive, 100% solids, low modulus, two-component epoxy-based coating that permits quick turn-over of traffic areas on time-sensitive projects. Due to its high tensile strength, superior wear characteristics, and overall durability, this product is an excellent option for areas where heavy duty pedestrian and/or vehicular traffic is expected. The Dynapoxy Low-Mod may be incorporated into a variety of the existing Pecora Deck polyurethane deck coating systems as the primer, base coat and/or intermediate coat. Expect a reduced HB1000 coating coverage rate when applying over the Dynapoxy Low-Mod Epoxy with sand to refusal.

### Optional Accelerator

**HB1000 Accelerator** is formulated to reduce the cure time of the HB1000 industrial coating when the ambient temperature is between 40° and 60°F. Accelerator portioning recommendations can be found on the HB1000 specification data sheet as well as in the table below. Add the appropriate amount in 10mL increments relative to the ambient temperature.

Pecora-Deck HB1000 Packaging	Ambient Temperature	Pecora-Deck HB1000 Accelerator	Work Life	Open to Pedestrian Traffic	Open to Vehicular Traffic
5.5 gallon	40°F	30mL	25 minutes	10 hours	18 - 22 hours
	50°F	20mL	25 minutes	10 hours	18 - 22 hours
	60°F	10mL	25 minutes	10 hours	18 - 22 hours
	70°F	None	30 minutes	8 hours	14 - 18 hours
	80°F	None	25 minutes	8 hours	14 - 18 hours
	90°F	None	25 minutes	8 hours	14 - 18 hours

## **DECK COATING APPLICATION EQUIPMENT REQUIREMENTS**

The following equipment will generally be required for applying polyurethane deck coatings and joint sealants. The list below is a guideline only and additional tools/materials may be required depending on the specific application and site conditions.

### **Joint Sealant Application**

- Mixing paddle (for mixing of two-component sealants only)
- ½” heavy duty corded drill (for mixing of two component sealants only)
- Bulk caulking gun (for dispensing of two component sealants only)
- Standard caulking or sausage gun (for one component sealants only)
- Clean rags and/or paint brushes for sealant primer application, if required
- Xylene, mineral spirits or isopropyl alcohol for cleaning tools
- Large spatula for scraping/hand mixing of two component sealant pails
- Small spatula or caulking knife for tooling sealants
- Closed cell or bi-cellular backer rod (should be 25% larger than joint openings)
- Diamond grinder for chasing cracks in concrete
- Oil free compressed air or vacuum for cleaning joint substrates

### **Deck Coating Application and Detailing**

- Five-gallon mixing paddle – Jiffy Mixer #PS-1 or equivalent
- ½” heavy duty variable speed corded drill
- Long spatula (for scraping of pail and hand mixing of deck coatings)
- Long handled V-notched squeegees - 30” width
  - Squeegee sizing to be determined by system application.
- Solvent resistant gloves
- Organic vapor masks
- Xylene or isopropyl alcohol for cleaning tools
- Shop rags
- Empty five (5) gallon metal pails for splitting contents of pails, if required
- Long handled paint roller applicator (standard and 2” width)
- Paint rollers – (standard and 2” width for detailing)
  - Roller nap length will be determined by the system application.
- Steel spike shoes
- Mil gauges for measuring wet coating thickness

## PECORA DECK 8013HB PEDESTRIAN

**A pre-installation site inspection is recommended for all projects in accordance with Pecora Technical Bulletin #192.** All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

### Application Instructions:

- A. Surface preparation.
- B. **Optional Primer & Base Coat Waterproofing:**
  - i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
  - ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a 1/4” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
  - iii. Allow 802 to cure 16-24hrs and 802FC 4-6hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

### Two Component Coating Mixing Procedure

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- C. Mix and apply **Pecora-Deck HB1000** at 120 square feet per gallon (13 wet mils) using a 1/8” notched squeegee.
- D. Manually broadcast 16/35 mesh (0.047/0.019 inch) aggregate<sup>2</sup> at 10 - 15 pounds per 100 square feet while the Pecora –Deck HB1000 is still fluid.
- E. Immediately back roll using a 1/4” nap roller to achieve a uniform aggregate distribution in finished coat.
- F. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry									Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET	DRY	
		Wet	Dry		Wet	Dry		Wet	Dry			
Pedestrian 8013HB	n/a	0	0	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>13 (.013)</b>	<b>13 (0.013)</b>	16/35 (.047/.019)
	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>36 (.036)</b>	<b>36 (.036)</b>	16/35 (.047/.019)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>45 (.045)</b>	<b>39 (.039)</b>	16/35 (.047/.019)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practices.

## PECORA DECK 8013HB-PW PLYWOOD DECKS

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

### **Construction Guidelines for Plywood Decks**

- a. All plywood shall be identified as conforming to U.S. Product Standard PS 1 for Construction and Industrial Plywood by the grade-trademarks of the American Plywood Association. Use grade EXT APA B-C or EXT APA A-C.
- b. Plywood should be a minimum 3/4 inch thickness with joist spacing 16" on center and must be properly blocked. Tongue and Groove plywood is preferred. Plywood should be continuous across two or more spans, with face grain across supports.
- c. Install plywood in order to provide suitable panel edge support to prevent differential deflection between panels. In order to allow for expansion and contraction, space panels 1/16 in. at panel edges and at panel ends. Where wet or humid conditions are expected, these spacing may be increased.
- d. Use minimum 6d non-rusting deformed shank (ring-shanked or spiral-thread) nails. Space nails 6 in. o.c. along panel edges and 12 in. o.c. along intermediate supports. Nails should **NOT** be countersunk, but simply nailed flush.

### **Wall to Deck Flashing**

- All wall-to-deck flashing and under threshold flashing should be galvanized metal or copper and must be installed prior to the application of the base coat. The metal to plywood juncture must be detailed with P-802 Base Coat and reinforcing fabric. Prime all metal flashings with P-100 primer.

### **Surface Preparation**

- a. Apply polyurethane joint sealant to butt joints that are not tight and tool the sealant flush to the surface.
- b. Along the juncture of all horizontal and vertical surfaces, tool polyurethane joint sealant to form a 1", 45 degree cant and allow the sealant to cure overnight.
- c. Prime all areas to receive the reinforcing cloth and detail coat with P-801 VOC or P-808 primer.
- d. Apply 20 wet mil detail coat, 4" wide over all primed joints and metal. Immediately embed a strip of reinforcing cloth into the wet coat and backroll.
- e. Apply a second detail coat over the strip of the same wet mils and feather edge the terminating edges. Allow to cure to a firm but tacky rubber.
- f. Apply 30 wet mils of an 802/802FC detail coat over all sealant cants and allow to cure to a firm but tacky rubber.

### **Application Instructions**

A. Surface preparation.

#### **B. Optional Primer & Base Coat Waterproofing:**

- i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
- ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼" notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
- iii. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

#### **Two Component Coating Mixing Procedure**

Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.

- C. Mix and apply Pecora-Deck HB1000 at 120 square feet per gallon (13 wet mils) using a ¼" notched squeegee.
- D. Broadcast 12/20 mesh (0.066/0.033 inch) aggregate<sup>2</sup> at 10 - 15 pounds per 100 square feet while the Pecora-Deck HB1000 is still fluid.
- E. Immediately back roll using a ¼" nap roller and completely encapsulate the aggregate.
- F. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry									Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET	DRY	
		Wet	Dry		Wet	Dry		Wet	Dry			
Plywood 8013HB-PW	n/a	0	0	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>13 (.013)</b>	<b>13 (.013)</b>	16/35 (.047/.019)
	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>36 (.036)</b>	<b>36 (.036)</b>	16/35 (.047/.019)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>45 (.045)</b>	<b>39 (.039)</b>	16/35 (.047/.019)

**CAUTION:** Pecora Deck 800 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer's guidelines for safety practices.

## PECORA DECK 8014HB HEAVY DUTY PEDESTRIAN

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

### Application Instructions:

- A. Surface preparation.
- B. **Optional Primer & Base Coat Waterproofing:**
  - i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
  - ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
  - iii. Allow 802 to cure 16-24hrs and 802FC 4-6hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

### Two Component Coating Mixing Procedure

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- C. Mix and apply **Pecora-Deck HB1000** at 64 square feet per gallon (25 wet mils) using a ¼” notched squeegee.
- D. Manually broadcast 16/35 mesh (0.047/0.019 inch) aggregate<sup>2</sup> at 10 - 15 pounds per 100 square feet while the Pecora –Deck HB1000 is still fluid.
- E. Immediately back roll using a 1/4” nap roller to achieve a uniform aggregate distribution in finished coat.
- F. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry									Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET	DRY	
		Wet	Dry		Wet	Dry		Wet	Dry			
Heavy Duty Pedestrian 8014HB	n/a	0	0	n/a	0	0	HB1000	25 (.025)	25 (.025)	<b>25</b> <b>(.025)</b>	<b>25</b> <b>(.025)</b>	16/35 (.047/.019)
	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	25 (.025)	25 (.025)	<b>48</b> <b>(.048)</b>	<b>48</b> <b>(.048)</b>	16/35 (.047/.019)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	25 (.025)	25 (.025)	<b>57</b> <b>(.057)</b>	<b>51</b> <b>(.051)</b>	16/35 (.047/.019)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practices.



**PECORA DECK 8015HB  
PEDESTRIAN  
LowMod Epoxy Option**

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

**Application Instructions:**

- A. Surface preparation.
- B. **Optional Primer & Base Coat Waterproofing:**
  - i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
  - ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
  - iii. Allow 802 to cure 16-24hrs and 802FC 4-6hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

**Two Component Coating Mixing Procedure**

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- C. Mix and apply **Pecora Dynapoxy Low-Mod Epoxy** with a ¼” notched squeegee at 40 square feet per gallon.
- D. Immediately broadcast 12/20 mesh (0.066/0.033 inch) aggregate<sup>2</sup> to refusal (40-45 pounds per 100 square feet) into wet Low-Mod Epoxy.
- E. Allow Low-Mod Epoxy to cure a minimum of 4 hours. Sweep off excess aggregate.
- F. Mix and apply **Pecora-Deck HB1000** at 120 square feet per gallon (13 wet mils) using a 1/8” notched squeegee.
- G. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry									Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET	DRY	
		Wet	Dry		Wet	Dry		Wet	Dry			
Pedestrian 8015 Epoxy Option	n/a	0	0	Low-Mod	40 (.040)	40 (.040)	HB1000	13 (.013)	13 (.013)	<b>53 (.053)</b>	<b>53 (.053)</b>	12/20 (.066/.033)
	802FC	23 (.023)	23 (.023)	Low-Mod	40 (.040)	40 (.040)	HB1000	13 (.013)	13 (.013)	<b>76 (.076)</b>	<b>76 (.076)</b>	12/20 (.066/.033)
	802	32 (.032)	26 (.026)	Low-Mod	40 (.040)	40 (.040)	HB1000	13 (.013)	13 (.013)	<b>85 (.085)</b>	<b>79 (.079)</b>	12/20 (.066/.033)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practice

**PECORA DECK 8016HB  
HEAVY DUTY PEDESTRIAN  
Low-Mod Epoxy Option**

**A pre-installation site inspection is recommended for all projects in accordance with Pecora Technical Bulletin #192.** All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

**Application Instructions:**

- A. Surface preparation.
- B. **Optional Primer & Base Coat Waterproofing:**
  - i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
  - ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
  - iii. Allow 802 to cure 16-24hrs and 802FC 4-6hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

**Two Component Coating Mixing Procedure**

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- C. Mix and apply **Pecora Dynapoxy Low-Mod Epoxy** with a ¼” notched squeegee at 40 square feet per gallon.
- D. Immediately broadcast 12/20 mesh (0.066/0.033 inch) aggregate<sup>2</sup> to refusal (40-45 pounds per 100 square feet) into wet LowMod Epoxy.
- E. Allow Low-Mod Epoxy to cure a minimum of 4 hours. Sweep off excess aggregate.
- F. Mix and apply **Pecora-Deck HB1000** at 64 square feet per gallon (25 wet mils) using a 1/4” notched squeegee.
- G. Manually broadcast 12/20 mesh (0.066/0.033 inch) aggregate<sup>2</sup> at 10 - 15 pounds per 100 square feet while the Pecora –Deck HB1000 is still fluid.
- H. Immediately back roll using a ¼” nap roller to achieve a uniform aggregate distribution in finished coat.
- I. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry								Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)	
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy Wet	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET		DRY
		Wet	Dry		Wet	Dry		Wet	Dry			
Heavy Duty Pedestrian 8016HB - Epoxy Option	n/a	0	0	Low-Mod	40 (.040)	40 (.040)	HB1000	25 (.025)	25 (.025)	<b>65 (.065)</b>	<b>65 (.065)</b>	12/20 (.066/.033)
	802FC	23 (.023)	23 (.023)	Low-Mod	40 (.040)	40 (.040)	HB1000	25 (.025)	25 (.025)	<b>88 (.088)</b>	<b>88 (.088)</b>	12/20 (.066/.033)
	802	32 (.032)	26 (.026)	Low-Mod	40 (.040)	40 (.040)	HB1000	25 (.025)	25 (.025)	<b>97 (.097)</b>	<b>91 (.091)</b>	12/20 (.066/.033)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practices.

## PECORA-DECK 8017HB RECOAT SYSTEM – PEDESTRIAN

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

### Application Instructions:

#### A. Surface Preparation.

- i. Existing coating inspected and approved for recoat by qualified representative.
- ii. Cut and remove any blistered or delaminated existing coating.
- iii. Rout any cracks in existing coating to 1/4" x 1/4" and caulk with Pecora Deck-Seal and tool flush.
- iv. Power wash surface of existing deck coating and allow to thoroughly dry prior to applying new coating.

#### B. Optional Primer & Base Coat Waterproofing (Exposed Concrete):

- i. Prime exposed concrete repair areas with P-801-VOC (<100g/L) or P-808 (<450g/L) primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
- ii. Apply a detail application of Pecora-Deck 802 at 50 square feet per gallon OR 802FC at 70 square feet per gallon using a 1/4" notched squeegee at repair areas. (Must apply base coat the same day as priming, otherwise re-prime).
- iii. Allow 802 to cure 16-24 hours and 802FC 4-6 hours. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

#### C. Primer Application to Existing Coating

- i. Prime existing coating with P-801-VOC (<100g/L) primer at 300-350 square feet per gallon. Allow primer to dry 1-2 hours. (Must apply top coat the same day as priming, otherwise re-prime.)

##### Two Component Coating Mixing Procedure

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.

#### D. Top Coat Application as follows:

- i. Mix and apply Pecora-Deck HB1000 at 130 square feet per gallon (13 wet mils) using a 1/8" notched squeegee.

#### E. Immediately broadcast aggregate into HB1000 as follows:

- i. Manually broadcast 16/35 mesh aggregate at 10-15 pounds per square feet while Pecora-Deck HB1000 is still fluid. Immediately back roll using a 1/4" nap roller to completely encapsulate the aggregate.

#### F. Cure Pecora-Deck HB1000 for 24-48 hours prior to opening completed system to traffic.

HB1000 RECOAT System Pedestrian & Vehicular	Components & Mil (Inch) Thickness, wet/dry								Total Mil (Inch) Thickness		Aggregate/s, mesh (Inch)	
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET		DRY
		Wet	Dry		Wet	Dry		Wet	Dry			
Pedestrian RECOAT	n/a	0	0	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>13 (.013)</b>	<b>13 (.013)</b>	16/35 (.047/.019)
	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>36 (.036)</b>	<b>36 (.036)</b>	16/35 (.047/.019)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>45 (.045)</b>	<b>39 (.039)</b>	16/35 (.047/.019)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

1 Check local VOC regulations for product compliance prior to installing deck coating primer.

2 Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer's guidelines for safety practices.

## PECORA DECK 8018HB UNDER CARPET/TILE

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

### Application Instructions:

- A. Surface preparation.
- B. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
- C. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
- D. Allow 802 to cure 16-24 hrs. and 802FC 4-6 hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

### Two Component Coating Mixing Procedure

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- E. Mix and apply Pecora-Deck HB1000 at 120 square feet per gallon (13 wet mils) using a 1/8” notched squeegee.
  - F. Immediately apply aggregate as follows for the specified system below:
    - i. **Under Tile:** Manually broadcast 16/35 mesh (0.047/0.019 inch) aggregate<sup>2</sup> to refusal (approx. 40-45 lbs. per 100 sf.) while the Pecora –Deck HB1000 is still fluid.
    - ii. **Under Carpet:** Aggregate broadcast is not required for under carpet systems.
      - a. *Optional aggregate broadcast if needed for adhesive purposes.* Broadcast 16/35 mesh (0.047/0.019 inch) aggregate<sup>2</sup> to refusal (40-45 pounds per 100 square feet) while the Pecora –Deck HB1000 is still fluid.
  - G. Allow to cure 4-6 hrs. min. Sweep off excess aggregate
  - H. Allow coating to cure for a minimum of 24 hours prior to applying carpet adhesive or thinset mortar over completed system.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry								Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)	
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET		DRY
		Wet	Dry		Wet	Dry		Wet	Dry			
Under Carpet/Tile 8018HB	n/a	0	0	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>13 (.013)</b>	<b>13 (0.013)</b>	16/35 (.047/.019)
	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>36 (.036)</b>	<b>36 (.036)</b>	16/35 (.047/.019)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	13 (.013)	13 (.013)	<b>45 (.045)</b>	<b>39 (.039)</b>	16/35 (.047/.019)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practices.

## PECORA DECK 8019HB POOL DECKS & TENNIS COURTS

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

**Application Instructions:**

- A. Surface preparation.
- B. **Optional Primer & Base Coat Waterproofing:**
  - i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
  - ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
  - iii. Allow 802 to cure 16-24hrs and 802FC 4-6hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

**Two Component Coating Mixing Procedure**

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- C. Apply Pecora-Deck HB1000 as follows:
  - i. **For Standard Aggregate Coverage:** Mix and apply **Pecora-Deck HB1000** at 75 square feet per gallon (20 wet mils) using a 1/4” notched squeegee.
  - ii. **For Sand to Refusal Aggregate Coverage:** Mix and apply **Pecora-Deck HB1000** at 130 square feet per gallon (13 wet mils) using a 1/8” notched squeegee.
- D. Distribute aggregate as follows:
  - i. **For Standard Aggregate Coverage:** Immediately broadcast 16/35 mesh (0.047/0.019 inch) aggregate<sup>2</sup> at 10 - 15 pounds per 100 square feet while the Pecora –Deck HB1000 is still fluid. Skip to step F.
  - ii. **For Sand to Refusal Aggregate Coverage:** Immediately broadcast 20/40 mesh (0.033/0.016 inch) aggregate<sup>2</sup> to refusal (40-45 pounds per 100 square feet) into wet Pecora-Deck HB1000. Allow coating to cure 2 - 4 hours then sweep off excess sand. Proceed to step E.
- E. Mix and apply Pecora-Deck HB1000 at 130 square feet per gallon (13 wet mils) using a 1/8” notched squeegee. Skip to step G.
- F. Immediately back roll using a 1/4” nap roller to achieve a uniform aggregate distribution in finished coat.
- G. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry									Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET	DRY	
		Wet	Dry		Wet	Dry		Wet	Dry			
Pool Deck & Tennis Court 8017HB (standard broadcast)	n/a	0	0	n/a	0	0	HB1000	20 (.020)	20 (.020)	<b>20 (.020)</b>	<b>20 (.020)</b>	16/35 (.047/.019)
	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	20 (.020)	20 (.020)	<b>43 (.043)</b>	<b>43 (&gt;043)</b>	16/35 (.047/.019)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	20 (.020)	20 (.020)	<b>52 (.052)</b>	<b>46 (.046)</b>	16/35 (.047/.019)
Pool Deck & Tennis Court 8017HB (Sand to refusal)	n/a	0	0	n/a	0	0	HB1000	24 (.024)	24 (.024)	<b>24 (.024)</b>	<b>24 (.024)</b>	20/40 (.033/.016)
	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	24 (.024)	24 (.024)	<b>47 (.047)</b>	<b>47 (.047)</b>	20/40 (.033/.016)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	24 (.024)	24 (.024)	<b>56 (.056)</b>	<b>50 (.050)</b>	20/40 (.033/.016)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practices.

**PECORA DECK 8020HB  
INDUSTRIAL  
(Pedestrian/Vehicular)**

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

**Application Instructions:**

- A. Surface preparation.
- B. **Optional Primer & Base Coat Waterproofing:**
  - i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
  - ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
  - iii. Allow 802 to cure 16-24hrs and 802FC 4-6hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

**Two Component Coating Mixing Procedure**

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- C. Mix and apply **Pecora-Deck HB1000** at 32 square feet per gallon (~50 wet mils) using a 3/8” notched squeegee.
- D. Manually broadcast 10/16 (0.079/0.047 inch) mesh aggregate<sup>2</sup> at 10 - 15 pounds per 100 square feet while the Pecora-Deck HB1000 is still fluid.
- E. Immediately back roll using a 1/4” nap roller to achieve a uniform aggregate distribution in finished coat.
- F. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry								Total (Inch) Mil Thickness		Aggregate/s, mesh (inch)	
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET		DRY
		Wet	Dry		Wet	Dry		Wet	Dry			
Industrial (Pedestrian & Vehicular)	n/a	0	0	n/a	0	0	HB1000	50 (.050)	50 (.050)	<b>50</b> <b>(.050)</b>	<b>50</b> <b>(.050)</b>	10/16 (.079/.047)
	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	50 (.250)	50 (.050)	<b>73</b> <b>(.073)</b>	<b>73</b> <b>(.073)</b>	10/16 (.079/.047)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	50 (.050)	50 (.050)	<b>82</b> <b>(.082)</b>	<b>76</b> <b>(.076)</b>	10/16 (.079/.047)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practices.

## PECORA DECK 8123HB VEHICULAR

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

### Application Instructions:

- A. Surface preparation.
- B. **Optional Primer & Base Coat Waterproofing:**
  - i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
  - ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
  - iii. Allow 802 to cure 16-24hrs and 802FC 4-6hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

### Two Component Coating Mixing Procedure

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- C. Mix and apply **Pecora-Deck HB1000** at 64 square feet per gallon (25 wet mils) using a ¼” notched squeegee.
- D. Manually broadcast 12/20 mesh (0.066/0.033 inch) aggregate<sup>2</sup> at 10 - 15 pounds per 100 square feet while the Pecora –Deck HB1000 is still fluid.
- E. Immediately back roll using a ¼” nap roller to achieve a uniform aggregate distribution in finished coat.
- F. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry								Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)	
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET		DRY
		Wet	Dry		Wet	Dry		Wet	Dry			
	n/a	0	0	n/a	0	0	HB1000	25 (.025)	25 (.025)	<b>25 (.025)</b>	<b>25 (.025)</b>	12/20 (.066/.033)
Vehicular 8123HB	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	25 (.025)	25 (.025)	<b>48 (.048)</b>	<b>48 (.048)</b>	12/20 (.066/.033)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	25 (.025)	25 (.025)	<b>57 (.057)</b>	<b>51 (.051)</b>	12/20 (.066/.033)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practices.

## PECORA DECK 8124HB HEAVY DUTY VEHICULAR

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

### Application Instructions:

- A. Surface preparation.
- B. **Optional Primer & Base Coat Waterproofing:**
  - i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
  - ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
  - iii. Allow 802 to cure 16-24hrs and 802FC 4-6hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

### Two Component Coating Mixing Procedure

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- C. Mix and apply **Pecora-Deck HB1000** at 50 square feet per gallon (32 wet mils) using a ¼” notched squeegee.
- D. Manually broadcast 12/20 mesh (0.066/0.033 inch) aggregate<sup>2</sup> at 10 - 15 pounds per 100 square feet while the Pecora –Deck HB1000 is still fluid.
- E. Immediately back roll using a ¼” nap roller to achieve a uniform aggregate distribution in finished coat.
- F. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry							Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)		
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness			WET	DRY
		Wet	Dry		Wet	Dry		Wet	Dry			
Heavy Duty Vehicular 8124HB	n/a	0	0	n/a	0	0	HB1000	32 (.032)	32 (.032)	<b>32 (.032)</b>	<b>32 (0.032)</b>	12/20 (.066/.033)
	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	32 (.032)	32 (.032)	<b>55 (.055)</b>	<b>55 (.055)</b>	12/20 (.066/.033)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	32 (.032)	32 (.032)	<b>64 (.064)</b>	<b>58 (.058)</b>	12/20 (.066/.033)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practices.



**PECORA DECK 8124HB-10  
HEAVY DUTY VEHICULAR  
10yr System Option**

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

**Application Instructions:**

- A. Surface preparation.
- B. **Optional Primer & Base Coat Waterproofing:**
  - i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
  - ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
  - iii. Allow 802 to cure 16-24hrs and 802FC 4-6hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

**Two Component Coating Mixing Procedure**

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- C. Mix and apply **Pecora-Deck HB1000** at 32 square feet per gallon (~50 wet mils) using a 3/8” notched squeegee.
- D. Manually broadcast 12/20 mesh (0.066/0.033 inch) aggregate<sup>2</sup> at 10 - 15 pounds per 100 square feet while the Pecora-Deck HB1000 is still fluid.
- E. Immediately back roll using a 1/4” nap roller to achieve a uniform aggregate distribution in finished coat.
- F. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry								Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)	
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET		DRY
		Wet	Dry		Wet	Dry		Wet	Dry			
Heavy Duty Vehicular 8124HB-10 (10yr system option)	n/a	0	0	n/a	0	0	HB1000	50 (.050)	50 (.050)	<b>50 (.050)</b>	<b>50 (.050)</b>	12/20(.066/.033)
	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	50 (.050)	50 (.050)	<b>73 (.073)</b>	<b>73 (.073)</b>	12/20(.066/.033)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	50 (.050)	50 (.050)	<b>82 (.082)</b>	<b>76 (.076)</b>	12/20(.066/.033)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practices.

**PECORA DECK 8125HB  
VEHICULAR  
Low-Mod Epoxy Option**

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

**Application Instructions:**

- A. Surface preparation.
- B. **Optional Primer & Base Coat Waterproofing:**
  - i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
  - ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
  - iii. Allow 802 to cure 16-24hrs and 802FC 4-6hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

**Two Component Coating Mixing Procedure**

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- C. Mix and apply **Pecora Dynapoxy Low-Mod Epoxy** with a ¼” notched squeegee at 40 square feet per gallon.
- D. Immediately broadcast 12/20 mesh (0.066/0.033 inch) aggregate<sup>2</sup> to refusal (40-45 pounds per 100 square feet) into wet Low-Mod Epoxy.
- E. Allow Low-Mod Epoxy to cure a minimum of 4 hours. Sweep off excess aggregate.
- F. Mix and apply **Pecora-Deck HB1000** at 64 square feet per gallon (25 wet mils) using a 1/4” notched squeegee.
- G. Manually broadcast 12/20 mesh (0.066/0.033 inch) aggregate<sup>2</sup> at 10 - 15 pounds per 100 square feet while the Pecora –Deck HB1000 is still fluid.
- H. Immediately back roll using a 1/4” nap roller to achieve a uniform aggregate distribution in finished coat.
- I. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry								Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)	
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (inch) Thickness		Top Coat	Mil (Inch) Thickness		WET		DRY
		Wet	Dry		Wet	Dry		Wet	Dry			
Vehicular 8025HB - Epoxy Option	n/a	0	0	Low-Mod	40 (.040)	40 (.040)	HB1000	25 (.025)	25 (.025)	<b>65 (.065)</b>	<b>65 (.065)</b>	12/20 (.066/.033)
	802FC	23 (.023)	23 (.023)	Low-Mod	40 (.040)	40 (.040)	HB1000	25 (.025)	25 (.025)	<b>88 (.088)</b>	<b>88 (.088)</b>	12/20 (.066/.033)
	802	32 (.032)	26 (.026)	Low-Mod	40 (.040)	40 (.040)	HB1000	25 (.025)	25 (.025)	<b>97 (.097)</b>	<b>91 (.091)</b>	12/20 (.066/.033)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practices.

**PECORA DECK 8126HB  
HEAVY DUTY VEHICULAR  
Low-Mod Epoxy Option**

**A pre-installation site inspection is recommended for all projects in accordance with Pecora Technical Bulletin #192.** All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

**Application Instructions:**

- A. Surface preparation.
- B. **Optional Primer & Base Coat Waterproofing:**
  - i. Prime concrete with Pecora P-801-VOC (<100g/L) or P-808 (<450g/L)<sup>1</sup> primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
  - ii. Apply Pecora-Deck 802 at 50 square feet per gallon (32 wet mils) OR 802 FC at 70 square feet per gallon (23 wet mils) using a ¼” notched squeegee. (Must apply base coat the same day as priming, otherwise re-prime.)
  - iii. Allow 802 to cure 16-24hrs and 802FC 4-6hrs. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

**Two Component Coating Mixing Procedure**

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.
- C. Mix and apply **Pecora Dynapoxy Low-Mod Epoxy** with a ¼” notched squeegee at 40 square feet per gallon.
- D. Immediately broadcast 12/20 mesh (0.066/0.033 inch) aggregate<sup>2</sup> to refusal (40-45 pounds per 100 square feet) into wet LowMod Epoxy.
- E. Allow Low-Mod Epoxy to cure a minimum of 4 hours. Sweep off excess aggregate.
- F. Mix and apply **Pecora-Deck HB1000** at 32 square feet per gallon (~50 wet mils) using a 3/8” notched squeegee.
- G. Manually broadcast 12/20 mesh (0.066/0.033 inch) aggregate<sup>2</sup> at 10 - 15 pounds per 100 square feet while the Pecora-Deck HB1000 is still fluid.
- H. Immediately back roll using a 1/4” nap roller to achieve a uniform aggregate distribution in finished coat.
- I. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 System	Components & Mil (Inch) Thickness, wet/dry									Total Mil (Inch) Thickness		Aggregate/s, mesh (inch)
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET	DRY	
		Wet	Dry		Wet	Dry		Wet	Dry			
Heavy Duty Vehicular 8026HB - Epoxy Option	n/a	0	0	Low-Mod	40 (.040)	40 (.040)	HB1000	50 (.050)	50 (.050)	<b>90 (.090)</b>	<b>90 (.090)</b>	12/20(.066/.033)
	802FC	23 (.023)	23 (.023)	Low-Mod	40 (.040)	40 (.040)	HB1000	50 (.050)	50 (.050)	<b>113 (.113)</b>	<b>113 (.113)</b>	12/20(.066/.033)
	802	32 (.032)	26 (.026)	Low-Mod	40 (.040)	40 (.040)	HB1000	50 (.050)	50 (.050)	<b>122 (.122)</b>	<b>116 (.116)</b>	12/20(.066/.033)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

<sup>2</sup> Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer’s guidelines for safety practices.

## PECORA-DECK 8127HB RECOAT SYSTEM - VEHICULAR

A **pre-installation site inspection** is recommended for all projects in accordance with Pecora Technical Bulletin #192. All observation details, required repairs, moisture mitigation, and photos should be recorded and documented per [Technical Bulletin #192 Deck Coating Inspection Checklist](#) and submitted to Pecora Technical Service Department.

### Application Instructions:

#### A. Surface Preparation.

- i. Existing coating inspected and approved for recoat by qualified representative.
- ii. Cut and remove any blistered or delaminated existing coating.
- iii. Rout any cracks in existing coating to 1/4" x 1/4" and caulk with Pecora Deck-Seal and tool flush.
- iv. Power wash surface of existing deck coating and allow to thoroughly dry prior to applying new coating.

#### B. Optional Primer & Base Coat Waterproofing (Exposed Concrete):

- i. Prime exposed concrete repair areas with P-801-VOC (<100g/L) or P-808 (<450g/L) primer at 250 to 350 square feet per gallon. Allow primer to dry 1 – 8 hours.
- ii. Apply a detail application of Pecora-Deck 802 at 50 square feet per gallon OR 802FC at 70 square feet per gallon using a 1/4" notched squeegee at repair areas. (Must apply base coat the same day as priming, otherwise re-prime).
- iii. Allow 802 to cure 16-24 hours and 802FC 4-6 hours. Base coat should be cured to a firm but tacky rubber at time of subsequent coating application.

#### C. Primer Application to Existing Coating

- i. Prime existing coating with P-801-VOC (<100g/L) primer at 300-350 square feet per gallon. Allow primer to dry 1-2 hours. (Must apply top coat the same day as priming, otherwise re-prime.)

#### Two Component Coating Mixing Procedure

- i. Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum of 3 minutes; scrape down sides and bottom of mixing vessel then mix again for 2 minutes. Keep mixing paddle submerged to avoid whipping air into the mixture.

#### D. Top Coat Application as follows:

- i. Mix and apply Pecora-Deck HB1000 at 64 square feet per gallon (25 wet mils) using a 1/4" notched squeegee.

E. Manually broadcast 12/20 mesh aggregate at 10-15 pounds per 100 square feet while the Pecora-Deck HB1000 is still fluid.

F. Immediately back roll using a 1/4" nap roller to achieve a uniform aggregate distribution in finished coat.

G. Cure Pecora-Deck HB1000 for 24 – 48 hours prior to opening completed system to traffic.

HB1000 RECOAT Vehicular System	Components & Mil (Inch) Thickness, wet/dry									Total Mil (Inch) Thickness		Aggregate/s, mesh (Inch)
	Base Coat	Mil (Inch) Thickness		Intermediate Low-Mod Epoxy	Mil (Inch) Thickness		Top Coat	Mil (Inch) Thickness		WET	DRY	
		Wet	Dry		Wet	Dry		Wet	Dry			
Vehicular RECOAT	n/a	0	0	n/a	0	0	HB1000	25 (.025)	25 (.025)	<b>25 (.025)</b>	<b>25 (.025)</b>	12/20 (.066/.033)
	802FC	23 (.023)	23 (.023)	n/a	0	0	HB1000	25 (.025)	25 (.025)	<b>48 (.048)</b>	<b>48 (.048)</b>	12/20 (.066/.033)
	802	32 (.032)	26 (.026)	n/a	0	0	HB1000	25 (.025)	25 (.025)	<b>57 (.057)</b>	<b>51 (.051)</b>	12/20 (.066/.033)

**CAUTION:** Pecora Deck HB1000 forms a non-breathing membrane and therefore is generally not used on-grade or outside on concrete surfaces poured over vapor barriers (such as unvented metal decks or between slab membranes). Consult Pecora Technical Service for applications on-grade, over unvented metal decks or concrete with between slab membranes.

1 Check local VOC regulations for product compliance prior to installing deck coating primer.

2 Employees using crystalline silica must wear an approved respirator if the exposure is above the permissible exposure level. Consult manufacturer's guidelines for safety practices.

## **SECTION #2**

# **DESIGN GUIDELINES**

**Design Guide for Concrete Substrates**  
**Concrete Finishing & Curing**  
**Design Guide for Plywood Substrates**

# PECORA DESIGN GUIDE FOR CONCRETE SUBSTRATES TO RECEIVE ELASTOMERIC MEMBRANE OR DECK COATING SYSTEMS

## 1. GENERAL

In general, properly designed structures where concrete is under compression and properly cured will have hairline cracks only. When the surface of the concrete is under tension, structural cracks can be expected and steps must be taken to control their location to permit suitable reinforcement. This can be done by distributing stresses over the entire deck and by proper location of rebar and control joints. Stresses can be distributed by continuous reinforcement steel such as #4 installed in both directions on 12" centers near the top of surface of the slab.

Concrete structures to receive Pecora Deck Coating Systems should be sloped to freely drain. Adequate drainage reduces accumulation of sediments, which can cause discoloration, reduce thermal reflectivity and provide a hazard to foot traffic. Installation of drains is preferable to drainage to an edge, which may soil the building fascia. In addition, the lack of slope with these systems can lead to possible leaks at low thresholds, puddles and surface staining for which the applicator does not assume responsibility. The Pecora systems cannot be used to provide such a slope.

Most concrete surfaces contain surface porosity capable of transmitting gases. Under some temperature conditions, gas transmission can cause blister development in elastomeric coatings. The Pecora P-801VOC, P-808 and Healer Sealer primers function to close off and span surface pores and allows installation of optimum elastomeric films. The primer is recommended for all concrete surfaces and considered essential on lightweight structural concrete and vehicular applications.

## 2. STRUCTURAL CONCRETE

2.1 Acceptable Construction: Most thin shell shapes are under compression and acceptable. Since planar roof decks, flat or sloping, including the top and bottom slabs of bent plate roofs, usually include areas under tension, special attention to crack control should be given. Thin slabs poured on wire mesh or high rib are especially prone to cracking and should not be used without discussion with Pecora Corporation. Similarly, pre-cast slabs, with or without a fill, can impose special problems of differential vertical movement between slabs. Pecora Deck Systems should not be used in these situations without prior discussion with Pecora Corporation. Pre-stressed or post-tension cast-in-place slabs are suitable as a base.

2.2 Ventilation: Metal decking used as concrete form must be of the "ventilating type" to relieve pressure underneath the concrete fill. Concrete slabs used as interior ceilings should not be painted or sealed on the underside until the slab is dry and acceptable by the waterproofing contractor.

### 2.3 CONCRETE REQUIREMENTS

1.31 Mix: Design and controls, materials mixing and placing should follow ASTM C94 Water-cement ratios should be as low as practicable. An air-entraining admixture may be used to improve workability of the concrete and freeze-thaw resistance.

Finishing: Finishing should be delayed until the concrete has hardened sufficiently to prevent excess fine material from working to the surface. A slightly sand-textured surface is desired. The end results should be neither slick nor burnished, (which impairs adhesion) nor rough with fins, sharp projections, voids or rock pockets (which cause blisters). Vibrators or "stingers" shall not be used.

Suggested Finishing Specifications for Concrete, Section 3300, are as follows:

"Finish shall be steel troweled. The surface shall be uniform without being slick or burnished and shall have a slight sand texture or light broom finish. It shall be free from voids or sharp projections. Voids, rock pockets and excessively rough surfaces shall be finished with a grout or ground to match the unrepaired areas. The grout and bonding agent shall be non-staining and the composition approved by the architect prior to application. Dusting the surface with Portland cement or a mixture of sand and cement shall not be permitted.

### 3. LIGHTWEIGHT STRUCTURAL CONCRETE

Lightweight structural aggregate generally consists of expanded shale or naturally occurring minerals or air- entraining additives with a foamed structure. Normally, the compressive strengths of the cured concrete based on this aggregate are not less than 2500 psi.

3.1 Acceptable Construction: Same as par 2.1 above

3.2 Ventilation: Same as par. 2.2 above

3.3 Concrete Requirements:

3.31 Mix: Same as par. 2.31 above

3.32 Finishing: Same as par 2.32 above

3.33 Drying: Lightweight structural aggregate tends to absorb excess water, which requires additional drying time and leads to increased shrinkage cracks. After curing period, deck shall be allowed to dry a minimum of 4 to 6 weeks before coating. If rain occurs after the drying period and prior to application of P-808 primer, allow at least two days of good drying weather

### 4. LIGHTWEIGHT INSULATING CONCRETE FILLS

Lightweight insulating concrete generally utilizes vermiculite or perlite aggregate. INSULATING CONCRETE FILLS ARE NOT SUITABLE SUBSTRATES FOR PECORA-DECK COATING SYSTEMS.

In an effort to assist you and the General Contractor in providing the proper concrete finish for receiving the Pecora Polyurethane Coating systems we recommend that the following important points be adhered to:

1. **Finishing:**

So as to density the concrete, the top surface of the slab must be steel troweled with a power trowel, **twice**. After the second steel troweling has been completed, finish the concrete by lightly pulling a light or soft hair broom over the surface so as to leave a light texture in the concrete.

2. **Curing:**

Water curing is preferred. However, if a curing compound is to be used, it must be of the pure sodium-silicate type. No resins, waxes or additional additives are allowed. Consult Pecora Technical Services for recommendations and/or approvals.

## PECORA DESIGN GUIDE FOR PLYWOOD SUBSTRATES

### 1. CONSTRUCTION GUIDELINES FOR PLYWOOD DECK

- a. All plywood shall be identified as conforming to U.S. Product Standard PS 1 for Construction and Industrial Plywood by the grade-trademarks of the American Plywood Association. Use grade EXT APA B-C or EXT APA A-C.
- b. Plywood should be a minimum 3/4 inch thickness with joist spacing 16" on center and must be properly blocked. Tongue and Groove plywood is preferred. Plywood should be continuous across two or more spans, with face grain across supports.
- c. Install plywood in order to provide suitable panel edge support to prevent differential deflection between panels. In order to allow for expansion and contraction, space panels 1/16 in. at panel edges and at panel ends. Where wet or humid conditions are expected, these spacing may be increased.
- d. A plywood moisture content of 10-14% is acceptable when applying polyurethane based deck coatings.

### 2. NAILING

- a. Use minimum 6d non-rusting deformed shank (ring-shanked or spiral-thread) nails. Space nails 6 in. o.c. along panel edges and 12 in. o.c. along intermediate supports.
- b. Nails should **NOT** be countersunk, but simply nailed flush.

# **SECTION #3**

## **SURFACE PREPARATION GUIDE**

**Surface Preparation for Polyurethane Coatings  
(Acid Etching, Shot Blasting, Sand Blasting)**  
**Mechanical Methods for Preparing Contaminated Concrete (Shot-  
blasting, Scabbling, Scarifying)**  
**Joint Sealant Application**  
**Deck Coating Detailing**



## **SURFACE PREPARATION FOR POLYURETHANE COATING SYSTEMS**

### **A. Concrete (New Construction)**

1. General Construction Practices
  - a. Concrete surfaces to receive Pecora Vehicular Deck Coating System must have a minimum compressive strength 4,000 psi.
  - b. Concrete surfaces to receive Pecora Pedestrian Deck System should have a minimum compressive strength of 3,000 psi.
  - c. Insulating concretes (Zonolite, Vermiculite, and etc.) must NEVER be coated directly with a Pecora Polyurethane Coating System.
  - d. Perlite or Polystyrene foam must never be coated directly. Concrete topping or wearing slabs are necessary in order to isolate the foam.
  - e. Structural concrete must have a 21-28 day curing period prior to application of the Pecora Polyurethane Coating System.
2. Finish Requirements (See Special Section on Finishing and Curing)
  - a. The concrete decks are to be steel troweled followed with a light broom ("sidewalk") finish to achieve an ICRI surface finish of CSP 3-5. No ridges, projections or voids should be present in the finished concrete
  - b. Water curing is the preferred method for curing the concrete deck.
  - c. If a curing compound is used, it must be of the "pure" sodium silicate variety; **NO** chlorinated rubber, wax, or resin-based curing compound can be used. Consult Pecora Technical Service for recommendations and/or approvals.
  - d. The decks must be free from contaminates such as tars, asphalts, grease, dirt, etc., prior to coating.
3. Acid Etching, Shot-Blasting and Sandblasting
  - a. The decks should be acid etched with 18<sup>o</sup> or 20<sup>o</sup> Baum muriatic acid to remove laitance on the concrete surfaces. [Dilute the acid by mixing 18<sup>o</sup> or 20<sup>o</sup> Baum acid (28% or 30% solution) with equal parts of clean water.]
  - b. Once the acid solution has stopped all action (after 15 to 30 minutes) supply a neutralizer to the deck consisting of 10% ammonia in water.
  - c. Be sure to thoroughly wash and flush the resulting residue completely off the deck prior to applying the deck coatings.  
In most instances, Shot-Blasting or Sandblasting is recommended in lieu of acid etching of environmental reasons or when necessary to remove an unacceptable curing compound or contaminate. On exterior decks shot-blasting or sandblasting does not eliminate the need for priming with Pecora P-801VOC or P-808 primers.
  - d. Excessive Sandblasting can cause "pinholes" in the concrete surfaces which in turn could blister problems during application of the base coating and possibly even blisters in the finished system.
4. Crack Preparation
  - a. All visible cracks should be coated with a "detail coat" of Pecora-Deck Base Coat. One coat should achieve the required 30 mils minimum.
  - b. Large cracks should first be routed and filled flush with Pecora Dynatred or Deck-Seal polyurethane sealant prior to applying the detail coats (step "a".)
  - c. The primer and coating materials used as the detail coat for cracks should minimum 6" width centered over the crack. Install the caulking only in the crack. **Do not** butter or featheredge the caulking beyond the edge of the crack. See Deck Coating Detailing section for more details.

**B. Concrete (Remedial Construction)**

1. General Construction Practices  
Same psi compressive strength requirements as for new conditions.
2. Finish Requirements  
Same troweling and texture requirements as for new construction.
3. Cleaning
  - a. Deck should be cleaned using tri-sodium phosphate and water, and a stiff bristle broom or power scrubber. Completely rinse away residue. Citric acid based concentrated degreaser and cleaner may also be used.
  - b. Heavily contaminated areas may require mechanical cleaning, grinding or scraping before power washing or scrubbing.
  - c. Once the concrete is thoroughly clean, acid etch the deck as new construction. (In cases of heavy penetration of surface contaminants, sandblasting or shot-blasting may be necessary.)
4. Repairing  

Areas that have spalled off or have been ground out should be patched using a mortar consisting of epoxy and sand (100% solid epoxy with no solvent or oil modifications) or cementitious type repair mortar. Consult Pecora Technical Service for approvals.
5. Crack Preparation  

Same as with new construction.

**C. Plywood**

1. Damaged Plywood  
All damaged or surface contaminated plywood must be replaced prior to application of the base coat.
2. Nailing
  - a. Nails used should be non-rusting and should be spiral or "non-backing" nails (Barbed, spiral or ring shanked).
  - b. Nails should **NOT** be countersunk, but simply nailed flush.
3. Wall to Deck Flashing  

All wall-to-deck flashing and under threshold flashing should be galvanized metal or copper and must be installed prior to the application of the base coat. The metal to plywood juncture must be detailed with 802 or 802FC Base Coat and reinforcing fabric. Prime all metal flashings with P-100 primer.
4. Joint Preparation.  

Joints at changes in plane, or expansion details should be caulked and treated as expansion joints or detailed with galvanized sheet metal or flexible reinforced flashing type material. All other joints in plywood should be caulked flush and receive a detail coat of Pecora 802 FC Base Coat. See Deck Coating Detailing and Joint Sealant Application sections for more details.

## **MECHANICAL METHODS FOR PREPARING CONTAMINATED CONCRETE**

### 1. Shot Blasting

Shot blasting propels steel onto a surface to roughen it and remove coating and contaminants. Whether hand-held or walk-behind, the blasting equipment includes an enclosed blast chamber that recovers and separates dust and reusable steel shot. Because the abrasive and pulverized concrete are recovered, the system creates only very low levels of airborne dust and debris.

Shot blasting can remove embedded dirt, laitance, curing compounds, sealers, and conventional coatings up to 10 mils thick, tile mastics, and brittle coatings up to 1/16 in. thick. Shot blasting is the preferred method for preparing concrete decks.

### 2. Grinding

Grinding is performed with hand-held or walk-behind machines that rotate abrading stones or discs under pressure at right angles to the concrete surface. The purpose of grinding is typically to remove coatings less than 6 mils in thickness, mineral deposits, and slight protrusions on a concrete surface. Excessive grinding can smooth out a surface. If the needed surface profile is lost, other preparation methods must be used along with grinding

Portable, hand-held grinders can be used on horizontal as well as vertical surfaces. Larger, walk-behind grinders are best suited to horizontal surfaces.

### 3. Abrasive Blasting

Air abrasive blasting with conventional media such as silica sand or slag is used to create a light profile on concrete or, when used more aggressively, to perform deep cleaning and profiling. Rigid coatings that are 4 to 10 mils thick and some surface contaminants can also be removed by abrasive blasting.

Air abrasive blasting is conducted with hoses and nozzles attached to blast pots, air compressors, and oil and moisture separators. Abrasive blasting can produce profiles suitable for applying protective sealers, coatings and concrete or epoxy toppings ranging from 20 mils to 250 mils. Abrasive blasting on concrete typically produces a large amount of airborne dust from the fractured abrasive and fractured concrete.

### 4. Scarifying

Scarifying is performed with a rotary impact tool made of cutters (toothed washers) assembled on tempered steel rods. The rods are attached to a drum. The tool is held at a right angle to the concrete surface. When the drum rotates, the cutters strike the surface, fracturing or pulverizing the concrete. Units range from small, hand-held tools suitable for vertical and overhead application to larger, walk-behind units for horizontal surfaces.

The method can be used to remove brittle coatings up to 1/8 in. (3 mm) thick, deteriorated or contaminated concrete from 1/8 to 3/4 in. (3 to 19 mm), high spots to smooth out surfaces, and adhesives. The method can also be used to profile concrete surfaces so that they can receive coatings above 40 mils in thickness, self-leveling systems, broadcast systems, or thin overlays.

Surfaces grinding or the installation of an epoxy or concrete overlay would be necessary prior to application of the Pecora Deck Coating.

### 5. Scabbling

Scabblers are used to remove coatings or contaminated concrete by chipping the concrete with piston-driven cutting heads placed at a right angle to the surface. Compressed air drives the heads.

Large walk-behind scabblers are used for decks and other horizontal surfaces. Brittle coatings up to 1/4 in. thick and concrete up to 3/4 in. thick be removed by scabbling. Scabbling can also be used to create deep profiles on concrete surfaces, such as would be required to apply concrete or epoxy overlays of 1/8 in. or greater thickness.

Scabbling is not appropriate for removing gummy or rubbery materials, such as elastomeric coatings, and this method is likely to produce microcracking in the concrete. The installation of a concrete or epoxy topping would be necessary prior to applying the Pecora Deck Coating System.

6. Waterjetting

Waterjetting can be used in pressures varying from 5,000 to 45, 000 psi to remove water soluble contaminants, laitance, efflorescence, weak or deteriorated concrete down to 3/4 in. in depth and coatings up to 10 mils in thickness. Waterjetting is generally used outside and in areas that can tolerate mists, loud noise, and deep puddling. Surfaces which are cleaned by waterjetting will need the application of an extra base coat prior to the application of Pecora Deck Coating System.

## **JOINT SEALANT APPLICATION**

Static (non-moving) cracks greater than 1/16" in width, changes in plane and any projections through deck must be caulked prior to deck coating application. Dynamic (moving) cracks less than 1/16" in width should be saw cut to a minimum 1/4" wide by 1/2" deep. Thoroughly clean all saw cut cracks, expansion and control joints. All substrates must be clean and dry at time of primer and sealant application. Pecora P-75 sealant primer is required on concrete and masonry substrates. Pecora P-120 sealant primer is required on steel and other non-porous substrates. Allow primer to dry 1 – 8 hours. Reapply primer if dry time exceeds 8 hours.

Recommended Pecora Polyurethane Joint Sealants:

- Dynatred Two-Part Traffic Grade Joint Sealant
- Deck-Seal One-Part Traffic Grade Joint Sealant
- Dynatrol II Two-Part General-Purpose Joint Sealant

### **Saw Cuts, Expansion & Control Joints**

- Thoroughly clean and dry all substrates to be sealed.
- Install closed cell backer rod. Backer rod should be compressed 25% when installed.
- Apply appropriate sealant primer.
- Apply polyurethane joint sealant at the proper configuration. Generally, a 2:1 sealant width to depth ratio is recommended.
- Tool sealant flush with the traffic surface.
- Allow sealant to cure overnight.

### **Changes in Plane & Projections through Deck**

- Thoroughly clean and dry all substrates to be sealed.
- Install closed cell backer rod or bond breaker tape, where applicable. Backer rod should be compressed 25% when installed.
- Apply appropriate sealant primer.
- Apply polyurethane joint sealant at the juncture of all changes in plane and any projections through the deck, curbs, walls, etc.
- Tool sealant to form a one-inch, 45 degree cant.
- Allow sealant to cure overnight.

## **DECK COATING DETAILING**

Cracks and areas that have been caulked with a joint sealant must be detailed with Pecora 802 FC or 802 Base Coat.

Areas to receive a detail coat must be primed with P-801VOC or P-808 primer prior to detailing. The P-801VOC or P-808 primer should be applied at the standard coverage rate and allowed to dry one to eight hours. At changes in plane, the detail coat should be applied a minimum 6" up the vertical surface. All detail coats should be allowed to cure to a firm but tacky rubber before proceeding with full scale primer and base coat application. Generally, an overnight cure is required but ultimately, site conditions will dictate cure rate.

### **Concrete**

Apply a detail coat over all cracks less than 1/16", expansion and control joints and any areas that have been sealed with a joint sealant. Prime all areas to receive a detail coat with P-801VOC or P-808 primer. The detail coat should be 6" wide and 20 wet mils thick. Apply 20 wet mils of the detail coat over sealant cants and joints less than 1/2" wide. Do not apply the coating over expansion joints wider than 1/2". Allow to cure to a firm but tacky rubber.

### **Plywood**

Apply joint sealant to butt joints that are not tight and tool the sealant flush to the surface. Along the juncture of all horizontal and vertical surfaces, tool joint sealant to form a 1", 45 degree cant and allow the sealant to cure overnight. Prime all areas to receive the reinforcing cloth and detail coat with P-801VOC or P-808 primer. Apply 20 wet mil detail coat, 4" wide over all primed joints and metal. Immediately embed a strip of reinforcing cloth into the wet coat and backroll. Apply a second detail coat over the strip of the same wet mils and feather edge the terminating edges. Allow to cure to a firm but tacky rubber. Apply 20 wet mils of 802FC or 802 Base Coat over all sealant cants and allow to cure to a firm but tacky rubber.

# **SECTION #4 INSTALLATION PRECAUTIONS**

**Temperature Limitations  
Pot Life  
Aggregate  
Slip-Resistance Guidelines  
Vehicular Ramp Applications  
General Two Component Coating Mixing Instructions  
Safety Precautions**

## **TEMPERATURE LIMITATIONS**

### **Low Temperature Applications**

When installing polyurethane deck coatings in cold weather, special precautions must be taken. These coatings should generally not be applied to surfaces which are 40°F or colder and extra care must be taken to insure that there is no condensation on the deck. Priming is always required at low temperatures. When outside temperatures are 60°F or less, the deck coating materials should be warmed by storing overnight in a warm room or in a heated van.

If desired, the **HB1000 Accelerator** may be used in order to reduce the cure time of the HB1000 industrial coating when the ambient temperature is between 40° and 60°F. Refer to page 29 of the manual for details.

### **High Temperature Applications**

When installing polyurethane deck coatings in hot weather, special precautions must be taken. Factors to consider are ambient and substrate temperatures as well as sunlight exposure. Elevated ambient temperatures and direct sunlight exposure will result in increased substrate surface temperatures. Generally, polyurethane coatings should not be applied to substrates when the ambient and substrate temperatures exceed 100°F. When polyurethane coatings are applied at ambient and substrate temperatures greater than 100°F, bubbles may form at the substrate / coating interface which can affect coating adhesion, appearance and ultimate field performance (See “Common Causes and Cures for Blisters” section for more details). Another factor to consider is the decrease in viscosity of the deck coating components which can affect coverage rates when material and substrate temperatures are elevated. In order to prevent this occurrence, adjust the work schedule to permit coating application in shaded areas first or perform work early or late in the day when the ambient / substrate temperatures are within the acceptable range.

Measurement of ambient and surface temperatures can be a useful exercise especially when solar radiant heat is a factor on dark construction surfaces. A convenient method of measuring surface temperature is the use of an infrared surface temperature probe.



## **POT LIFE (aka Work Life)** **and ACCELERATOR**

Pecora HB1000 deck coating system utilizes two component, fast cure, 100% solids polyurethane based coatings. The coatings cure via a chemical reaction that is initiated when the base (Part A) and catalyst (Part B) components are mixed.

Pot Life (work life) in practical terms is the amount of time from which the components, Part A and Part B, are mixed until they are unusable. It is the length of time that the mixture is workable in the “pot”. As the coating cures, the viscosity of the mixture will increase until it is no longer usable.

### **What affects Pot Life?**

**Catalyst:** The Pot Life and cure rate are highly dependent on the ratio of base to catalyst in the mixture. The ultimate cure and performance properties will be affected by an improper base to catalyst ratio. The base and catalyst are pre-proportioned by the manufacturer. The entire contents of the catalyst must be mixed into the base portion. Do not split kits.

**Temperature:** Higher temperatures will accelerate the reactions and subsequently reduce Pot Life. Conversely, colder temperatures will slow down the reactions and increase Pot Life.

The use of high speed drill when mixing may generate more shear and subsequently more heat resulting in a shorter pot life. Always use a low-medium speed drill and proper mixing paddle i.e. Jiffy Mixer.

Store products at the recommended conditions. The components should be stored at temperatures below 80°F. Do not store pails in direct sunlight. It may be necessary to store the materials in the shade or an air conditioned area when at the project location.

**Accelerator:** The HB1000 accelerator is designed to reduce the cure time of the two part polyurethane deck coating material when the temperature is between 40°F and 60°F. Extended cure times can be expected at low ambient temperatures. The accelerator is added in 10mL increments to the 5.5 gallon pail as noted below. Pour the contents of the pail in ribbon patterns as quickly as possible and spread with a V-notched squeegee to the appropriate wet film thickness.

### **Work Life of Pecora HB1000 Deck Coating System Components**

Pecora-Deck HB1000 Packaging	Ambient Temperature	Pecora-Deck HB1000 Accelerator	Work Life	Open to Traffic
5.5 gallon kit	40°F (4°C)	30 mL	25 minutes	10 Hours
	50°F (10°C)	20 mL	25 minutes	10 Hours
	60°F (15°C)	10 mL	25 minutes	10 Hours
	70°F (21°C)	0 mL	30 minutes	8 Hours
	80°F (27°C)	0 mL	25 minutes	8 Hours
	90°F (32°C)	0 mL	25 minutes	8 Hours

## **PECORA-DECK HB1000** **COMPLIANCE WITH ANSI B101.1 FLOOR SAFETY** **STANDARD**

At this time the ADA and OSHA have no published minimum requirement for slip resistance and as a result there is currently no established industry specification for slip resistance. As of 2006, the American National Standards Institute (ANSI) committee on prevention of slips, trips and falls has developed the ANSI B101.1-2009 Test Method for Measuring Wet SCOF (Static Coefficient of Friction) of Common Hard-Surface Floor Materials standard which identifies three individual risk categories or “Traction Ranges” for flooring materials.

It is typically agreed upon within the flooring industry that both wet and dry SCOF be above 0.60 for flat surfaces and 0.80 for ramps. The vast majority of slip and falls occur on wet surfaces and therefore the ANSI B101.1-2009 standard focuses solely on wet SCOF. The table below was taken directly from the ANSI B101.1-2009 standard and represents the published traction ranges including corresponding wet SCOF values, risk probability of slipping and remediation:

### **ANSI B101.1 Wet SCOF Values and Traction Ranges**

Wet SCOF Value ( $\mu$ )	Available Traction	Remediation
$m\mu \geq 0.60$	High Traction (Lower probability of slipping)	Monitor SCOF regularly and maintain cleanliness.
$0.40 m\mu \leq 0.60$	Moderate Traction (Increased probability of slipping)	Monitor SCOF regularly and maintain cleanliness. Consider traction-enhancing products and technologies.
$m\mu < 0.40$	Minimal Available Traction (Higher probability of slipping)	Seek professional intervention. Consider replacing flooring and/or coating with high traction products.

### **Test Results**

Static Coefficient of Friction was determined using the ANSI B101.1-2009 test method and an American Slip Meter 825A Tribometer with a Neolite surface in contact with the test sample surface. The results reported are the average of four measurements each. Measurements were taken at standard lab conditions on both wet and dry flat surfaces.

Pecora-Deck HB1000 System	Aggregate Size	Aggregate Coverage, lbs/100 sq ft	SCOF Value ( $\mu$ )		Available Traction	
			DRY	WET	DRY	WET
Pedestrian (Plywood and Concrete)	16/35	10-15	1.08	1.06	High	High
Heavy Duty Pedestrian	12/20	10-15	1.04	1.04	High	High
Pedestrian w/ Low Mod Epoxy	12/20	10-15	1.20	1.21	High	High
Vehicular	12/20	10-15	1.20	1.21	High	High
Heavy Duty Vehicular	10/16	10-15	1.14	1.13	High	High
Vehicular w/ Low Mod Epoxy	10/16	10-15	1.14	1.13	High	High

### **Conclusion**

When tested per ANSI B101.1-2009 test methods, all tested Pecora-Deck HB1000 Traffic Coating Systems are classified as “High Traction” flooring surfaces. **Actual installed slip resistance is affected by a number of installation-related factors, including aggregate size, type, amount, and installation technique.** Agreement should be reached between all parties involved regarding the desired finished surface profile appearance via an installation mock up under representative site conditions.

## VEHICULAR RAMP APPLICATIONS

The Pecora Deck HB1000 Series vehicular deck coating is approved for use on vehicular ramps with slopes  $\leq 15\%$ .

Ramp areas with slopes  $> 15\%$  may be problematic when wet with regard to vehicular slip resistance. As a result, Pecora recommends installing the 8014HB Heavy Duty Vehicular coating system plus an additional coat of the HB1000 with aggregate to refusal as this will increase the coefficient of friction to some degree. Use a 12-20 mesh aggregate to ensure a course surface. Remove all excess aggregate after a 24 hr. cure period. **Do not apply additional HB1000 over the exposed aggregate surface.** Aggregate surface must be left exposed to vehicular traffic in order to ensure the added slip resistance.

Periodic maintenance of the top coat with exposed aggregate may be required in order to maintain the original coefficient of friction. Also, the use of “Slippery When Wet” signage in these ramp areas is recommended as these areas are difficult to ensure 100% slip resistance with vehicular traffic when wet.

## **GENERAL MIXING INSTRUCTIONS FOR PECORA TWO-PART POLYURETHANE COATINGS**

Check mix ratio on labels or in the Application Manual prior to mixing materials. Proper ratios are essential for optimal coating performance and development of physical properties. Pecora-Deck HB1000 components are pre-measured and the mix ratios should not be altered. Pay particular attention to pot life instructions.

- A. The catalyst or Part B side of the mix is **always** to be added to the Base or Part A Side.
- B. Always mix the base or Part A side thoroughly prior to addition of the catalyst or Part B.
- C. **Mixing Instructions for Base & Pre-Tinted Top Coats:** Add entire contents of Part B into Part A. Mix components with a slow-medium speed drill and Jiffy Mixer for a minimum three (3) minutes. Scrape down sides and bottom of mixing vessel then mix again for two (2) minutes.

**Mixing Instructions for Field Tintable Coating:** Add entire contents of Part B into Part A. Add entire contents of six (6) Pecora Universal Colorpaks or one (1) Pecora Deck Pack to pail. (*If using universal colorpaks, six (6) colorpaks are required to achieve desired color. Adding colorants other than Pecora Universal Colorpaks is not recommended.*) Mix all components with a slow-medium speed drill and Jiffy Mixer for a minimum three (3) minutes. Scrape down sides and bottom of mixing vessel then mix again for two (2) minutes.

- D. Apply deck coating.

### **NOTES:**

- Be careful not to whip in excessive quantities of air into the coating. Mixing at too high rate of speed or with the wrong mixing blade will introduce excessive air into the coating. These air bubbles may develop into blisters during application. It is recommended that mixing paddle speeds be kept low, preferably at 300 R.P.M. or less and that the mixing head be kept immersed as much as possible.
- Thinning of the two-part coatings is NOT recommended.

## **SAFETY PRECAUTIONS**

### **A. Environmental Conditions**

1. Do not proceed with application of the primers or polyurethane coating materials when the deck temperature is less than 40°F.
2. Do not apply materials unless the surfaces to receive the coating are clean and dry, or if precipitation is imminent.

### **B. Protection**

1. Warn personnel against breathing vapors and contact of materials with skin or eyes. Provide adequate ventilation.
  - a. At all times, workmen should have available chemical-cartridge type masks or other approved protection devices.
  - b. Wear protective clothing.
  - c. Keep all personnel out of areas being coated until 48 hours after job is completed. Longer if there is not adequate ventilation.
2. When installing any organic type coatings, seal air inlets, doorways and windows into nearby occupied spaces to prevent vapors from entering these areas.
3. Keep products away from heat, sparks and flame. Do not allow use of spark-producing equipment during application and until vapors are gone. Post "No Smoking" signs.
4. After completion of application, do not allow traffic on coated surfaces for a period of 24 - 48 hours.
5. Protect plants, vegetation and animals that might be adversely affected by the coating operation. Use drop cloth or masking as required.
6. Read warnings and instructions on container labels and on the safety data sheets.

## **SECTION #5**

# **TROUBLESHOOTING**

### **Words of Wisdom**

### **The Roll of Adhesion in Deck Coatings**

### **Concrete Slabs with Vapor Drive Concerns**

### **(Unvented Metal Pans, Between Slab Membranes, On-Grade Slabs)**

### **Common Causes & Cures of Blisters**

### **Chemical Resistance**

## **WORDS OF WISDOM**

1. Pecora Polyurethane Coatings are vapor barriers systems and should not be applied over exterior concrete decks that have been constructed over unvented metal pans or onto exterior concrete decks that have a between-slab membrane system under them.
2. Deck temperature should always be 40°F or above whenever epoxy primers or Pecora Polyurethane Coatings are being applied.
3. All material quantities given in the Pecora Application Manual and Pecora Specification sheets assume perfectly flat and smooth surfaces. As the profile of concrete tends to vary, material quantity estimates should be increased accordingly. In addition, material left in lines or containers and loss due to overspray should be taken into consideration when estimating.
4. Mix all materials thoroughly prior to use. Read labels directions carefully, especially on two-component products.
5. Acid Etching or Shot-Blasting is required on all concrete surfaces prior to application of the Pecora Polyurethane Waterproofing Systems. Consult Pecora Representative for job to job recommendations or for alternate methods of surface preparation.
6. Clean up tools with mineral spirits or Xylene. Use caution when cleaning with solvents.
7. Never coat wet or damp surfaces. Consult Pecora Technical Bulletin #71 for recommended methods for determining concrete moisture content.
8. Solvent based products are incompatible with asphaltic compounds.
9. Do not mix combinations of different coating material (different part numbers) without consulting an authorized representative.
10. It is much easier to use caution or to use masking to keep off an adjacent surface during application than to remove it after cure.
11. When using spray equipment flush equipment lines thoroughly every night to prevent material from clogging the hoses.
12. Pecora 802, 802 FC Base Coats and Dynapoxy Low-Mod coatings are not designed for extended ultra-violet exposure.
13. In systems requiring the use of primers, the polyurethane coatings materials must be applied the same day as the primer is applied, otherwise lightly re-prime.
14. Never apply the primer or polyurethane elastomeric coatings when precipitation is imminent.

## **THE ROLL OF ADHESION IN DECK COATINGS**

Most deck coating failures are the result of inadequate preparation of the concrete substrate. The following is a check list for avoiding adhesion problems caused by inadequate surface preparation.

1. Ensure that there is an adequate surface profile or anchor pattern.
  - a. Concrete is a porous, heterogeneous composite. Its pores or capillaries aid in the adhesion of the deck coating. Adhesion is improved via the use of high penetration primers, preferably of the lowest possible viscosity. The greater the depth of penetration, the better the adhesion will be. But concrete porosity alone does not produce an adequate surface profile.
  - b. Mechanical adhesion is also achieved in the concrete substrate by roughening or profiling the concrete. The minor peaks and valleys formed by roughing the concrete provide an anchor pattern to which the base coat topping can bond. This profile can be created by mechanical methods such as shot blasting or by proper finishing of the new concrete.

2. Be certain the concrete is sufficiently clean. The degree of cleanliness of the concrete substrate is critical for long-term adhesion. Surface preparation must produce a substrate that is free of all deleterious substances.

Substrate cleanliness means also that there are "non-visible" contaminants on the concrete. Job site tests may need to be performed to ensure soluble salts and other contaminants are not present.

Water soluble contaminants can be effectively removed by using high pressure water jetting or other mechanical means.

Curing agents or sealers can cause deck coating failures if they are chemically incompatible with the coating system. Solving this problem generally involves concrete removal via mechanical means.

3. Ensure that the concrete substrate is dry. Among the several tests for the presence of moisture in concrete, the most effective is the rubber mat or plastic sheet taped to the deck.



## **CONCRETE SLABS WITH POSSIBLE VAPOR DRIVE**

The low moisture vapor permeability of Pecora Polyurethane Deck Coatings restricts the amount of moisture that can be released through the coating. On-grade slabs may have a significant vapor drive through the coating due to the combination of uncontrolled amounts of ground moisture and temperature differentials. This can result in blistering and adhesion loss. These slabs should not be coated with polyurethane deck coating systems. Other slab types may be exhibiting the same phenomenon due to water trapped in the slab system prior to deck coating installation or by entering the system by another path afterwards. These construction types include split slabs with a buried waterproofing membrane and slabs over unvented metal pans.

Pecora-Deck HB1000 Industrial Coating System installation procedures, as described in Pecora's Technical Data Sheets, should not be used on slabs of these types. The coatings may be installed on these types of slabs only when specific surface preparation measures are taken. The following points and procedures will apply to concrete slabs with possible vapor drive:

1. Concrete slab must be thoroughly dry prior to coating installation. Confirm that the slab is adequately dry with a rubber mat test or concrete moisture meter. Refer to Pecora Technical Bulletin #71 for concrete moisture testing guidelines.
  - a. Concrete over unvented slabs or split slabs with buried membrane must have a moisture content below 5% at time of primer application. Split slabs with buried membrane must have drainage at the membrane level.
  - b. On-grade slabs must have a moisture content below 12% at time of primer application.
2. The concrete surface must be prepared by shot blasting or equivalent procedure to an ICRI surface finish of CSP 3 to 5.
3. Mix equal volumes of P-808 Part A and Part B. Thin the resulting mixture 50% with xylene (1 gallon mixed P-808: 0.5 gallon Xylene). Allow mixture to stand at least 15 minutes but no longer than 60 minutes.
  - a. The Pecora Healer Sealer Penetrating Epoxy Sealer (220 g/L VOC) may be substituted for the P-808 primer at project locations where local VOC regulations prevent the usage of the P-808 primer (450g/L VOC)<sup>1</sup>. An undiluted single coat of the Healer Sealer will be required.
4. Apply thinned P-808 by roller, spray or brush at 250 square feet per gallon. Allow primer to dry 1 to 2 hours minimum at 70°F, longer at colder temperatures.
5. Apply second coat of undiluted P-808 at 250 square feet per gallon. Allow primer to dry 2 hours minimum, 8 hours maximum.
6. Install Pecora-Deck HB1000 Industrial Deck Coating System per instruction on the Technical Data Sheet.

<sup>1</sup> Check local VOC regulations for product compliance prior to installing deck coating primer.

## Determining Concrete Moisture Content Through Field Testing

The allowable moisture content of concrete prior to the application of sealant or coating materials is 5% or less via the internal humidity test (ASTM F2170) or 5lbs/1000ft<sup>2</sup>/24hrs via the calcium chloride test (ASTM F1869) when applying to slabs with possible vapor drive such as on-grade slabs and unvented elevated slabs. Three common methods (one qualitative and two quantitative) for determining moisture content are described below. Pecora requires at least one quantitative test method to be performed and documented prior to coating installation.

**Be aware that concrete moisture mitigation will be required if the below-mentioned requirements are not met. Consult Pecora Technical Service with any questions or concerns regarding the published requirements and possible resolutions.**

### ASTM D4263 Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method (Qualitative / Rubber Mat Test)

The rubber mat test is intended to measure concrete surface boundary moisture only and is not intended to determine internal concrete moisture content. This is considered a qualitative test method and is typically conducted the day of coating installation.

- **Purpose:** Capillary moisture in concrete is detrimental to the adhesion and performance of polyurethane deck coatings which cannot tolerate moisture on or within the surface boundary.
- **Materials:** 4 mil (minimum) polyethylene sheet or rubber mat 2" duct tape.
- **Conditions:** Test when surface and ambient temperatures are within the recommended application temperature for the coating system.
- **Procedure:** Tape polyethylene sheet or rubber mat approximately 12"x 12" to the deck surface making certain all edges are sealed. Allow the polyethylene sheet or rubber mat to remain in place for 16 hours (minimum). After 16 hours, remove the polyethylene sheet or rubber mat and observe the underside of the mat and the concrete surface. Slight amounts of moisture are normal and are to be expected. ***Beads of water indicate the concrete is too wet for moisture sensitive coatings to be applied and quantitative testing for internal moisture content should be completed using one of the methods noted below.***

### ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes

- **Quantitative** test method to determine relative humidity as measured inside a drilled hole.
- **Requirement: Maximum 75-80% internal RH considered acceptable for floor coatings**
- Comparable to ~ 5% moisture level

If the concrete is at 5.0% moisture content, it will neither absorb nor desorb moisture if the air above it is 70° F (21° C) and 75% RH. Therefore, if the air inside the box measures less than 75%, it can be assumed that the moisture content of the concrete is less than 5%.

**Sensor availability:**

Wagner Electronic Products, Inc. · <https://www.wagnermeters.com/>



**Wagner RH Meter (models may vary)**

### ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub Using Anhydrous Calcium Chloride

- **Quantitative** test method where moisture vapor emission rate is measured and determined over 24hrs via calcium chloride
- Unit of measure: Pounds per 1000ft<sup>2</sup> over a 24hr period (lbs/1000ft<sup>2</sup>/24hr)
- **Requirement: Maximum 5lbs/1000ft<sup>2</sup>/24hrs allowed prior to floor coating application**

**Test Method Summary & Procedure:**

On-site temperature and humidity must be controlled at least 48 hours prior to testing at a setting between 65-85°F and 40-60% relative humidity (RH). The slab must be clean and free of any contaminants. The test method noted below may slightly vary. Refer to the test kit instructions for specific guidelines.

1. Prepare three test sites for the first 1,000 sq. ft. Add one test site for each additional 1,000 sq. ft.
2. Set the tape sealed plastic dish on the scale and record its weight in grams, date and time of the test.
3. Carefully remove the tape along the edge of the dish, invert the lid under the dish and then stick the tape along the side of the dish to keep it safe. Be very careful not to spill any of the calcium chloride.
4. Place the dish on the slab away from cracks and joints. Be sure the calcium chloride inside is level. Remove the white paper on the dome and place the dome over the dish.
5. Firmly press the gasket under the flanges of the dome to seat the outer flanges of the dome to the slab and the gasket inside the edge of the dome. Place your hand over the dome and apply pressure, making sure there are no leaks in the gasket.
6. Place a safety cone over the dome and allow the test kit to remain undisturbed for 60-72 hr.
7. Cut open the dome and carefully remove the dish. Replace the lid and re-seal it with the blue tape.
8. Weigh the dish on the same scale, recording the ending weight in grams, the date and time on the dish lid.
9. Calculate the Moisture Vapor Emission Rate in pounds per 1000ft<sup>2</sup> over a 24hr period per the instructions included with the test kit.

## **COMMON CAUSES AND 'CURES' FOR BLISTER**

Because the Pecora Polyurethane Coating Systems are positive seal or vapor barrier systems, blistering may occur during application if certain conditions are present.

### 1. **Moisture Blister**

Normally, blister caused by moisture are fairly large (quarter to silver dollar in size). They will have a trace of moisture under them when they are cut open. They can be caused by coating a damp or wet deck. The most important aspect to all systems is the bond to the substrate. All precautions should be taken to assure that the deck to receive the Pecora Polyurethane Deck Coating System is thoroughly dry. Moisture blisters will also occur between layers of coating if the deck is damp between coats (due to rain, dew, fog, etc.) There may or may not be a trace of moisture under these blisters. The moisture between coats leaves a definite watermark on the back of the blister itself.

To minimize the moisture blister problem after it occurs, you must cut out these blisters and leave the void open in order to allow the moisture to escape. After the moisture has escaped and the surface has dried, make necessary repairs.

### 2. **Pinhole Blister**

Pinholing occurs normally when a concrete deck has been sandblasted, shot-blasted, ground, or if the new concrete has not been properly finished with a steel trowel. The surface of the concrete has been broken, opening up air pockets in the concrete which are actually tiny holes in the concrete about 1/8" to 1/4" deep. As you coat the deck, the coating will bridge these holes, and as the film dries, small blister will form as the air inside the pinhole expands. If you cut these blisters open, there will be a tiny hole in the deck. While the coating is still in the liquid stage, these blisters must be broken with a squeegee or stiff broom before another coat is applied.

Several measures have proven effective to the occurrence of these small pinhole blisters:

- a. Increase slightly the amount of primer being used or apply two light applications of primer.
- b. Apply the specified system in thinner coats. Obviously, this procedure means more coats are involved in applying the full system.
- c. Begin application of first base coat late in the day, after the heat of the day has passed and after the deck has begun to cool. This will allow the base coat flow into the pinholes and plug the pinholes upon curing.

### 3. **Application Blisters**

- a. Gassing can occur when the coating system is applied at an application rate or thickness which is greater than that in the recommended application instructions. It may occur anywhere in the coating film. When it occurs at the top surface of the cured film, gassing resembles a small pinhole. To reduce the occurrence of this problem, apply the material in thinner coats.

***\*\*\*Pecora-Deck HB1000 Industrial Coating is a 100% solids, chemically curing, high build coating system which will eliminate blisters as a result of over application\*\*\****

- b. Solvent blisters occur when a coat of material is applied before the preceding coat has cured. Solvents in the uncured coat will not have had sufficient time to leave the film and are trapped by the next coat. Solvent blisters are most common during marginal weather conditions such as low temperatures, low humidity, or both. These blisters are usually fairly large (quarter-sized up to several inches) and will be tacky on the back side of the film. To repair, cut out the blisters and allow the entire film to dry before touching up and recoating.

## **CHEMICAL RESISTANCE OF PECORA SOLVENT-BASED POLYURETHANE DECK COATING SYSTEMS**

Pecora Deck Coating Systems are resistant to many commonly encountered chemicals. These coatings are widely used for parking decks, mechanical rooms and other location where they are exposed to incidental chemical contact. They are not recommended for fluid containment, fountains, or ponding water applications, nor are they recommended for chemical processing areas where there may be long term exposure to aromatic oxygenated or chlorinated solvents and/or concentrated acids or bases.

Any coating system can stain if not properly maintained. Pecora recommends washing on a regular schedule to remove dirt, oils and other debris that may damage the coating. Spills of unknown chemicals should be cleaned up immediately.

***Pecora HB1000 Chemical Resistance Chart***

<u>Chemical</u>	<u>Rating</u>
Acetic Acid, 10%	C
Acetic Acid, 30%	NR
Acetic Acid, 50%	NR
Ammonium Hydroxide, 30%	R
Chlorinated Water, 100ppm	R
Citric Acid, 10%	R
Citric Acid, 20%	R
Citric Acid, 50%	R
Coconut Oil, 250°F	R
Coconut Oil, RT	R
Fuel Oil/Diesel Fuel	C
Hydrochloric Acid, 10%	R
Hydrochloric Acid, 20%	C
Hydrochloric Acid, 35%	C
Hydrogen Peroxide, 30%	R
Hydrogen Peroxide, 50%	R
Isopropyl Alcohol	R
Jet Fuel	C
Latic Acid, 88%	C
Motor Oil	C
Nitric Acid, 10%	NR
Olive Oil, 250°F	R
Olive Oil, RT	R
Propylene Glycol	C
Skydrol	C
Sodium Hydroxide, 25%	R
Sodium Hydroxide, 50%	R
Sodium Hypochlorite, 15%	R
Sodium Hypochlorite, 50%	R
Sodium Hypochlorite, 7.5%	R
Sodium hypochlorite, 8%	C
Sulfuric Acid, 10%	R
Sulfuric Acid, 50%	C
Sulfuric Acid, 75%	NR
Sunflower Oil, 250°F	R
Sunflower Oil, RT	R
Transmission Fluid	C
Urine	R
Vinegar	C
Xylene	C

**SECTION #6  
MAINTENANCE OF DECK COATING  
SYSTEMS**

## **PECORA DECK COATINGS MAINTENANCE MANUAL**

1. General
  - A. Maintenance of Pecora Deck Coating Systems must be performed at regular intervals to assure that the coating system will continue to provide service for which it was intended.
  - B. Maintenance procedures should include:
    - a. Periodic physical inspections
    - b. Cleaning
    - c. Snow removal and ice control (where applicable)
    - d. Repairs to structure
    - e. Repairs to coating system
    - f. Periodic replacement of Topcoat and paint striping
2. Inspections
  - A. The deck coating system is subject to extreme abrasive wear conditions as well as to physical damage from general use and damage resulting from structural problems. Periodic inspections will provide a basis for the proper maintenance work to assure a long life expectancy of the coating system.
  - B. Monthly - make a physical inspection to determine if there are any areas of excessive wear or physical damage to the coating.
  - C. Semi-Annually - make a thorough physical inspection. Such inspections should include, but are not limited to:
    - a. Inspect the sealant in the joints for proper adhesion. Also determine if there is any cohesive failure or physical damage to the sealant
    - b. Where possible, inspect the underside of the joints for evidence of leaks.
    - c. Inspect the areas where beams are resting on columns for evidence of stress cracking or excessive movement.
    - d. Where possible, inspect the entire structure from the underside of the deck for cracks which show evidence of a difference in the plane of the materials on each side of the crack.
    - e. Inspect drains or scuppers to ensure there is nothing clogging or blocking them, to avoid ponding water on the deck.
    - f. Inspect areas at junctures of horizontal decks and vertical sections (ie: parapet walls, planter walls, building walls, curbs, etc.) to determine if there has been excessive movement at these points which may have caused the coating to crack.

- g. Inspect coating at the base of parking bumpers (in the case of parking deck coating systems) to determine if there has been any damage to coating as a result of movement of the bumper.
- h. Inspect coating surface to determine if there are any substantial structural cracks in the substrate which have caused the coating to crack.
- i. Inspect areas which are subject to high abrasion and wear such as:
  - (1) Vehicular Traffic Decks: Turn radii, entrance and exit ramps and other start/stop areas for excessive wear loss of aggregate in the coating.
  - (2) Pedestrian Decks: Top of stair landings, stair treads, doorways, narrow walk-through areas, etc.
  - (3) Other Decks: Inspect entire surface for high wear areas.

### 3. Cleaning

- A. The use and location of the deck will cause the cleaning frequency to vary. Our recommendation for cleaning under average use conditions is as follows:
  - a. Weekly - Sweep or vacuum deck to remove loose debris and dirt.
  - b. Monthly - thoroughly clean the deck to remove dirt, debris, oil or grease dripping, black tire marks, etc. Cleaning may be by:
    - (1) Power scrubbing with low suds, biodegradable detergent. This requires thorough rinsing to avoid detergent residues which may cause the deck to be slippery when wet and may cause stains.
    - (2) High pressure water blast. Water pressure should not be greater than 1,000 psi at nozzle.
  - c. Avoid the use of strong solvents, especially hydrocarbon type solvents.

### 4. Snow Removal and Ice Control

- A. It should be recognized that piled snow can significantly load the deck surface beyond its design load capacity resulting in significant structural cracks and/or more serious structural damage. Therefore, immediate removal of piled snow is recommended.
- B. The use of metal blades should be avoided at all times to prevent physical damage to the coating system.
- C. Snow Blowers *with rubber blades* and Snow Brooms are recommended, as opposed to heavy snow removal equipment.

### 5. Repair to Structure

- A. All structural repairs should be at the direction of a Structural Engineer.

### 6. Repair to Deck Coating Materials

- A. Minor repairs may be made by owner's maintenance people, however, it is suggested that to protect the manufacturer's warranty, major repairs should be accomplished by the original approved applicator.
  
- B. Physical damage to the coating system (cuts, tears, burns, etc.):
  - a. Remove damage coating materials back to well adhered material.
  - b. Thoroughly clean the exposed substrate and existing coating surrounding the area with a clean cloth that has been wet with xylene solvent.
  - c. Allow solvent to evaporate (1 hour at 75°F, 50% R. H.).
  - d. Install the coating system to the original film thickness, extending each coat onto the existing coating, featheredging the terminating edge of the coating. If multiple coats are required (ie: coating removed to the original substrate), allow proper cure time between coats.
  - e. Allow the repaired area to cure for 24 hours (minimum) for pedestrian decks, 48 hours (minimum) for vehicular decks before allowing traffic on the repaired area.
  
- C. Excessive Wear Areas and Traffic Replacement
  - a. Thoroughly clean area with steam cleaner, power scrubber or high pressure water blast.
  - b. Allow area to become completely dry.
  - c. Scrub area with xylene solvent.
  - d. Allow solvent to evaporate (1 hour at 75°F, 50% R.H.).
  - e. Apply P-801-VOC Primer at a rate 300-400 square feet per gallon in a thin, even film. Avoid puddles or ponding.
  - f. Allow P-801-VOC primer to cure for 1 hour minimum, 8 hours maximum.
  - g. Apply continuous membrane coat:
    - (1) For applications requiring a Base Coat: Apply Pecora 802 or 802 FC Base Coat to the cleaned area at appropriate coverage rate. Featheredge terminating edges. Allow to cure 4 – 5 hours at a temperature above 70°F.
    - (2) For applications not requiring a Base Coat: Apply a coat of Pecora HB1000 Industrial Coating to the cleaned area at a rate of 32 square feet per gallon. Featheredge terminating edges. Allow to cure 2 – 4 hours at a temperature above 70°F.
  - h. Suggested schedule for aggregate. Amounts may require adjustment to match existing coating texture.
  - i. Allow Pecora HB1000 Industrial Coating to cure for 24 - 48 hours before opening to traffic.



## **SECTION #7**

# **WARRANTY**

### **Material Warranties**

**Please refer to Pecora Technical Service Dept  
for Warranty Information and Guidelines**