



Application Manual

Traffic-Bearing Waterproofing Systems • Volume 1



Introduction

Dear Customer

This catalogue is an up to date handbook covering the important technical aspects of NEOGARD's Traffic-Bearing Waterproofing systems and is intended for all Applicator personnel who are involved in selling, estimating, administration and application.

It is our intention to make changes and additions to this handbook as technology evolves. For specific application questions or technical assistance, contact the NEOGARD's Technical Service Department at (214) 353-1600.

Thank you for your help in making this handbook possible.

Your NEOGARD Team



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Job Inspection

Concrete

1. Verify that the work done under other sections meets the following requirements:
 - The concrete deck surface is free of ridges and sharp projections. If metal forms or decks are used, they should be ventilated to permit adequate drying of concrete on exterior exposed deck.
 - The concrete was cured for a minimum of 28 days. (Minimum of 3,000 psi pedestrian, 4,000 psi vehicular compressive strength). Water-cured treatment of concrete is preferred. The use of concrete curing agents, if any, shall be of the sodium silicate base only; others require written approval by NEOGARD.
 - The concrete was finished by a power or hand steel trowel followed by soft hair broom to obtain light texture or “sidewalk” finish similar to photo below.



- Damaged areas of the concrete deck be restored to match adjacent areas. Use 100% solids epoxy and sand for filling and leveling. See epoxy patching section in Surface Preparation section of manual.

Plywood

1. Verify that the plywood deck work done under other sections meets the following requirements:
 - Plywood is of exterior grade quality and minimum B-C grade with B side to receive coating. Plywood shall be at least 5/8” thick. Tongue and groove plywood is preferred.
 - Joist spacing beneath plywood deck has a maximum spacing of 16” O.C.
 - Plywood imperfections are filled with 70991 sealant or other polyurethane sealant approved by NEOGARD.
 - Spiral or coated nails are used and are driven flush with the surface of plywood. Nails shall not be countersunk.
 - A maximum of 1/16” space between sheets of plywood is maintained while deck is being placed.
 - Plywood decking is to be covered as soon as possible after installation.



Surface Preparation

Concrete – New Construction

1. General Construction Practices

- Surfaces to receive Auto-Gard systems must be a minimum compressive strength of 4,000 psi concrete.
- Surfaces to receive Peda-Gard systems must be a minimum compressive strength of 3,000 psi concrete.
- Insulating concrete (Zonolite, Vermiculite, Perlite, etc.) must never be coated directly with surface applied waterproofing.
- Structural concrete must have a full 28-day cure period prior to coating.

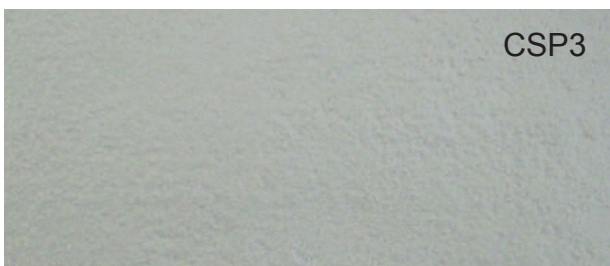
2. Finish Requirements

- The deck must be steel troweled with power or hand trowel. After the second steel troweling has been completed, finish concrete by lightly pulling a soft hair broom over the surface to leave a light texture in the concrete. No projections or voids should be present in the concrete surface.
- If the concrete finish is rougher or smoother than a light hair broom finish, consult NEOGARD for additional surface preparation procedures.
- Water curing of deck is the preferred method. However, if a curing compound is to be used, it must be of the sodium silicate type. Other types of curing compounds require prior written approval by NEOGARD. Chlorinated rubber, wax or resin based curing compounds must not be used.
- Deck must be free from contaminants such as oils, tars, asphalts, grease, dirt, etc., prior to coating.

3. Methods for Preparing Concrete Deck

Shot Blasting

- Shot blasting is the preferred method to remove laitance from concrete surfaces. See photos below. Proper care and procedure should be taken to leave the concrete surface as unopened as possible. Shot blasting is also preferred over sandblasting to remove an unacceptable curing compound. Mechanically prepare surface by shot blasting to industry standard surface texture (ICRI's CSP3 - 4) without causing additional surface defects in deck surface. **Note: Shot blasting does not remove deep penetrating oils, grease, tar or asphalt stains. Proper cleaning procedures should be followed to insure proper bonding of the deck coating.**



CSP3



CSP4

Surface Preparation

- Shot blasting does not replace acid etching on expansive type concrete decks.
- Improper shot blasting can destroy the surface finish of the concrete. Overly-blasted concrete can contain voids or pinholes which can result in blister problems during coating application. It may also require extra coats of additional material to “profile” the rough surface.

Acid Etching

- Purpose; to remove laitance from concrete surface.
- **Acid etching has its limitations. Acid will not cut through oil and greases, curing or sealing compounds, paints, heavy dust or dirt accumulation. These contaminants must be removed before etching. Scrub with detergents or use appropriate solvents depending on the type of contaminate.**
- Pre-wet the concrete surface prior to applying etching solutions. Using a hose with a fine spray nozzle, apply water uniformly across the concrete until the surface is wet but no standing water is present. The concrete should remain wet until the acid solution is applied.
- Acid etch deck with 18° to 20° Baume muriatic acid and water mixed one to one. **Always pour acid into water; never water into acid.** Evenly distribute acid solution over entire floor from plastic sprinkling cans at a rate of one gallon acid solution to 40 square feet of floor. As the acid is reacting or foaming, vigorously scrub with a nylon or plastic bristle broom. Use caution so that spent acid solution does not wet floor prior to application of fresh acid. As soon as acid quits foaming, immediately rinse thoroughly with large amounts of water. **Do not allow acid solution to dry on the deck.** Any soluble salt formed by the acid acting on the concrete that remains on the surface will affect the bond of the deck coatings to the substrate, particularly in the low spots, where water “puddles”. **Note: If acid does not “boil” or “foam”, there may be a curing compound or other problem present. Consult NEOGARD before proceeding.**
- Allow deck to completely dry after flushing with water (usually overnight). Check for “salty” spots of residue left after concrete has dried. If any are present, use water, brooms and a portable vacuum to remove.

Sandblasting

- Sandblasting is recommended only as a last resort (in lieu of acid etching or shot blasting) or when necessary to remove an unacceptable curing compound.
- Sandblasting does not replace acid etching on expansive type concrete decks.
- Sandblasting can cause “pinholes” in concrete surfaces which could cause blister problems during coating application and in the finished system.
- Can be used to remove incompatible striping paint from deck prior to application of surface applied waterproofing.



4. Concrete Patching

- Very little repairing should be necessary in new concrete if the slab is placed according to specifications, but minor imperfections must be corrected. There are many jobs that the applicator is called in to do after the structure is complete and the decks were roughly done, not anticipating the use of a surface applied waterproofing system. Ridges and sharp projections should be ground off and pits, holes and low spots should be filled with 70714/70715 series 100% solids epoxy and sand mixture at a ratio of one part epoxy to four parts sand. The repairs should be done after any chemical cleaning or acid etching treatments and the epoxy patch allowed to cure approximately one day at 75° F to 80° F.

Surface Preparation

- One gallon of mixed epoxy mixed with four gallons of 20-40 mesh clean dry sand will yield approximately 6.42 square feet of epoxy patching material one inch thick.



5. Cracks and Cold Joint Preparation

- Visible hairline cracks (up to 1/16" in width) in concrete and cold joints shall be cleaned, primed and treated with polyurethane deck coating material extended a minimum distance of 2" on either side of crack to yield an average thickness of 30 dry mils.
- Large cracks (over 1/16" in width) shall be routed out, blown clean, and filled flush with polyurethane sealant. Sealant shall be applied to inside area of crack only, not applied to deck surface. Detail sealed cracks with polyurethane deck coating material extended a minimum distance of 2" on either side of crack to yield an average thickness of 30 dry mils.

6. Control Joint Preparation

- Seal secondary control joints with polyurethane sealant. Be sure to maintain ratio of width to depth recommended by sealant manufacturer.

Concrete - Remedial Construction

1. General Construction Practices

- Surfaces to receive Auto-Gard systems must be a minimum of 4,000 psi compressive strength concrete.
- Surfaces to receive Peda-Gard systems must be a minimum of 3,000 psi compressive strength concrete.
- Insulating concrete (Zonolite, Vermiculite, Perlite, etc.) must never be coated directly with surface applied waterproofing.
- Structural concrete patches must have a full 28-day cure period prior to coating.
- Concrete surfaces must be sound and dry. Remove all delaminated or scaled concrete, paint, tar, asphalt, grease, dirt, waxes, oils, etc., as may be necessary to establish a clean, dry substrate.

2. Finish Requirements

- Existing deck should have the same finish as a new deck. No projections or voids should be present in the concrete surface.
- If the concrete finish is rougher or smoother than a light hair broom finish, consult NEOGARD for additional surface preparation procedures.
- Water curing of structural concrete patches is the preferred method. However, if a curing compound is to be used, it must be of the sodium silicate type. Other types of curing compounds require prior written approval by NEOGARD. Chlorinated rubber, wax or resin based curing compounds must not be used.
- Deck must be free from contaminants such as oils, tars, asphalts, grease, dirt, etc., prior to coating.

Surface Preparation

3. Methods for Preparing Existing Concrete Deck

- Deck should be cleaned using trisodium phosphate and water, stiff bristle brooms or a power scrubber. Completely rinse away residue. Zep Pride E Concentrated Degreaser and Cleaner may also be used with water at a 1 to 3 ratio mix. Alternately use NEOGARD's 8500 BioDegradable Cleaner (BDC) concentrate with water at a 1 to 10 mix. Scrub solution with stiff bristle broom and allow to stand for approximately 15 minutes. Do not allow the solution to dry. Thoroughly rinse to remove all residue.
- Heavily contaminated areas may require mechanical grinding or chipping before washing.
- Shotblast, acid etch or sandblast deck as follows:

Shot Blasting (Preferred for Remedial Application)

- Proper care and procedure should be taken to leave the concrete surface as unopened as possible. Shot blasting is the preferred method to remove unacceptable curing compounds. Mechanically prepare surface by shot blasting to industry standard surface texture (ICRI's CSP3 - CSP4) without causing additional surface defects in deck surface. **Note: Shot blasting does not remove deep penetrating oils, grease, tar or asphalt stains. Proper cleaning procedures should be followed to insure proper bonding of the deck coating.**
- Shot blasting does not replace acid etching on expansive type concrete decks.
- Improper shot blasting can cause "pinholes" in concrete surfaces which can result in blister problems during coating application and in the finished system.
- Will not remove projections on surface of concrete.

Sandblasting

- Sandblasting is recommended only as a last resort (in lieu of shotblasting or acid etching) or when necessary to remove an unacceptable curing compound. Sandblasting does not replace acid etching on expansive type concrete decks.
- Sandblasting can cause "pinholes" in concrete surfaces which could cause blister problems during coating application and in the finished system.
- Can be used to remove incompatible striping paint from deck prior to application of surface applied waterproofing.

4. Concrete Patching and Concrete Replacement

- Patching of concrete in remedial applications is usually required. Ridges and sharp projections should be ground off and pits, holes and low spots should be filled with 70714/70715 series 100% solids epoxy and sand mixture at a ratio of one part epoxy to four parts sand. The repairs should be done after any chemical cleaning or acid etching treatments and the epoxy patch allowed to cure approximately one day at 75° F to 80° F.
- One gallon of mixed epoxy mixed with four gallons of 20-40 mesh clean dry sand will yield approximately 6.42 square feet of epoxy patching material one inch thick.

5. Cracks and Cold Joint Preparation

- Visible hairline cracks (up to 1/16" in width) in concrete and cold joints shall be cleaned, primed and treated with polyurethane deck coating material extended a minimum distance of 2" on either side of crack to yield an average thickness of 30 dry mils.
- Large cracks (over 1/16" in width) shall be routed out, blown clean, and filled flush with polyurethane sealant or FC7500/FC7960 base coat. Sealant shall be applied to inside area of crack only, not applied to deck surface. Detail sealed cracks with polyurethane deck coating material extended a minimum distance of 2" on either side of crack to yield an average thickness of 30 dry mils.

Surface Preparation

6. Control Joint Preparation

- Seal secondary control joints with polyurethane sealant. Be sure to maintain ratio of width to depth recommended by sealant manufacturer.

New Plywood

1. General Construction Practices

- Plywood should be a minimum of B-C exterior grade and a minimum of 5/8 inch thickness with joist spacing 16" on center. "B" side to be exposed to receive the coating system.
- Nails should not be countersunk, but simply nailed flush.
- Nails used should be spiral or "non-backing" nails (coated).
- A joint of 1/32" to 1/16" should be left between sheets. Tongue and groove plywood is available with 1/16" joint built in.
- Plywood imperfections are filled flush with polyurethane sealant.
- Pressure treated or "Wolmanized" plywood requires a six month aging period to insure complete adhesion.

2. Joint Preparation

- Joints at changes in plane, or expansion details should be detailed with uncured sheet flashing. Joints at changes in plane may alternately be detailed with 86218 Flashing Tape. Joints in plywood should be caulked flush and be detailed with polyurethane coating material with Tietex reinforcement fabric embedded in detail coating and extend a minimum distance of 2" on either side of crack. Average thickness 40 mils.

Existing Plywood

1. General Construction Practices

- Existing plywood decks must be absolutely clean and free of dust, oil, asphalt, grease, and old paint. This can usually be done with a floor sander. Lift all debris with vacuum.

2. Joint Preparation

- Joints at changes in plane, or expansion details should be detailed with uncured sheet flashing. Joints at changes in plane may alternately be detailed with 86218 Flashing Tape. Joints in plywood should be caulked flush and be detailed with polyurethane coating material with Tietex reinforcement fabric embedded in detail coating and extend a minimum distance of 2" on either side of crack. Average thickness 40 mils.

Metal Surfaces (Vents, Pipes, Drains, Flashing, Etc.)

1. Ferrous Metal (Carbon Steel)

- Surface must be wire brushed, ground with wire wheels or sandblasted to a near-white metal blast finish. This is the removal of all visible rust, mill scale, paint and other foreign matter from the surface.
- Prime metal with Ureprime HS4 in strict accordance with procedures recommended by NEOGARD.

2. Galvanized Steel and Other Non-Ferrous Metals

- Remove dust and dirt by blowing off the surface with high pressure (oil-free) air or wiping with clean dry rags. Oil, grease and protective mill coatings should be removed by solvent cleaning.

Surface Preparation

White rust should be removed from galvanized steel by hand or power brushing. Care should be taken not to damage or remove the galvanizing. Rust should be removed from old galvanized steel by hand or power tool cleaning.

- Prime metal with Ureprime HS4 in strict accordance with procedures recommended by NEOGARD.

Substrate Moisture Tests

New Concrete

ASTM D 4263-83 Plastic Sheet Method



New concrete should not be coated for at least 28 days to permit the concrete to cure and dry out. **All slabs on grade should be tested to determine if vapor is being transmitted through the slab.** Free water and soluble alkaline salts remaining in the concrete may attack fresh coatings or eventually cause delamination, blistering, peeling or efflorescence staining. For this reason, it is sometimes required that the concrete be tested for moisture content before coating. There are no truly reliable methods for determining if concrete is dry enough to coat and the feel or appearance of the surface can be highly deceiving.

The following ASTM D 4263-83 test method has been used with fair reliability. Securely tape a 4 ft. x 4 ft. sheet of clear polyethylene film to the surface and allow to remain for 24 hours. **The film should be carefully sealed with tape to prevent the escape of any moisture or vapor that would be trapped behind the film.** Test area is to be kept shaded for duration of test per ASTM procedures. The plastic film will act as a moisture barrier and trap any moisture migrating through the concrete. If condensation appears on the back side of the film or if the concrete under the film appears to be darker, damp or wet, this would indicate the presence of moisture in the concrete as demonstrated in photo above. If the test area shows there is moisture, do not proceed with coating application until re-tested and the test shows to be dry.

Pieces of test film should be placed at various locations that are likely to be slow drying out, such as below grade, low spots in floors, inside corners and lower wall areas.

Sustrate Moisture Tests

New or Aged Concrete

ASTM F 1869-10 Calcium Chloride Tests (Visual or Qualitative Test Method and the Referee or Quantitative Test Method)



When conducting either test in exterior environments, the calcium chloride test may yield skewed results. The concrete floor area must be clean and free from loose sand or dust as well as any coatings or sealers. The floor and area must be a minimum temperature of 65° F. When tested in accordance with the prescribed procedures for conducting the Referee or Quantitative Moisture Emission Test, the moisture emission from the subfloor shall not exceed 3 to 4 pounds per 1,000 square feet per 24 hours at time of installation of the elastomeric coating system or at any future time.

1. Visual or Qualitative Method

- When using the Visual Test Method, the calcium chloride is poured from its container onto the concrete floor in an area small enough so that the calcium chloride can be entirely covered by the plastic cover.
- Apply the sealant to all four flanges of the plastic cover and immediately place the cover over the calcium chloride. Press the flanges, with the sealant applied, to the concrete floor making sure that there is an airtight seal between the edges of the plastic cover and the concrete.
- After 60 hours, remove the plastic cover and visually examine the calcium chloride. If there is no sign of moisture, there will be no visible change in the calcium chloride. A small amount of moisture will cause the calcium chloride to cake or darken. More moisture will cause drops to form; and, in severe cases, the calcium chloride will dissolve.
- This Visual or Qualitative Test Method is not measurable and is subject to the interpretation of the person conducting the test. If there is any doubt whatsoever, the Referee or Quantitative Test Method should be used.

2. Referee or Quantitative Test Method

- Before conducting the Referee Test, the container of calcium chloride along with the tape used to seal the container and the cover label must be weighed to the nearest Centigram (.01 gram).

Substrate Moisture Tests

Record the weight. Apply the moisture-tight sealant to all four flanges of the plastic cover. Record the date and exact time you start the test on the cover label. Open the calcium chloride container and place the opened container onto the concrete floor.

- **CAUTION: Be careful you do not spill any of the calcium chloride from the container. If any is spilled, a new pre-weighed container must be used.**
- Place the plastic cover over the calcium chloride container and press the flanges, with the sealant applied, to the concrete floor making sure that there is an airtight seal between the edges of the plastic cover and the concrete. **NOTE: The calcium chloride container top with label and the sealing tape must be saved and used to seal the container after the test has been completed. It is suggested that you use the sealing tape to attach the top to the inside of the plastic cover while the test is being conducted to make sure the tape and top are reattached to the same test unit they came from.**
- Place the caution label on outside of cover as a protective warning and allow the unit to remain undisturbed for approximately 60 hours. Then remove the plastic cover and immediately place the top back on the calcium chloride container. Reseal the container with the original sealing tape. Record the date and exact time the test was completed.
- **CAUTION: You must again be careful you do not spill any of the calcium chloride from the container. If any is spilled, the test must be rerun with a new pre-weighed moisture test unit.**
- This sealed container is now weighed again to determine the weight gain. The formula for computing moisture emission is as follows:

$$\frac{1,000 \text{ sqft} \times \text{weight gain} \times 24 \text{ hours}}{\text{Area of test} \times \text{Exposure time} \times \text{Grams per pound}} = \text{Pounds per 1,000 sqft/24 hours}$$

NOTE: 1,000 square feet = 144,000 sq. in.

Area of test = 70 sq. in.

Exposure time = Hours to nearest 0.1 hour

Grams per pound = 454

- Use the following guidelines to determine the number of test to be taken simultaneously. Remember, testing in exterior environments may yield skewed results.

1 Test for areas up to 250 sq. ft.

2 Tests for areas of 250-500 sq. ft.

3 Tests for areas of 500-1,000 sq. ft.

4 Tests for areas of 1,000-5,000 sq. ft.

1 Additional test for each additional 5,000 sq. ft.

When conducting Moisture Emission Tests, the test units should not be concentrated, but should be located in various parts of the floor area. One unit should be placed near the center and others should be placed in edge areas, but no closer than 5 feet from the edge.



Dew Point of Moist Air Chart

Temperature at which moisture will condense on a surface. No coatings should be applied unless surface temperature is a minimum of 5°F above this point. Temperature must be maintained during curing.

This chart illustrates how to calculate the dew point:

		Ambient Air Temperature										
		20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F	110°F	120°F
Relative Humidity	90%	18°F	28°F	37°F	47°F	57°F	67°F	77°F	87°F	97°F	107°F	117°F
	85%	17°F	26°F	36°F	45°F	55°F	65°F	75°F	84°F	95°F	104°F	113°F
	80%	16°F	25°F	34°F	44°F	54°F	63°F	73°F	82°F	93°F	102°F	110°F
	75%	15°F	24°F	33°F	42°F	52°F	62°F	71°F	80°F	91°F	100°F	106°F
	70%	13°F	22°F	31°F	40°F	50°F	60°F	68°F	78°F	88°F	96°F	105°F
	65%	12°F	20°F	29°F	36°F	47°F	57°F	66°F	76°F	85°F	93°F	103°F
	60%	11°F	19°F	27°F	36°F	45°F	55°F	64°F	73°F	83°F	92°F	101°F
	55%	9°F	17°F	25°F	34°F	43°F	53°F	61°F	70°F	80°F	89°F	96°F
	50%	6°F	15°F	23°F	31°F	40°F	50°F	59°F	67°F	77°F	86°F	94°F
	45%	4°F	13°F	21°F	29°F	37°F	47°F	58°F	64°F	73°F	82°F	91°F
	40%	1°F	11°F	18°F	26°F	35°F	43°F	52°F	61°F	69°F	78°F	87°F
	35%	-2°F	8°F	16°F	23°F	31°F	40°F	48°F	57°F	65°F	74°F	83°F
30%	-6°F	4°F	13°F	20°F	28°F	36°F	44°F	52°F	61°F	69°F	77°F	

Example: Fahrenheit: If ambient air temperature is 70°F and relative humidity is 65%, the dew point is 57°F.
No coating should be applied unless the surface temperature is 62°F minimum (57°F + 5°F = 62°F).



70714/70715 Series Epoxy Patching

1. Description

- NEOGARD 70714/70715 series epoxy patching materials are two-component 100% solids epoxy resins specially formulated to use in damp, humid environments and has excellent chemical and water resistance.

2. Surface Preparation

- Surface must be clean and sound. It may be dry or damp, but free of standing water. Remove dust, laitance, grease, curing compounds, impregnations, waxes and other foreign materials. After surface preparation - prepare concrete by shot blast or other approved mechanical methods and sandblast steel to a white metal finish.

3. Mixing

- Pre-mix each component. Proportion two parts epoxy to one part epoxy hardener by volume into a clean pail.. Mix thoroughly for three minutes with a mixing paddle on low-speed (400 to 600) rpm drill until uniform in color. Mix only that quantity that can be used within its pot life (see product data sheet for profile of each product).
- To prepare an epoxy mortar, slowly add four parts by loose volume of an oven-dried aggregate to one part of the mixed epoxy, and mix until uniform in consistency.

4. Application

- When used as a broadcast overlay, prime the prepared substrate with mixed 70714/70715 series epoxy. While primer is still tacky, spread mixed 70714/70715 series epoxy with a 3/16 inch notched squeegee. When the material levels, broadcast the oven-dried aggregate slowly allowing it to settle in the epoxy binder. Ultimately the broadcast aggregate should be applied to excess at a rate of two pounds per square foot.
- When used as an epoxy mortar, prime the prepared substrate with mixed 70714/70715 series epoxy. Before the primer becomes tack-free, apply epoxy mortar by trowel. Finish with finishing trowel.

5. Limitations

- Minimum surface temperature is 40°F.
- Do not dilute . . . solvents will prevent proper cure.
- Use oven-dried aggregates only.
- If depth of mortar patch exceeds one inch, consult NEOGARD for mix design.

6. Safety

- The epoxy hardener contains reactive amines which are highly alkaline. Personnel protection should include goggles, rubber gloves and full clothing. In case of skin contact, remove contaminated clothing and wash affected area thoroughly with soap and water. In case of eye contact, flush with clean water for a minimum of 15 minutes. CONTACT A PHYSICIAN.



70714/70715 Epoxy Surface Conditioner

(For Structural Concrete Decks)

1. Description

- Neogard 70714/70715 is a two-component, moisture insensitive, 100% solids epoxy resin, designed as an economical super high strength binder. Mixing #200 fumed silica flour into the mixed epoxy makes an excellent concrete surface conditioner prior to the application of NEOGARD's Peda-Gard and Auto-Gard traffic bearing waterproofing systems.

2. Yield

- The following mix will yield approximately 4.8 gallons of mixed material. Spread at approximately 50 square feet per gallon.

3 parts by volume mixed epoxy
2 parts by volume #200 fumed silica flour

3. Application

- In a depressed, scaled or exposed aggregate surface of the existing concrete slab, squeegee effected areas with the epoxy slurry mix. Spread mix thoroughly over all areas to fill-in all low spots and immediately broadcast 16-30 mesh aggregate into wet mix to rejection. Allow to cure and remove excess aggregate. Please note that the surface profile of the epoxy surface conditioner is not smooth and will require a grout coat of neat epoxy at 1/2 gallon per 100 square feet or an extra coat of polyurethane coating at 3/4 gallons per 100 square feet prior to the application of NEOGARD's Peda-Gard or Auto-Gard Traffic Bearing Waterproofing systems.

4. Safety

- The epoxy hardener contains reactive amines which are highly alkaline. Personnel protection should include goggles, rubber gloves and full clothing. In case of skin contact, remove contaminated clothing and wash affected area thoroughly with soap and water. In case of eye contact, flush with clean water for a minimum of 15 minutes. **CONTACT A PHYSICIAN.**



Product Mixing Instructions

Single Component Polyurethane Coatings

- Read labels and application manual prior to mixing materials.
- The accelerator or small container is always to be added to the color side. One gallon containers in 55's and half pint and pint containers in 5's.
- Always pre-mix the color side thoroughly prior to the addition of the accelerator. Pre-mix 55 gallon drums for 5 to 10 minutes and 5 gallon pails for 3 to 5 minutes. Time will vary depending on temperature conditions.
- Add the accelerator slowly at the end of the pre-mix time while still mixing. After all of the accelerator has been added, continue to mix the material for a minimum of 20 minutes for 55 gallon drums and a minimum of 5 to 10 minutes for 5 gallon pails. Time will vary depending on temperature conditions.
 - **Note: Use a low-medium speed drill and a Jiffy Mixer to mix all materials thoroughly. Mixing at too high rate of speed or with the wrong mixer can introduce air bubbles into the coating. These bubbles may develop into blisters during application.**
- Any thinning of the materials should come after the materials are mixed. Do not thin materials more than 15%. See compatible thinners in the thinning section of this manual.



All Two-Part Polyurethane Coatings or Epoxies

- Check mix ratio on labels and in Application Manual prior to mixing materials. Proper ratios are essential for optimum coating performance and development of physical properties. Pay particular attention to pot life instructions.
- The catalyst or clear side of the mix is always to be added to the color side. Never add the color to the catalyst, as mixing will be poor.
- Always mix the color side thoroughly (3 to 5 minutes) prior to addition of the catalyst.
- Once the two parts are combined, mix for a minimum of 5 minutes. It is essential that all two-component materials be mixed thoroughly so no off-ratio materials are produced.
 - **Note: Use a low-medium speed drill and a Jiffy Mixer to mix all materials thoroughly. Mixing at too high rate of speed or with the wrong mixer can introduce air bubbles into the coating. These bubbles may develop into blisters during application.**
- Any thinning of two-part materials should come after the materials are mixed. If solvents are added prior to mixing, proper coating ratios will not be achieved. Do not thin materials more than 15%. See compatible thinners in the thinning section of this manual.
- If you elect to pump the two-part polyurethane through plural-component equipment (such as Graco's Hydra-Cat), be sure to mix the pigmented side thoroughly prior to pumping. Thinning in such an application must be done equally to both sides prior to spraying.



System Application

Auto-Gard

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7760/7761 mixed 1 part 7760 to 1 part 7761, 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 series mixed 2 parts 70714 to 1 part 70715 series by volume.
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Sealant: 70991 or approved equal.
- Liquid Flashing: 70410 or 7400 series polyurethane coating.
- Aggregate: 7992 16/30 mesh silica quartz sand.
- Base Coat: Single-component, moisture-cured 70410 or 7400 series polyurethane.
- Wear Coat: Single-component, moisture-cured 7400 series polyurethane.
- Topcoat: Single-component, moisture-cured 7400 series polyurethane.
 - **Accelerators 7923, 7931 and fast-set additive 7925 may be blended with 70410 and 7400 series polyurethane to enhance curing. Contact NEOGARD for specific instructions regarding use and handling of accelerators and fast-set additive.**

2. Average Dry Film Thickness

- 40 dry mils (excluding aggregate)
- Double texture in high wear areas (turns, ramps, ticket spitters, etc.) will average 52 dry mils (excluding aggregate).

3. Application Instructions

Seed and Lock Method

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of 70410 polyurethane in one coat at 1-2/3 gallons per 100 sf (60 sf/gal). The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of 7400 series polyurethane at 2/3 gallon per 100 square feet (150 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 15 pounds per 100 square feet and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.
- After removing loose aggregate, apply final topcoat of 7400 series polyurethane at 1 gallon per 100 square feet (100 sf/gal) and allow to cure.
 - **Double texturing instructions:** After removing loose aggregate from wearing surface coat and before applying final topcoat of 7400 series polyurethane, apply a second wearing surface coat of 7400 series polyurethane at 1 gallon per 100 square feet (100 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 10 pounds per 100 square feet and allow to cure.

System Application

- Apply final topcoat of 7400 series polyurethane as outlined above.

Seed and Backroll Method

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of 70410 in one coat at 1-2/3 gallon per 100 square feet (60 sf/gal). The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- For Heavy Duty Areas (Turns, ramps, etc.), apply wearing surface coat of 7400 series polyurethane at 1 gallon per 100 square feet (100 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 10 to 15 pounds per 100 square feet and allow to cure. **Note: For parking stalls and non-heavy duty service, skip this step and proceed to the next item.**
- When previous coating application is dry, recoat surface with 7400 series polyurethane at 1-2/3 gallons per 100 square feet (60 sf/gal) and immediately broadcast aggregate at a rate of approximately 15 to 18 pounds per 100 square feet and backroll to encapsulate aggregate.

Odor Free Auto-Gard

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 mixed 2 parts 70714 to 1 part 70715 series by volume.
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Sealant: 70991 or approved equal.
- Liquid Flashing: 7400-02 series polyurethane coating.
- Aggregate: 7992 16/30 mesh silica quartz sand.
- Base Coat: Single-component, moisture-cured 7400-02 series polyurethane.
- Wear Coat: Single-component, moisture-cured 7400-02 series polyurethane.
- Topcoat: Single-component, moisture-cured 7400-02 series polyurethane.
 - **Accelerators 7923 and 7931 may be blended with 7400-02 series to enhance curing. Contact NEOGARD for specific instructions regarding use and handling of accelerators.**
 - **Fast-set additive 7925 MUST NOT be used with 7400-02 series polyurethane.**

2. Average Dry Film Thickness

- 40 dry mils (excluding aggregate)
- Double texture in high wear areas (turns, ramps, ticket spitters, etc.) will average 52 dry mils (excluding aggregate).

3. Application Instructions

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 sf (300 sf/gal) and allow to cure.

System Application

- Apply first base coat of 7400-02 series polyurethane at 0.83 gallons per 100 square feet (120 sf/gal) and allow to cure. The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- Apply second base coat of 7400-02 series polyurethane at 0.83 gallons per 100 square feet (120 sf/gal) and allow to cure.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of 7400-02 series polyurethane at 2/3 gallon per 100 square feet (150 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 15 pounds per 100 square feet and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.
- After removing loose aggregate, apply final topcoat of 7400-02 series polyurethane at 1 gallon per 100 square feet (100 sf/gal) and allow to cure.
 - **Double texturing instructions:** After removing loose aggregate from wearing surface coat and before applying final topcoat of 7400-02 series polyurethane, apply a second wearing surface coat of 7400-02 series polyurethane at 1 gallon per 100 square feet (100 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 10 pounds per 100 square feet and allow to cure.
 - Apply final topcoat of 7400-02 series polyurethane as outlined above.

Auto-Gard FC

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7760/7761 mixed 1 part 7760 to 1 part 7761, 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 series mixed 2 parts 70714 to 1 part 70715 series by volume.
 - **Note: If system is required to be solvent-free, primer 7760/7761 must not be used.**
- Flashing Tape : 86218 or approved equal having a minimum thickness of 30 mils.
- Liquid Flashing: FC7500/FC7960 two-component polyurethane coating mixed 9 parts FC7500 resin to one part FC7960 hardener.
- Sealant: 70991 or approved equal.
- Aggregate: 7992U 12/20 mesh silica quartz sand.
- Base Coat: FC7500/FC7960 two-component polyurethane coating mixed 9 parts FC7500 resin to one part FC7960 hardener.
- Wear Coat: FC7510/FC7961 two-component polyurethane mixed 3 parts FC7510 resin to one part FC7961 hardener.
 - **Note: For decks exposed to UV, FC7520/FC7962 or FC7540/FC7964 must be used as the topcoat.**
- Topcoat for Non UV Exposure: FC7510/FC7961 two-component polyurethane mixed 3 parts FC7510 resin to one part FC7961 hardener.
- Topcoat for UV Exposure: FC7520/FC7962 two-component polyurethane coating mixed 85 parts FC7520 resin to 15 parts FC7962 hardener or FC7540/FC7964 mixed 2 parts FC7540 resin to 1 part FC7964 hardener.

2. Average Dry Film Thickness

- 40 dry mils (excluding aggregate).
- Double texture in high wear areas (turns, ramps, ticket spitters, etc.) will average 52 dry mils (excluding aggregate).

System Application

3. Application Instructions

Seed and Lock Method

Note: Do not apply FC7520/FC7962 heavier than 40 square feet per gallon per coat.

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See the **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of FC7500/FC7960 two-component polyurethane mix at 1-1/4 gallons per 100 square feet (80 sf/gal) and allow to cure. The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of FC7510/FC7961 two-component polyurethane mix at 1/2 gallon per 100 sf (200 sf/gal). While the wearing surface coat is still wet, broadcast 7992U aggregate at the rate of 10 to 15 pounds per 100 square feet into the system and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.
- After removing loose aggregate, apply final topcoat of FC7510/FC7961 (for non UV exposure) or use FC7520/FC7962 or FC7540/FC7964 (for UV exposure) two-component polyurethane mix at 3/4 gallon per 100 sf (133 sf/gal).
- Double texturing instructions: After removing loose aggregate from wearing surface coat and before applying final topcoat, apply a second wearing surface coat of FC7510/FC7961 two-component polyurethane mix at 3/4 gallon per 100 square feet (133 sf/gal). While the second wearing surface coat is still wet, broadcast 7992U aggregate at the rate of 10 to 15 pounds per 100 square feet into the system and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum and apply final topcoat of FC7510/FC7961 (for non UV exposure) or use FC7520/FC7962 or FC 7540/FC7964 (for UV exposure) two-component polyurethane mix at 3/4 gal per 100 square feet (133 sf/gal).

Seed and Backroll Method

Note: Do not apply FC7520/FC7962 heavier than 40 square feet per gallon per coat.

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gal per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of FC7500/FC7960 two-component polyurethane mix at 1-1/4 gallons per 100 square feet (80 sf/gal) and allow to cure. The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- For Heavy Duty Areas (Turns, ramps, etc.), apply wearing surface coat of FC7510/FC7961 (for non UV exposure) or use FC7520/FC7962 series or FC7540/FC7964 series (for UV exposure) two-component polyurethane mix at 3/4 gallon per 100 square feet (133 sf/gal) and immediately broadcast 7992U aggregate into wet coating at a rate of 10 to 15 pounds per 100 square feet and allow to cure. **Note: For parking stalls and non-heavy duty service, skip this step and proceed to the next item.**
- When previous coating application is dry, recoat surface with FC7510/FC7961 (for non UV

exposure) or use FC7520/FC7962 or FC7540/FC7964 series (for UV exposure) two-component polyurethane mix at 1-1/4 gallons per 100 square feet (80 sf/gal) and immediately broadcast aggregate at a rate of approximately 15 to 18 pounds per 100 square feet and backroll to encapsulate aggregate.

Auto-Gard Aliphatic

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7760/7761 mixed 1 part 7760 to 1 part 7761, 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 series mixed 2 parts 70714 to 1 part 70715 series by volume.
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Sealant: 70991 or approved equal.
- Liquid Flashing: 70410 or 7400 series polyurethane coating.
- Aggregate: 7992 16/30 mesh silica quartz sand.
- Base Coat: Single-component, moisture-cured 70410 or 7400 series polyurethane.
- Wear Coat: Single-component, moisture-cured 7400 series polyurethane.
 - **Accelerators 7923, 7931 and fast-set additive 7925 may be blended with 70410 and 7400 series polyurethane to enhance curing. Contact NEOGARD for specific instructions regarding use and handling of accelerators and fast-set additive.**
- Topcoat: Single-component, moisture-cured 7470 series aliphatic polyurethane.
 - **Accelerators 7931 may be blended with 7470 series aliphatic polyurethane to enhance curing. Contact NEOGARD for specific instructions regarding use and handling of accelerators and fast-set additive.**

2. Average Dry Film Thickness

- 40 dry mils (excluding aggregate)
- Double texture in high wear areas (turns, ramps, ticket spitters, etc.) will average 52 dry mils (excluding aggregate).

3. Application Instructions

Seed and Lock Method

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of 70410 or 7400 series polyurethane in one coat at 1-2/3 gallons per 100 sf (60 sf/gal). The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of 7400 series polyurethane at 2/3 gallon per 100 square feet (150 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 10 to 15 pounds per 100 square feet and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.
- After removing loose aggregate, apply final topcoat of 7470 series aliphatic polyurethane at 1 gallon per 100 square feet (100 sf/gal) and allow to cure.

System Application

- **Double texturing instructions:** After removing loose aggregate from wearing surface coat and before applying final topcoat of 7470 series aliphatic polyurethane, apply a second wearing surface coat of 7400 series polyurethane at 1 gallon per 100 square feet (100 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 10 to 15 pounds per 100 square feet and allow to cure.
- Apply final topcoat of 7470 series aliphatic polyurethane as outlined above.

Seed and Backroll Method

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of 70410 or 7400 series polyurethane in one coat at 1-2/3 gallon per 100 sf (60 sf/gal). The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- For Heavy Duty Areas (Turns, ramps, etc.), apply wearing surface coat of 7400 series polyurethane at 1 gallon per 100 square feet (100 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 10 to 15 pounds per 100 square feet and allow to cure. **Note: For parking stalls and non-heavy duty service, skip this step and proceed to the next item.**
- When previous coating application is dry, recoat surface with 7470 series aliphatic polyurethane at 1-2/3 gallons per 100 square feet (60 sf/gal) and immediately broadcast aggregate at a rate of approximately 15 to 18 pounds per 100 square feet and backroll to encapsulate aggregate.

Auto-Gard E

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7760/7761 mixed 1 part 7760 to 1 part 7761, 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715-09 mixed 2 parts 70714 to 1 part 70715-09.
 - **Note: If system is required to be solvent-free, primer 7760/7761 must not be used.**
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Sealant: 70991 or approved equal.
- Liquid Flashing: FC7500/FC7960 polyurethane coating.
- Base Coat: Two-component FC7500/FC7960 series polyurethane mixed 9 parts FC7500 resin with 1 part FC7960 hardener.
- Wear Coat: 70714/70715-09 two-component, 100% solids epoxy mixed 2 parts 70714 resin with 1 part 70715-09 hardener.
- Aggregate: 7992U 12/20 mesh silica quartz sand or #16 or #20 aluminum oxide.
- Topcoat for Non UV Exposure: 70714/70715-09 two-component, 100% solids pigmented epoxy mixed 2 parts 70714 resin with 1 part 70715-09 hardener.
- Topcoat for UV Exposure: FC7520/FC7962 two-component polyurethane mixed 85 parts FC7520 resin with 15 parts FC7962 hardener or FC7540/FC7964 two-component polyurethane mixed 2 parts FC7540 resin to 1 part FC7964 hardener.

2. Average Dry Film Thickness

- 40 dry mils (excluding aggregate)

3. Application Instructions

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a minimum rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of FC7500/FC7960 in one pass at 1-1/4 gallons per 100 square feet (80 sf/gal) and allow to cure. The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
 - **Note: Steep slopes may require thinner, multiple passes of coating to achieve necessary thickness.**
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of 70714/70715-09 clear epoxy at 3/4 gallon per 100 square feet (133 sf/gal) and immediately broadcast selected aggregate into wet coating at a rate of 15 pounds per 100 square feet and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.
- After removing loose aggregate, apply final topcoat of 70714-02/70715-09 pigmented epoxy (for non UV exposure) or use FC7520/FC7962 or FC7540/FC7964 (for UV exposure) two-component polyurethane mix at 1 gallon per 100 square feet (100 sf/gal).
- For Heavy Duty (HD) applications, apply 70714/70715-09 clear epoxy at a rate of 1 gallon per 100 square feet (100 sf/gal) and immediately broadcast selected aggregate, evenly distributed, into wet coating at a rate of 15-20 pounds per 100 square feet.

Auto-Gard F

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7760/7761 mixed 1 part 7760 to 1 part 7761, 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715-09 mixed 2 parts 70714 to 1 part 70715-09.
 - **Note: If system is required to be solvent-free, primer 7760/7761 must not be used.**
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Sealant: 70991 or approved equal.
- Liquid Flashing: FC7500/FC7960 polyurethane coating.
- Base Coat: Two-component FC7500/FC7960 series polyurethane mixed 9 parts FC7500 resin with 1 part FC7960 hardener.
- Wear Coat: 70714/70715-09 two-component, 100% solids epoxy mixed 2 parts 70714 resin with 1 part 70715-09 hardener or FC7510/FC7961 two-component polyurethane mixed 3 parts FC7510 resin to 1 part FC7961 hardener.
- Aggregate: 84059 #3 or #4 flint.
- Topcoat for Non UV Exposure: 70714-02/70715-09 two-component, 100% solids pigmented epoxy mixed 2 parts 70714 resin to 1 part 70715-09 hardener or FC7510/FC7961 two-component polyurethane mixed 3 parts FC7510 resin to 1 part FC7961 hardener.
- Topcoat for UV Exposure: FC7520/FC7962 mixed 85 parts FC7520 resin to 15 parts FC7962 hardener or FC7540/FC7964 two-component polyurethane mixed 2 parts FC7540 resin to 1 part FC7964 hardener.

2. Average Dry Film Thickness

- 55 dry mils (excluding aggregate)

System Application

3. Application Instructions

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a minimum rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply a base coat of FC7500/FC7960 polyurethane at 1-1/4 gallons per 100 square feet (80 sf/gal) in one coat and allow to cure. The base coat must be applied within 24 hours of priming, otherwise reprime as noted above.
 - **Note: Steep slopes may require thinner, multiple passes of coating to achieve necessary thickness.**
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of 70714/70715-09 100% solids epoxy or FC7510/FC79 two-component polyurethane at 3/4 gallon per 100 square feet (133 sf/gal) in one coat and immediately broadcast 84059 #3 or #4 flint into wet coating to point of rejection (30-40 lbs per 100 square feet), and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.
- After removing loose flint, apply final topcoat of 70714-02/70715-09 pigmented epoxy or FC7510/FC7961 two-component polyurethane (non UV exposure) or FC7540/FC7964 two-component polyurethane (for UV exposure) at 1-1/2 gallons per 100 square feet (66 sf/gal).

Peda-Gard

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7760/7761 mixed 1 part 7760 to 1 part 7761, 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 series mixed 2 parts 70714 to 1 part 70715 series by volume.
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Sealant: 70991 or approved equal.
- Liquid Flashing: 70410 or 7400 series polyurethane coating.
- Aggregate: 7992 16/30 mesh silica quartz sand.
- Base Coat: Single-component, moisture-cured 70410 or 7400 series polyurethane.
- Wear Coat: Single-component, moisture-cured 7400 series polyurethane.
- Topcoat: Single-component, moisture-cured 7400 series polyurethane.
 - **Accelerators 7923, 7931 and fast-set additive 7925 may be blended with 70410 and 7400 series polyurethane to enhance curing. Contact NEOGARD for specific instructions regarding use and handling of accelerators and fast-set additive.**

2. Average Dry Film Thickness

- 32 dry mils (excluding aggregate)

3. Application Instructions

Seed and Lock Method

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.

System Application

- Apply base coat of 70410 or 7400 series polyurethane in one coat at 1-1/2 gallons per 100 sf (66 sf/gal). The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of 7400 series polyurethane at 1/2 gallon per 100 square feet (200 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 10 pounds per 100 square feet and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.
- After removing loose aggregate, apply final topcoat of 7400 series polyurethane at 2/3 gallon per 100 square feet (150 sf/gal) and allow to cure.

Seed and Backroll Method

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See the **Surface Preparation** section of the **Surface Applied Waterproofing Systems** application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of 70410 or 7400 series polyurethane in one coat at 1-2/3 gallon per 100 square feet (60 sf/gal). The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- When previous coating application is dry, recoat surface with 7400 series polyurethane at 1 gallon per 100 square feet (100 sf/gal) and immediately broadcast 7992 aggregate at a rate of approximately 10 to 15 pounds per 100 square feet and backroll to encapsulate aggregate.

Odor Free Peda-Gard

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 mixed 2 parts 70714 to 1 part 70715 series by volume.
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Sealant: 70991 or approved equal.
- Liquid Flashing: 7400-02 series polyurethane coating.
- Aggregate: 7992 16/30 mesh silica quartz sand.
- Base Coat: Single-component, moisture-cured 7400-02 series polyurethane.
- Wear Coat: Single-component, moisture-cured 7400-02 series polyurethane.
- Topcoat: Single-component, moisture-cured 7400-02 series polyurethane.
 - **Accelerators 7923 and 7931 may be blended with 7400-02 series to enhance curing. Contact NEOGARD for specific instructions regarding use and handling of accelerators.**
 - **Fast-set additive 7925 MUST NOT be used with 7400-02 series polyurethane.**

2. Average Dry Film Thickness

- 32 dry mils (excluding aggregate)

3. Application Instructions

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**

System Application

- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 sf (300 sf/gal) and allow to cure.
- Apply first base coat of 7400-02 series polyurethane at 3/4 gallon per 100 square feet (133 sf/gal) and allow to cure. The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- Apply second base coat of 7400-02 series polyurethane at 3/4 gallon per 100 square feet (133 sf/gal) and allow to cure.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of 7400-02 series polyurethane at 1/2 gallon per 100 square feet (200 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 10 pounds per 100 square feet and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.
- After removing loose aggregate, apply final topcoat of 7400-02 series polyurethane at 2/3 gallon per 100 square feet (150 sf/gal) and allow to cure.

Peda-Gard FC

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7760/7761 mixed 1 part 7760 to 1 part 7761, 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 series mixed 2 parts 70714 to 1 part 70715 series by volume.
 - **Note: If system is required to be solvent-free, primer 7760/7761 must not be used.**
- Flashing Tape : 86218 or approved equal having a minimum thickness of 30 mils.
- Liquid Flashing: FC7500/FC7960 two-component polyurethane coating mixed 9 parts FC7500 resin to one part FC7960 hardener.
- Sealant: 70991 or approved equal.
- Aggregate: 7992 16/30 mesh silica quartz sand.
- Base Coat: FC7500/FC7960 two-component polyurethane coating mixed 9 parts FC7500 resin to one part FC7960 hardener.
- Wear Coat: FC7510/FC7961 two-component polyurethane mixed 3 parts FC7510 resin to one part FC7961 hardener.
 - **Note: For decks exposed to UV, FC7520/FC7962 or FC7540/FC7964 must be used as the topcoat.**
- Topcoat for Non UV Exposure: FC7510/FC7961 two-component polyurethane mixed 3 parts FC7510 resin to one part FC7961 hardener.
- Topcoat for UV Exposure: FC7520/FC7962 two-component polyurethane coating mixed 85 parts FC7520 resin to 15 parts FC7962 hardener or FC7540/FC7964 mixed 2 parts FC7540 resin to 1 part FC7964 hardener.

2. Average Dry Film Thickness

- 34 dry mils (excluding aggregate).

3. Application Instructions

Seed and Lock Method

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**

System Application

- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of FC7500/FC7960 two-component polyurethane mix at 1.13 gallons per 100 square feet (88 sf/gal) and allow to cure. The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of FC7510/FC7961 two-component polyurethane mix at 1/2 gallon per 100 square feet (200 sf/gal). While the wearing surface coat is still wet, broadcast 7992 aggregate at the rate of 10 pounds per 100 square feet into the system and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.
- After removing loose aggregate, apply final topcoat of FC7510/FC7961 (for non UV exposure) or use FC7520/FC7962 or FC7540/FC7964 (for UV exposure) two-component polyurethane mix at 3/4 gallon per 100 sf (133 sf/gal).

Seed and Backroll Method

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gal per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of FC7500/FC7960 two-component polyurethane mix at 1-1/4 gallons per 100 square feet (80 sf/gal) and allow to cure. The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Topcoat: When previous coating application is dry, recoat surface with FC7510/FC7961 (for non UV exposure) or use FC7520/FC7962 or FC7540/FC7964 series (for UV exposure) polyurethane mix at 1 gallon per 100 square feet (100 sf/gal) and immediately broadcast aggregate at a rate of approximately 10 to 15 pounds per 100 square feet and backroll to encapsulate aggregate.

Peda-Gard Aliphatic

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7760/7761 mixed 1 part 7760 to 1 part 7761, 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 series mixed 2 parts 70714 to 1 part 70715 series by volume.
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Sealant: 70991 or approved equal.
- Liquid Flashing: 70410 or 7400 series polyurethane coating.
- Aggregate: 7992 16/30 mesh silica quartz sand.
- Base Coat: Single-component, moisture-cured 70410 or 7400 series polyurethane.
- Wear Coat: Single-component, moisture-cured 7400 series polyurethane.
 - **Accelerators 7923, 7931 and fast-set additive 7925 may be blended with 70410 and 7400 series polyurethane to enhance curing. Contact NEOGARD for specific instructions regarding use and handling of accelerators and fast-set additive.**
- Topcoat: Single-component, moisture-cured 7470 series aliphatic polyurethane.

System Application

- Accelerators 7931 may be blended with 7470 series aliphatic polyurethane to enhance curing. Contact NEOGARD for specific instructions regarding use and handling of accelerators and fast-set additive.

2. Average Dry Film Thickness

- 32 dry mils (excluding aggregate)

3. Application Instructions

Seed and Lock Method

- Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.
- Surface preparation. See Surface Preparation section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of 70410 polyurethane in one coat at 1-1/2 gallons per 100 sf (66 sf/gal). The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.
- Apply wearing surface coat of 7400 series polyurethane at 1/2 gallon per 100 square feet (200 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 10 pounds per 100 square feet and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.
- After removing loose aggregate, apply final topcoat of 7470 series aliphatic polyurethane at 2/3 gallon per 100 square feet (150 sf/gal) and allow to cure.

Seed and Backroll Method

- Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.
- Surface preparation. See Surface Preparation section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of 70410 in one coat at 1-2/3 gallon per 100 square feet (60 sf/gal). The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.
- When previous coating application is dry, recoat surface with 7470 series aliphatic polyurethane at 1 gallon per 100 square feet (100 sf/gal) and immediately broadcast 7992 aggregate at a rate of approximately 10 to 15 pounds per 100 square feet and backroll to encapsulate aggregate.

Decorative Peda-Gard

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7760/7761 mixed 1 part 7760 to 1 part 7761, 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 series mixed 2 parts 70714 to 1 part 70715 series by volume.
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Sealant: 70991 or approved equal.
- Liquid Flashing: 70410 or 7400 series polyurethane coating.
- Aggregate: Blended UV resistant color quartz aggregate.

System Application

- Base Coat: Single-component, moisture-cured 70410 or 7400 series polyurethane.
- Wear Coat: 7400 series polyurethane coating
- Topcoat: 45090/99951 Acrylithane HS/2 clear polyurethane or clear 70860/70865 polyurea.
 - **Accelerators 7923, 7931 and fast-set additive 7925 may be blended with 70410 and 7400 series polyurethane to enhance curing. Contact NEOGARD for specific instructions regarding use and handling of accelerators and fast-set additive.**

2. Average Dry Film Thickness

- 36 dry mils (excluding aggregate)

3. Application Instructions

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of 70410 polyurethane in one coat at 1-2/3 gallons per 100 square feet (60 sf/gal). The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of 7400 series polyurethane at 2/3 gallon per 100 square feet (150 sf/gal) and immediately broadcast blended **UV Resistant** color quartz aggregate into wet coating until refusal at a rate of approximately 40-50 pounds per 100 square feet. Allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.
- After removing loose aggregate, apply first topcoat of Acrylithane HS/2 clear urethane or clear polyurea at 2/3 gallon per 100 square feet (150 sf/gal) and allow to cure.
- Apply final topcoat of Acrylithane HS/2 clear urethane or clear polyurea at a rate of 1/2 gallon per 100 square feet (200 sf/gal). Additional topcoat material may be required depending on texture desired. Allow 24 hours to cure before allowing foot traffic.

Peda-Gard LT

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7760/7761 mixed 1 part 7760 to 1 part 7761, 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 series mixed 2 parts 70714 to 1 part 70715 series by volume.
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Sealant: 70991 or approved equal.
- Liquid Flashing: 70410 or 7430, series polyurethane coating.
- Aggregate: 7992 16/30 mesh silica quartz sand.
- Base Coat: Single-component, moisture-cured polyurethane 70410 or 7430T series.
- Topcoat: 7430T series polyurethane coating
 - **Accelerators 7923, 7931 and fast-set additive 7925 may be blended with 70410 and 7400 series polyurethane to enhance curing. Contact NEOGARD for specific instructions regarding use and handling of accelerators and fast-set additive.**

System Application

2. Average Dry Film Thickness

- 32 dry mils (excluding aggregate)

3. Application Instructions

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to cure.
- Apply base coat of 70410 polyurethane in one coat at 1-2/3 gallons per 100 square feet (60 sf/gal) . Base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply topcoat of 7430T series polyurethane at 1 gallon per 100 square feet (100 sf/gal) and allow to cure.

Peda-Gard M

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7760/7761 mixed 1 part 7760 to 1 part 7761, 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 series mixed 2 parts 70714 to 1 part 70715 series by volume.
 - **Note: If system is required to be solvent-free, primer 7760/7761 must not be used.**
- Flashing Tape : 86218 or approved equal having a minimum thickness of 30 mils.
- Liquid Flashing: FC7500/FC7960 two-component polyurethane coating mixed 9 parts FC7500 resin to one part FC7960 hardener.
- Sealant: 70991 or approved equal.
- Aggregate: 7992U 12/20 mesh silica quartz sand.
- Base Coat: FC7500/FC7960 two-component polyurethane coating mixed 9 parts FC7500 resin to one part FC7960 hardener.
- Wear Coat: FC7510/FC7961 (for non UV exposure) two-component polyurethane mixed 3 parts FC7510 resin to one part FC7961 hardener.
 - **Note: For decks exposed to UV, FC7520/FC7962 or FC7540/FC7964 must be used as the topcoat.**
- Topcoat: FC7510/FC7961 two-component polyurethane mixed 3 parts FC7510 resin to one part FC7961 hardener or 70714-02/70715 series 100 % solids pigmented epoxy mixed 2 parts 70714 resin to 1 part 70715 series hardener.

2. Average Dry Film Thickness

- 32 dry mils (excluding aggregate).

3. Application Instructions

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 square feet (300 sf/gal) and allow to to cure.

System Application

- Apply base coat of FC7500/FC7960 two-component polyurethane mix at 1-1/3 gallons per 100 square feet (75 sf/gal) and allow to cure. The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of FC7510/FC7961 two-component polyurethane mix at 0.8 gallon per 100 square feet (125 sf/gal) or 70714-02/70715 series pigmented epoxy at 3/4 gallon per 100 square feet (133 sf/gal) and immediately broadcast 7992 aggregate, evenly distributed, at the rate of 10 to 15 pounds per 100 square feet and back roll.

Peda-Gard TS

1. Materials

- Primer: Water reducible urethane primer 7790 mixed 1 part 7790 to 1 part water by volume.
- Two-component epoxy primer: 7780/7781 mixed 4 parts 7780 to 1 part 7781, or 70714/70715 mixed 2 parts 70714 to 1 part 70715 series by volume.
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Sealant: 70991 or approved equal.
- Liquid Flashing: 7400 series polyurethane coating.
- Aggregate: 7992 16/30 mesh silica quartz sand.
- Base Coat: Single-component, moisture-cured 7400 series polyurethane.
- Wear Coat: Single-component, moisture-cured 7400 series polyurethane.
 - **Accelerators 7923 and 7931 may be blended with 7400 series to enhance curing. Contact NEOGARD for specific instructions regarding use and handling of accelerators.**

2. Average Dry Film Thickness

- 36 dry mils (excluding aggregate)

3. Application Instructions

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with water reducible or epoxy primer at a rate of 1/3 gallon per 100 sf (300 sf/gal) and allow to cure.
- Apply first base coat of 7400 series polyurethane at 1-1/4 gallons per 100 square feet (80 sf/gal) and allow to cure. The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- Apply second base coat of 7400 series polyurethane at 1-1/4 gallon per 100 square feet (80 sf/gal) and allow to cure.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply wearing surface coat of 7400 series polyurethane at 1/2 gallon per 100 square feet (200 sf/gal) and immediately broadcast 7992 aggregate into wet coating at a rate of 10 pounds per 100 square feet or until solidly textured and allow to cure. Remove loose aggregate by blowing, sweeping or vacuum.

System Application

Pool-Gard C

1. Materials

- Primer: Two-component epoxy primer 7740/7741 mixed 2 parts 7740 to 1 part 7741 by volume.
- Flashing Tape: 86218 or approved equal having a minimum thickness of 30 mils.
- Liquid Flashing: 7825/7821 two-component polyurethane coating mixed 3 parts 7825 resin to one part 7821 hardener.
- Sealant: 70991 or approved equal.
- Base Coat: 7825/7821 two-component polyurethane coating mixed 3 parts 7825 resin to one part 7821 hardener.
- Topcoat: 7825/7821 two-component polyurethane coating mixed 3 parts 7825 resin to one part 7821 hardener.
- Exterior Finish Primer: 33014/99951 Ureprime HS4.
- Exterior Finish Topcoat: ACRYLITHANE™ series urethane enamel.

2. Average Dry Film Thickness

- 48 dry mils

3. Application Instructions

- **Caution: The following instructions are for horizontal surfaces. Vertical or inclined surfaces may require additional coats to build film to design thickness.**
- Surface preparation. See **Surface Preparation** section in the application manual.
- Prime concrete with 7740/7741 epoxy primer mix at a rate of 1/2 gallon per 100 square feet (200 sf/gal) and allow to cure.
- Apply first coat of 7825/7821 two-component polyurethane mix at 1.5 gallons per 100 square feet (66sf/gal) and allow to cure. The base coat must be applied within 24 hours of priming, otherwise reprime as outlined above.
- **Caution: Rough concrete surfaces may increase the number of base coats and material required to achieve uniform coverage.**
- Apply second coat of 7825/7821 two-component polyurethane mix at 1.5 gallons per 100 square feet (66sf/gal) and allow to cure.
- **Note: Exterior applications exposed to UV must be topcoated with Ureprime HS4 series primer and exterior finish coat.**
- Exterior Finish Primer: Apply thoroughly mixed 33014/99951 Ureprime HS4 at a rate of 1/3 gallon per 100 square feet (300 sf/gal) over the final coat of 7825/7821 when cured.
- Exterior Finish Coats: Apply two coats of ACRYLITHANE™ series urethane enamel at the rate of 1/2 gallon per 100 feet (200 sf/gal) per coat. **Note: If more than 24 hours lapse between topcoat applications, the first topcoat must be sanded prior to second topcoat application. Repeat this step for additional coats.**
 - **Caution: Allow entire Pool-Gard C coating system to cure for a minimum of 10 days prior to filling pool.**



Safety & Storage

The following covers safety and storage of NEOGARD coating materials. **Failure to follow these instructions can result in bodily injury or property damage.** MSDS must be on jobsite at all times. Two basic types of coatings for surface applied waterproofing systems are produced by NEOGARD. They are solvent solution and solvent free coatings. Each type has specific hazard potentials and storage requirements. Solvent solution coatings have hazards associated with fire, solvent toxicity, and chemical toxicity. Solvent free coatings have low fire risk but may require special care because of chemical toxicity. Water borne coatings have negligible risk of fire and moderate to very low chemical toxicity. Both the employer and workman must know precautions necessary to protect against fire, explosive combustion and toxicity. Refer to individual product labels, product data sheets and application specifications which describe specific hazards content, proper use, and storage recommendations.

An important safety precaution against fire, explosion and chemical toxicity is to provide ventilation at all times. Most coating applications are in open exterior areas where natural ventilation minimizes hazards.

When natural air movement is insufficient as in a confined area, forced air ventilation is required. Confined areas are best ventilated by equipment which exhausts the air from near floor level, since solvent vapors are heavier than air and tend to collect in low areas. A competent, properly equipped man must be stationed outside confined areas while work is in progress to assist in case of emergency.

Fire & Expulsion Prevention

Flash points are listed for each NEOGARD product containing solvent on the appropriate product data sheet. The workman and foreman must know the flash point for the material being applied. The flash point is the lowest temperature at which a coating gives off sufficient solvent vapor to form an ignitable mixture with air. This mixture of solvent vapor and air can then be ignited by an outside source such as sparks, flame, lit cigarettes, etc.

Open flame, welding, smoking or other ignition sources shall not be allowed in a building, overhead, or near a building where coating is being or has been recently applied. Open flame, welding, smoking, etc. shall be restricted downwind of a coating operation. No smoking, welding or open flame shall be allowed near outlets where solvent vapor laden air is being discharged.

All electrical equipment and outlets must be grounded. This includes switches, connectors, lights and motors. Lights must have a protective enclosure to prevent physical damage. Whenever solvent vapors are present, all electrical equipment must be explosion proof. It is the responsibility of the workmen and their foreman to verify who is to check these precautions. An applicator employee **must** be appointed this duty.

Any equipment, such spray guns and compressed air nozzles, which can produce a static charge must be grounded.

Work clothes must be of a material such as cotton which does not generate static charges. Beware of synthetic materials. Shoes shall not have metal sole plates since these cause sparking.

Safety & Storage

All hand tools used in solvent vapor areas must be of non-sparking construction. When con-complying tools must be used, remove equipment to an area free of solvent vapor or exhaust solvent laden air thoroughly before beginning work.

Have fire extinguishers as prescribed by OSHA within easy access of work areas where solvent coatings are being applied. Dry chemical and CO₂ (carbon dioxide) extinguishers are effective in controlling small solvent fires.

Ventilation shall be provided to coated areas not only during application but also for sufficient time after to assure complete evaporation of solvents.

Toxicity & Health Considerations

Inhalation of solvent vapors in high concentration . . . above 200 parts per million . . . can induce narcosis, a physiological effect similar to intoxication by alcohol. Continued exposure to high concentration can cause loss of consciousness and ultimately even death. The maximum allowable concentration of NEOGARD type solvent vapors on a weighted eight hour working day is limited to 100 parts per million as published by the Occupational Safety & Health Administration (OSHA). This is a concentration at which nearly all workers can be repeatedly exposed without adverse effects.

Small, portable air sampling equipment is available to measure the content of some solvents in the air. Workmen and foremen must be certain that measurements of this type are being made when men are working in an enclosed area.

Approved chemical cartridge vapor masks (respirator masks) may be used to protect against low concentrations of solvent vapor (below 200 PPM). At higher vapor concentrations, this type of mask will not provide adequate protection. Cartridges must be replaced on a regular basis to remain effective.

- Proper selection of respirators shall be made according to the guidance of American National Standard Practices for Respiratory Protection Z88.2-1992.

An approved fresh air supplied respirator with approved source of respirable air must be used for protection when solvent vapor concentrations are high (above 200 PPM). The use of fresh air supplied respirator does not reduce the necessity for good ventilation to lessen fire hazards and insure proper drying of coatings.

- Air quality . . . Compressed air, compressed oxygen, liquid air, and liquid oxygen used for respiration shall be of high purity. Oxygen shall meet the requirements of the United States Pharmacopoeia for medical or breathing oxygen. Breathing air shall meet at least the requirements of the specification for Grade D breathing air as described in Compressed Gas Association Commodity Specification G-7.1-1966. Compressed oxygen shall not be used in supplied-air respirators or in open circuit self-contained breathing apparatus that have previously used compressed air. Oxygen must never be used with air line respirators.
- Breathing air may be supplied to respirators from cylinders or air compressors.
- **Cylinders** shall be tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR part 178). **Compressors** for supplying air

shall be equipped with necessary safety and standby devices. A breathing air-type compressor shall be used. Compressors shall be constructed and situated so as to avoid entry of contaminated air into the system and suitable in-line air purifying sorbent beds and filters installed for further assure breathing air quality. A receiver of sufficient capacity to enable the respirator wearer to escape from a contaminated atmosphere in event of compressor failure, and alarms to indicate compressor failure and overheating shall be installed in the system. If an oil-lubricated compressor is used, it shall have a high-temperature or carbon monoxide alarm, or both. If only a high-temperature alarm is used the air from the compressor shall be frequently tested for carbon monoxide to insure that it meets the specifications noted in air quality above. Air line couplings shall be incompatible with outlets for other gas systems to prevent inadvertent servicing of air line respirators with nonrespirable gases or oxygen.

Any time a workman begins to feel discomfort or irritation to the eyes, nose or throat the concentration of solvent vapor is too high for steady exposure. If a person feels light headed, giddy, dizzy or exhilarated the solvent vapor concentration is also too high and must be reduced by better ventilation. Any persons so affected must go to an area of fresh air.

The effectiveness of ventilation depends on the physical barriers which restrict air flow. Open exterior areas on decks ventilate normally by natural air movement. Confined areas in rooms, some pit or ponded areas, as well as decks surrounded by walls or high parapets require forced air ventilation.

Most people do not find solvent vapors irritating to the skin, even in high concentrations. Contact with liquid solvent has a drying effect on the skin; however, most individuals find no lasting effects. Special hand creams can be used to protect persons who handle NEOGARD solvents or coatings frequently. Protect the sensitive areas of the face, armpits and groin from contact with solvent. These areas can suffer an astringent burn and should be washed with soap and water immediately if exposed to liquid solvents.

Some individuals have a very low resistance to irritants. Should a person develop respiratory problems or skin rash, have him or her consult a physician. Particularly sensitive individuals may have to be assigned to work free exposure to solvents or, in some cases, certain chemicals.

Should solvent or solvented coatings be splashed in the eye, flush immediately with water; then consult a physician.

Other Health Considerations

Footwear must be safety shoes with steel toe protection. 55 gallon drums of coating are very heavy and can cause considerable damage if set on an unprotected foot. The sole should be of a soft, resilient material to give best traction without damaging coated areas.

Use extreme caution when working on sloped areas. Use lifelines. Wet coatings are very slippery.

When working in bright sun with light color coating, wear dark glasses to prevent glare blindness.

Property Precautions

Consider possible damage to property. Overspray can ruin finishes on autos and other surfaces (brick, paint, plastic, etc.). Solvent vapors in confined areas can damage plants and pets . . including tropical

Safety & Storage

fish and birds. Foods . . even those stored in freezers . . can pick up a solvent taste and should be protected from vapors.

Storage

All material should be stored in a cool shaded place, preferably at a temperature less than 75° F. Higher storage temperature for extended periods can cause thickening and even gelation of elastomeric coatings.

Whenever work is stopped for the day, all coatings and thinner should be stored in tightly sealed factory containers to prevent evaporation and fire hazard. Materials left on unsupervised job sites may attract the curious or the malicious. Protect your materials properly and avoid potential harm to others.

Do not keep open containers in confined places.

Protect emulsion coatings (water borne) from freezing.

Volatile Organic Compounds (VOCs) & Health

Worker Safety & Public Health

- VOCs as solvents in paint coatings are regulated by EPA because of their public health hazard in industrial metropolitan areas. VOCs are one class of chemicals which when released into the air will begin chemical reactions in the atmosphere that result in smog, which is a health hazard to people, especially the young, old, and those with respiratory problems. Some solvents are legally not VOC, but still hazardous.
- VOCs as solvents in paint coatings are regulated by OSHA because of the occupational exposure hazards to workers in the industries of construction, shipbuilding, and general trades.
- Besides VOCs, there are often other hazardous ingredients in paint coatings that may be regulated by OSHA. These ingredients include heavy metals in paint pigments, isocyanates in urethane paint binders, and several other chemical ingredients.

Zero VOC versus VOC COMPLIANT

- Under the EPA's Clean Air Act regulations, use of low-VOC paint coatings — typically where VOCs are less than 2.1 pounds per gallon (lbs/gal) of paint — are one of the best ways to reduce hazardous air pollutants (actual VOC restrictions vary by area and coating type). Alternative coatings are now available that are essentially "Zero VOCs." These include waterborne coatings (80% water) and powder coatings (100% solids). These alternative coatings eliminate the VOC problem and are "EPA-friendly," but they have their own disadvantages in application limitations, unproven performance, and they can still contain chemical ingredients that may be hazardous to workers and regulated by OSHA.

VOCs and ODORS

- Most, if not all, VOCs have some odor, and some are "better smelling" than others. Some VOC exempt solvents have odor. Certain binders and pigments in some paints can also have odors. However, the amount or type of odor is not the best measure of the health hazard or toxicity from breathing a certain chemical or compound. Odors are subjective to different people, and some chemicals can saturate the nose, thereby reducing the apparent smell.
- Comparing odors and toxicity is like comparing apples and oranges. The best way to measure the toxicity of a chemical is by laboratory testing, usually with animal exposures. The best way to measure a person's exposure to a chemical is using air sampling and laboratory analysis. When this air sampling is for a worker in an occupational setting, this becomes part of the OSHA-recognized practice of industrial hygiene.

- Odor cannot be ignored, as it is often the most difficult issue that a building owner or employer using chemicals has to deal with, regardless of whether they are toxic. In some cases, a so-called “VOC-free” paint coating can be more odorous than a “low-odor” coating that contains small amounts of VOCs. The mere perception of irritating odors is enough to warrant an owner to consider sacrifices in cost and product performance just to buy some “peace of mind” and reduce the risk of complaints or lawsuits from the building occupants and neighbors. On the other hand, some product specifiers may insist on “VOC - free” coatings, whereas the “low-odor” coating with small amounts of VOCs would perform better as a coating and may even have a less irritating odor than the “VOC-free” coating.

When and What Air Testing Is Needed For Coating Applications?

- Air testing is driven by the owner’s concerns and the employer’s responsibilities. Relatively few chemicals and substances are used in paint coatings for which OSHA requires the employer to collect air samples during the paint application. Examples of where OSHA sampling is required are if the coating contained the heavy metals of lead or chromium.
- If conditions of the application are extreme — such as a confined area with no ventilation - it’s best to take extra measures to reduce exposures (e.g., safer paints, added ventilation, and respirators for workers). Air sampling can verify the adequacy of these control measures. The owner often requires air sampling to address concerns that nearby occupied areas are not being contaminated by the coating application. VOCs are often the target of air sampling, but some other constituents of coatings are hazardous and should have their exposures evaluated.
- An industrial hygienist typically makes a judgement on what and when to air sample considering all of the above factors and issues. The hygienist first identifies the paint coating ingredients as listed on the manufacturer’s Material Safety Data Sheet (MSDS). This document lists hazardous ingredients, known hazards and health effects, and known exposure limits, as established by OSHA or recommended by a professional body, such as the American Conference of Government Industrial Hygienists (ACGIH).

The above information is based on standard industrial practices and is meant to outline the hazards, but is not necessarily all inclusive. Local conditions on specific jobs may indicate other precautions. Common sense and care in evaluating the possibility of hazards is essential.

Nothing contained herein should supersede local laws, codes, ordinances or regulations, or the instructions of other manufacturers for the use of their products.

The standards and regulations published by the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor, where applicable, should be consulted for further detail and compliance.



Miscellaneous

Thinning & Cleaning Solvents

General Practices

- Use only commercial grade solvents with NEOGARD products.
- Be sure there is no moisture contamination in solvents, as it can produce adverse reactions.
- Never thin any product more than 15% by volume. Excessive thinning may affect physical properties of coating.
- Never use solvents that contain alcohol in NEOGARD polyurethane products. Alcohol prohibits polyurethane from curing.
- Thin and clean only with recommended products. Consult NEOGARD for questions regarding solvents.

Recommended Solvents

Product Number	Material Thinning	Equipment Cleaning
942/188	Not Recommended	Alcohol
33014/99951 Ureprime HS4	21092	MEK
33902/99931	21092	21092
7790	Acetone	MEK
7740/7741	Not Recommended	Xylene
7760/7761	Xylene	Xylene
7780/7781	Not Recommended	Water
70714/70715	Not Recommended	Xylene
70718/70719	Xylene	Xylene
70410	Xylene	Xylene
7400 Series	Xylene	Xylene
7400-02 Series	Odorless Reducer 7055	Xylene
7825/7821	Xylene	Xylene
FC7500/FC7960	Odorless Reducer 7055	Xylene
FC7510/FC7961	Odorless Reducer 7055	Xylene
FC7520/FC7962	Odorless Reducer 7055	Xylene
FC7530/FC7963	Odorless Reducer 7055	Xylene
FC7540/FC7964	Odorless Reducer 7055	Xylene
ACRYLITHANE™ HS2	21092	MEK

Cold Weather Impact

Polyurethane Coating Materials

NEOGARD's single component and batch mixed plural component polyurethanes are designed to be applied through an ambient temperature range of 70° to 90°F to provide ideal handling and application characteristics. **Note: Deck temperatures can effect the cure of the polyurethane materials as much as or more than ambient temperatures can. Application of heated material to a cold substrate will not decrease the curing time. Consult NEOGARD for recommendations.**

As material component temperatures become colder and start to drop below 60°F, they increase in material viscosity. An increase in material viscosity, increases the materials resistance to flow and can result in the following:

- Single component systems that utilize accelerators become difficult to mix. If the accelerator is not thoroughly mixed with the polyurethane, the cure of the material can be slowed down.
- Plural component systems also become more difficult to mix together. If a thorough mix is not obtained, the off-ratio mixture can cause improper curing.
- Polyurethanes become more difficult to spray. They produce erratic spray pressures, poor atomization, fingering at the spray tip or a complete loss of the spray pattern. Some applicators are tempted to add solvent to the polyurethane material so that it can be sprayed. Unfortunately, adding solvent may slow down the cure time and change the thixotropy and resulting dry film thickness. All of this can lead to material puddles, uneven coating coverage and an added expense to the job cost in the form of downtime.
- Accelerators and catalysts are packaged to provide good potlife and reasonable cure of materials at 70° to 90°F. As material temperatures become colder and start to drop below 60°F, the potlife of the material is increased but the speed of the cure may be severely reduced. If the material is applied at 60°F (material temperature) and the air temperature drops to 40°F or below, the cure is slowed down; particularly if windy conditions exist. The cure is further retarded due to slow solvent evaporation at cold temperatures. Materials that normally cure at a rate of 8 - 12 hours can be extended to 14 - 24 hours or more.

Don't risk these problems. Keep enough material at 70° to 80°F for about 2 days production. This will minimize the storage space required to keep the material warm. Refer to NEOGARD's Accelerator Curing Charts when these conditions exist. When possible, apply the coatings earlier in the day, making sure the substrate is dry, and quit early enough to allow several hours of cure from the sun. Remember, if the application area is enclosed with no exchange of air over the membrane, the relative humidity (moisture) may be severely reduced, resulting in a slow curing time.

Things You Ought To Know

- Non-breathable coating systems should not be applied over exterior concrete decks that have been constructed over unvented steel pans or that have a membrane system under them unless specifically approved in writing by NEOGARD.
- Deck temperature should always be 60° F. or above whenever 100% solids epoxy is being applied and at least 40° F. when polyurethane coatings are being applied.
- All material quantities given in the **Application Manual** assume perfectly flat surfaces. As the profile

Miscellaneous

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, when spraying a deck, should be taken into consideration when estimating.

- Any thinning of material reduces coverage and subsequent dry film thickness. If thinning is required, increase material gallonage accordingly. Do not thin materials more than 15%.
- Never coat wet or moist surfaces. When in doubt, consult a moisture meter or moisture sensitive paper.
- Solvent based products are incompatible with asphaltic compounds.
- Do not mix combinations of NEOGARD materials without consulting an authorized representative.
- It is much easier to keep coating off an adjacent surface during application than to remove it after cure.
- Flush equipment lines thoroughly every night to prevent material from clogging hoses.
- In systems requiring the use of primers, coating materials must be applied the same day as priming, otherwise reprime.
- When repriming, never allow primer to overlap on existing or previous applied polyurethane coating or separation and/or blisters can occur.
- When placing two-component (2K) coating materials, do not turn empty pails upside down or scrape sides to capture remaining coating. This material is not fully mixed and will result in uncured spots in the coating.
- When using 7986 Odor Mask in NEOGARD products, use odor mask at a rate of 3 oz. per 5 gallons or 1 quart per 55 gallons of product.

Coverage Rates Theoretical vs Actual

Theoretical coverages are those calculated for glass-smooth surfaces with no allowances made for loss. Manufacturers publish theoretical coverages instead of actual coverages because they cannot anticipate job or surface conditions. Therefore, published coverage rates should only be used as a guide for estimating material requirements for a given job.

Actual coverage will be less than theoretical coverage. When coatings are applied over concrete, many factors, such as the surface texture, overspray loss, container residue, equipment characteristics, applicator technique, etc. will directly affect the amount of coating material required to meet the designed in-place dry film thickness (DFT). Therefore, it is very important that additional material be added to the theoretical quantities to ensure that the proper coating thickness is applied. Items to consider are:

- Shotblasted Concrete - Even though the surface texture appears to be fairly smooth, this surface can require 5% to 15% additional material to the theoretical amount.

- Wind Loss - In spray applications, up to 30% of the coating may be lost due to wind. Consider using wind screens and add wind loss to your coating calculations.
- Miscellaneous Loss - A miscellaneous factor must be added to the theoretical coverage rate to cover losses due to material left in containers, equipment problems, etc. Use a percentage factor of between 3% to 10%, depending on the contractor's experience and efficiency.

Calculating Theoretical Coverage

Any liquid, when applied at a thickness of one mil (1/1000 inch) will cover 1604 square feet per gallon. Another way to state this is that one gallon of any liquid, applied over a 100 square foot surface, will be 16 mils thick when wet. To determine dry mils (or how much is left when the solvents are gone), multiply 16 (wet mils) times the solids content (by volume) of the particular liquid. Solids by weight are meaningless in this formula.

Example

50% solids by volume = 16 (wet mils) x .5 (50% solids by volume) = 8 dry mils.

To determine how much total material is required to cover 100 square feet, divide the total system thickness (expressed in mils) by the number of dry mils per gallon.

Example

System = 32 dry mils total
Material (50% solids by volume) = 8 dry mils per gallon
32 divided by 8 = 4 gallons per 100 square feet
% Solids by Volume X 1604 ÷ Desired Dry Mils = Coverage Rate

Calculating Actual Coverage

To determine total material requirements for a job, add estimated losses due to field conditions to theoretical coverages. Depending on jobsite conditions, up to 50% additional material may be required to meet the designed in-place dry film thickness (DFT).



Recoat Guidelines

Inspection of Existing Coating System, Exposed Concrete & Metal Substrates

1. Inspect existing coating system and remove all existing surface applied membrane material that is loose or marginally bonded.
2. Check exposed concrete surfaces for soundness. Concrete spalls can be detected by tapping with a hammer and listening for a hollow sound. All spalled portions must be removed before further preparation. Removal can be completed with chipping hammers or other suitable tools.
3. Where concrete was removed, follow ICRI guidelines for preparation and installation of repair materials.
4. For smaller repairs such as divots, popouts, etc., NEOGARD 70714/70715-09 series 100% solids epoxy mortar has many advantages.

NEOGARD 70714/70715-09 series 100% solids epoxy is mixed with selected sand to form the mortar. In using this mortar, it is important to match the characteristics of the concrete being repaired. If a sand-to-binder ratio of approximately 4 to 1 or as much as 5 to 1 by volume is maintained, the thermal coefficient of expansion of the mix will closely approximate that of concrete. This prevents failure of the bond caused by freeze-thaw cycles or wide fluctuations in temperature. Repairs made with epoxy mortar should be no deeper than 1/2"-3/4". Large scale repairs to be made with conventional cement based repairs materials per ICRI guidelines.

Protrusions, such as fins or mortar spatter are easily removed by grinding or impact.

5. After the new concrete or NEOGARD 70714/70715-09 series 100% epoxy patching material has been placed and properly cured, solvent clean existing membrane perimeter adjacent to patch a minimum distance of one inch.

When patching concrete, new concrete patches must be prepared by shotblasting or a cup grinder prior to application of primer.

Verify dryness of new concrete patches for a dry surface in accordance with ASTM D4263-83 "Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method".

6. All exposed metals to be coated should be mechanically prepared to a clean, white metal finish and primed with Ureprime HS4 at a rate of 300 - 400 square feet per gallon.

Cleaning of Existing Coating System

1. Clean existing deck coating by power washing, (600 to 800 psi), with 8500 Biodegradable Cleaner or other similar detergent. The use of stiff bristle street brooms may be required to help remove

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some contaminants. Rinse deck thoroughly with clean water and allow to dry completely. All low spots where water puddles must be vacuumed dry to remove any contaminants left by the rinsing operation.

2. Visually inspect deck for oil or grease deposits and remove by chemical cleaning with detergents, caustic sodas solutions, or trisodium phosphate. A vigorous scrubbing action should be carried out during the washing procedure. It is important to thoroughly flush the water to remove all traces of the loosened oil as well as the cleaning solution itself. If any residue remains, it will interfere with the bond of the new membrane.

Repairing Cracks & Installing Base Coat on Exposed Concrete Surfaces

1. Inspect all surfaces for cracks and cold joints. Cold joints and visible hairline cracks (up to 1/16" in width) in existing membrane or new patching material shall be cleaned, primed (on concrete or patching material) and treated with 30 dry mils of polyurethane deck coating material. Large cracks (over 1/16" in width) shall be routed and sealed with polyurethane sealant or FC7500/FC7960 as recommended by NEOGARD. Sealant shall be applied to inside area of crack only, not applied to deck surface. Detail sealed cracks with 30 dry mils of polyurethane deck coating material.
2. Apply NEOGARD primer to bare concrete or cementitious patching material only. Apply NEOGARD base coat to yield 20 dry mils. Solvent-based coating to be applied at a rate of 60 sf/gal. FC7500/FC7960 base coat to be applied at 80 sf/gal. Allow to cure.

Adhesion Testing

1. Often, it is important to conduct field adhesion tests to confirm the proper procedure for recoating an existing coating system.
2. If compatibility between two systems is ever a question, NEOGARD recommends performing one of the following adhesion tests. It is more useful to conduct adhesion testing in the field than in the lab as it represents the actual job conditions.
 - ASTM D4541: This test requires the use of an elcometer and provides a "pull off" value.
 - Instructions for this test are provided by the testing equipment manufacturer and follow the guidelines set by ASTM D4541.
 - ASTM D903: Standard Test Method for Peel or Stripping of Adhesive Bonds. This test is also known as the "Adhesion in Peel" test and results in a quantitative value stated in lbs.
 - The surface is prepared as required. The primer is applied and allowed to cure. The coating is applied and a fiberglass cloth or similar fabric is worked into the coating. The fabric is not to be placed "under" the coating. Allow a strip of the fabric, a minimum of 6" in length, to remain free of the coating. When coating has cured, generally after 7 - 10 days, a spring scale is attached to the fabric and pulled 180° in the same plane as the fabric.
 - Rag Test: This test gives an indication of bond with no value. It is typically the recommended procedure for field adhesion tests.
 - The surface is prepared as required. The primer is applied and allowed to cure. The coating is applied and a fiberglass cloth or similar fabric is worked into the coating. The

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fabric is not to be placed “under” the coating. Allow a strip of the fabric, a minimum of 6” in length, to remain free of the coating. When coating has cured, generally after 7 - 10 days, pull the free strip of fabric back towards the test area for indication of bond strength.

Recoat Existing NEOGARD Solvent-Based System with Solvent-Based System

1. Clean and prepare surfaces per the guidelines in Sections 1 - 3 of this document.
2. Apply one coat of 7400 series polyurethane coating material at a rate of 100 square feet per gallon to yield an average of 12 dry mils and immediately broadcast properly graded, evenly distributed, hard (6.5+ on Moh's scale) aggregate at the rate of 15 pounds per 100 square feet.
3. For heavy duty areas such as ramps, ticket spitters and turn areas, apply double texturing as follows: Repeat step 2 above before applying final topcoat.
4. Apply final topcoat of 7400 series polyurethane coating material at a rate of 100 square feet per gallon to yield an average of 12 dry mils. Allow to cure 48 - 72 hours before opening to vehicular traffic.

Recoat Existing NEOGARD FC & other Two-Component (2K) Systems with Solvent-Based System

1. Clean and prepare surfaces per the guidelines in Sections 1 - 3 of this document.
2. If required, apply NEOGARD 7795/7796 primer to existing coating at a rate of approximately 500 sf/gal, taking care to keep primer thin or alternately use 70714/70715-09 100% solids epoxy at a rate of approximately 275 sf/gal. Allow primer to dry. Drying time is approximately 2 - 12 hours depending on temperatures.
3. Apply one coat of 7400 series polyurethane coating material at a rate of 100 square feet per gallon to yield an average of 12 dry mils and immediately broadcast properly graded, evenly distributed, hard (6.5+ on Moh's scale) aggregate at the rate of 15 pounds per 100 square feet.
4. For heavy duty areas such as ramps, ticket spitters and turn areas, apply double texturing as follows: Repeat step 2 above before applying final topcoat.
5. Apply final topcoat of 7400 series polyurethane coating material at a rate of 100 square feet per gallon to yield an average of 12 dry mils. Allow to cure 48 - 72 hours before opening to vehicular traffic.

Recoat Existing NEOGARD Solvent-Based System with NEOGARD FC System

1. Clean and prepare surfaces per the guidelines in Sections 1 - 3 of this document.
2. If required, apply NEOGARD 7795/7796 primer to existing coating at a rate of approximately 500 sf/gal, taking care to keep primer thin or alternately use 70714/70715-09 100% solids epoxy at a rate of approximately 275 sf/gal. Allow primer to dry. Drying time is approximately 2 - 12 hours depending on temperatures.
3. Apply NEOGARD FC topcoat at a rate of 133 sf/gal to yield 12 dry mils and broadcast aggregate at a rate of 10 - 15 lbs per 100 sf.

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4. For heavy duty areas such as ramps, ticket spitters and turn areas, apply double texturing as follows: Repeat step 3 above before applying final topcoat.
5. Apply final topcoat of NEOGARD FC coating at a rate of 133 sf/gal to yield 12 dry mils. Allow to cure 24 - 36 hours before opening to vehicular traffic.

Recoat Existing NEOGARD FC System with NEOGARD FC System

1. Clean and prepare surfaces per the guidelines in Sections 1 - 3 of this document.
2. If required, apply NEOGARD 7795/7796 primer to existing coating at a rate of approximately 500 sf/gal, taking care to keep primer thin or alternately use 70714/70715-09 100% solids epoxy at a rate of approximately 275 sf/gal. Allow primer to dry. Drying time is approximately 2 - 12 hours depending on temperatures.
3. Apply NEOGARD FC topcoat at a rate of 133 sf/gal to yield 12 dry mils and broadcast aggregate at a rate of 10 - 15 lbs per 100 sf.
4. For heavy duty areas such as ramps, ticket spitters and turn areas, apply double texturing as follows. Repeat step 3 above before applying final topcoat.
5. Apply final topcoat of NEOGARD FC coating at a rate of 133 sf/gal to yield 12 dry mils. Allow to cure 24 - 36 hours before opening to vehicular traffic.

Recoat Existing Non-NEOGARD System with NEOGARD FC System

1. Clean and prepare surfaces per the guidelines in Sections 1 - 3 of this document.
2. If required, apply NEOGARD 7795/7796 primer to existing coating at a rate of approximately 500 sf/gal, taking care to keep primer thin or alternately use 70714/70715-09 100% solids epoxy at a rate of approximately 275 sf/gal. Allow to dry. Drying time is approximately 2 - 12 hours depending on temperature.
3. Apply NEOGARD FC7500/FC7960 base coat material at a rate of 80 sf/gal to yield 20 dry mils. (Please contact your NEOGARD Regional Manager in competitive situations).
4. Apply NEOGARD FC topcoat at a rate of 133 sf/gal to yield 12 dry mils and broadcast aggregate at a rate of 10-15 lbs per 100 sf.
5. For heavy duty areas such as ramps, ticket spitters and turn areas, apply double texturing as follows. Repeat step 4 above before applying final topcoat.
6. Apply final topcoat of NEOGARD FC coating at a rate of 133 sf/gal to yield 12 dry mils. Allow to cure 24 - 36 hours before opening to vehicular traffic.

Recoat Existing Urethane System with Hybrid System

1. Clean and prepare surfaces per the guidelines in Sections 1 - 3 of this document.

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2. Apply Neogard 70714/70715-09 100% solids epoxy at a rate of 100 sf/gal. Broadcast aggregate at a rate of 15-20 lbs/100sf.
3. Apply final FC or 100% solids epoxy coating at a rate of 133 sf/gal to yield 12 dry mils.

Recoat of Existing Kelmar-type System

1. Clean and prepare surfaces per the guidelines in Sections 1 - 3 of this document.
2. Apply Neogard 70714/70715-09 100% solids epoxy primer at a rate of 275 sf/gal.
3. Apply Neogard FC7500/FC7960 base coat material at a rate of 80 sf/gal to yield 20 dry mils. (Please contact your Neogard Regional Manager in competitive situations).
4. Apply 70714/70715-08 100% solids epoxy at a rate of 133 sf/gal (standard duty) or 100 sf/gal (heavy duty) and broadcast aggregate.
5. Apply Neogard FC or 100% solids epoxy top coat at a rate of 133 sf/gal.

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Traffic-Bearing Waterproofing Systems

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