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You can find Neogard coatings in Major Stadiums and Arenas, Office Buildings, Universities, Hospitals, Hotels and Casinos, Airports and Hangers, Government Facilities, Manufacturing Plants and more.

About Hempel

As a world-leading supplier of trusted coating solutions, Hempel is a global company with strong values, working with customers in the protective, marine, decorative, container and yacht industries. Hempel factories, R&D centers and stock points are established in every region.

Across the globe, Hempel's coatings protect surfaces, structures and equipment. They extend asset lifetimes, reduce maintenance costs and make homes and workplaces safer and more colorful. Hempel was founded in Copenhagen, Denmark in 1915. It is proudly owned by the Hempel Foundation, which ensures a solid economic base for the Hempel Group and supports cultural, social, humanitarian and scientific purposes around the world.

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neogard.com

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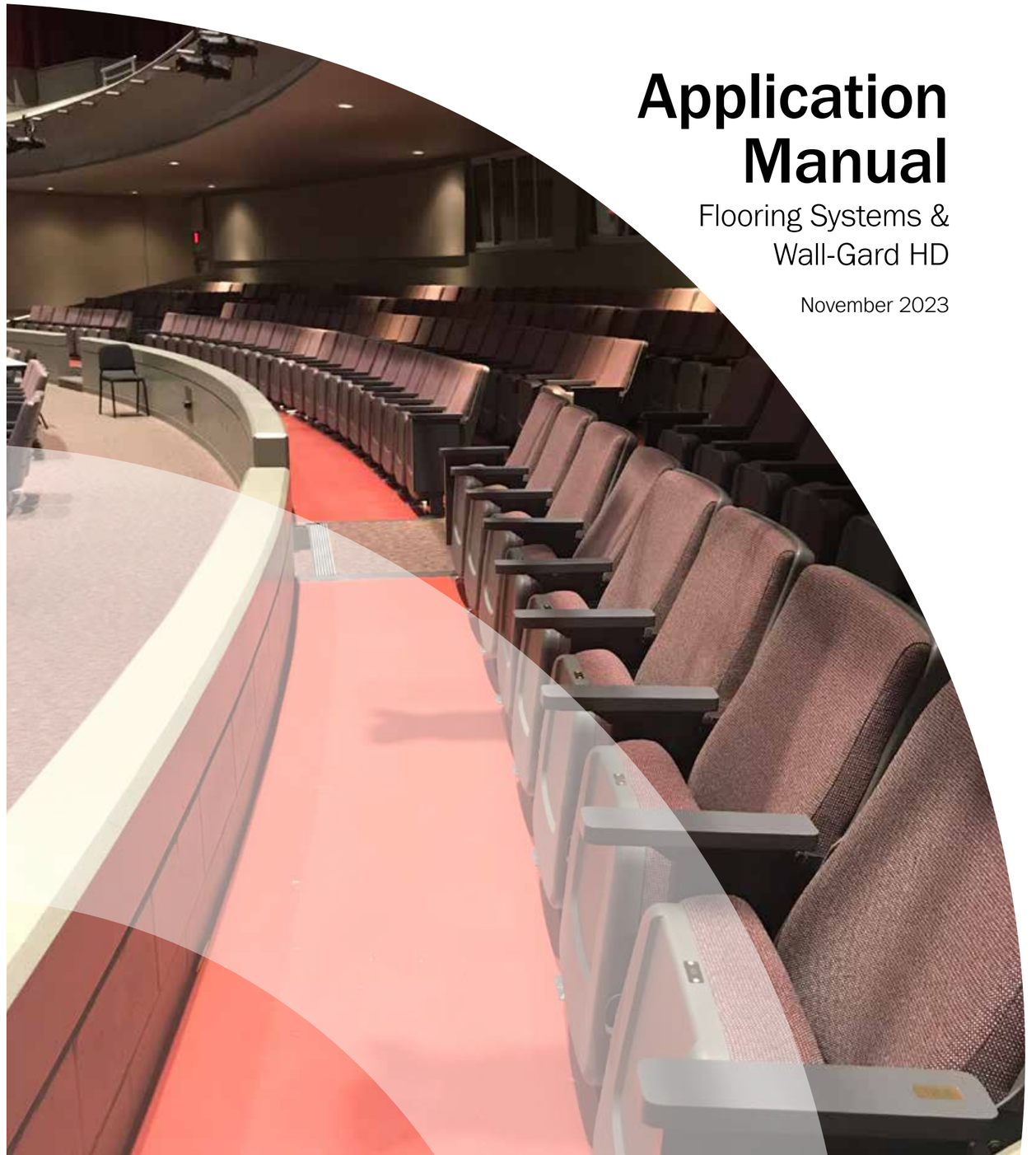

Application Manual

Flooring Systems & Wall-Gard HD

November 2023

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Introduction

Dear Neogard Customer,

This manual covers many important technical aspects of Neogard flooring systems and Wall-Gard HD. It is intended for personnel who are involved in selling, estimating, administration and application.

We will make changes and additions to this handbook as technology evolves. For specific application questions or technical assistance, contact the Neogard Technical Service Department by phone at (214) 353-1600, or use the contact form at www.neogard.com/contact. Additional technical resources are also available at www.neogard.com.

Thank you for your help in making this manual possible.

Your Neogard Team

Disclaimer

This document is intended for professional use and provides generic advice in respect of the subject matter hereof only. It is not intended to be used as a comprehensive guide. The buyer/applicator should always read the relevant Product Data Sheets (“PDS”), Safety Data Sheets and Guide Specification relating to the applicable products/system. If in doubt, please contact your local Neogard representative for further advice. To the extent relevant, the disclaimer set forth in the relevant PDS or Guide Specification applies to this document.

Substrate and Project Conditions

Concrete

Verify that the concrete meets the following requirements:

- Concrete must have a minimum compressive strength of 3,500 psi.
- Concrete must cure for a minimum of 28 days.
- Water-cured treatment of the concrete is preferred. The use of concrete curing agents, if any, shall be sodium silicate base only. Others require written approval by Neogard and may necessitate additional surface preparation.
- Concrete must be clean and dry.
- Concrete must be free of oil or other contaminants.
- Floor temperature should be above 60ºF/15ºC and rising.
- Slabs-on-grade should have a vapor barrier installed beneath the slab.

Moisture/moisture vapor drive of concrete is not to exceed the following rates:

- Calcium Chloride Test (ASTM F1869-10): 3 lbs. per 1,000 square feet per 24 hours. If readings are greater than 3 lbs. consult Neogard Technical Services Department.
- When applying Neocrete urethane cement systems, moisture vapor drive must not exceed 20 lbs per 1,000 square feet. If relative humidity readings are greater than 75%, consult the Neogard Technical Services Department.

Finish Profile Requirements

- Slabs must be steel troweled with power or hand trowel.
- Rough surfaces may require additional surface prep such as grinding, to smooth concrete.
- Surface must be clean, sound and dry before application of Neogard flooring systems.
- Surfaces contaminated with oil or grease will need to be vigorously scrubbed with a power scrubber and a strong, non-sudsing detergent, such as Neogard 8500 BioDegradable Cleaner (089JB)..
- Areas where oil, grease or other contaminants have penetrated deep into the concrete may require removal by mechanical methods. Repair damage to the substrate caused by removal of contaminants.
- Restore damaged areas of the concrete substrate to match adjacent areas.

Existing Flooring Systems

If possible, determine the chemical makeup of the existing system (epoxy, urethane, methyl methacrylate, novolac, or others).

Examine the existing floor for delamination/peeling, chemical attack, abuse, poor surface preparation, or other problems/issues..

Always perform a field adhesion test. See the Field Adhesion Testing section of this Application Manual.

Determine the type of traffic, loads, and chemical exposure the flooring system will be subjected to, and skid resistance required of the system.

Project Conditions

Read and follow the Safety Data Sheets (SDS) and container labels for detailed health and safety information.

Coordinate flooring work with other trades. Applicator should have sole right of access to the specified area for the time needed to complete the application and allow the flooring system to cure adequately.

Protect equipment, plants, vegetation or other surfaces not to be coated, against damage or soiling. It is much easier to keep coating off adjacent surfaces during application than to remove it after cure.

Keep products away from spark or flame. Do not allow the use of spark-producing equipment during application and until all vapors have dissipated. Post “No Smoking” signs.

Ventilate work areas as needed.

Maintain work area in a neat and orderly condition, removing empty containers, rags and trash daily from the site.

Field Sample

Install a field sample of at least 100 square feet at the project or pre-selected area as agreed to by owner’s representative, applicator and manufacturer.

- Apply material in accordance with written application instructions.
- Field sample will be the standard for judging color and texture on remainder of project.
- Maintain field sample during construction for workmanship comparison.
- Do not alter, move, or destroy field sample until work is completed and approved by the Owner’s representative.

Surface Preparation

Methods for Preparing Concrete Substrate

Shot-blasting

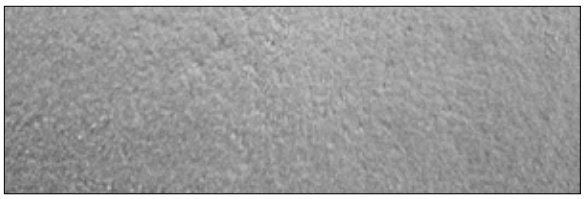
Shot-blasting is the preferred method to remove laitance from concrete surfaces. Take care and use proper procedures to leave the concrete surface as unopened as possible. Shot-blasting is also preferred over sandblasting to remove an unacceptable curing compound. Mechanically prepare surface by shot-blasting to industry standard surface texture—ICRI CSP3 or CSP4—without causing additional surface defects in deck surface. See the example photos below.

Shot-Blasting Equipment

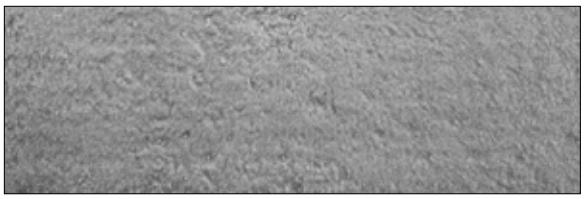
Note: Shot-blasting does not remove deep penetrating oils, grease, tar or asphalt stains. Proper cleaning procedures should be followed to ensure proper bonding of the deck coating.

Caution: Do not over shot-blast the substrate. Improper or aggressive shotblasting can create an over-porous concrete surface, which can cause blisters or bubbles during application of the flooring system.

ICRI CSP3



ICRI CSP4



Scarification

Scarification is a method for removal of existing coatings, oils, grease, sealers, and other contaminants that resist removal by shot-blasting or acid etching.

- Scarifying a concrete substrate will provide a proper profile for maximum adhesion of the flooring system to the concrete substrate.
- Aggressive scarification can result in blistering problems during the application of the flooring system.

Grinding

Grinding is an alternative method for the removal of laitance from the concrete surface. It is the preferred method for thin film applications.

- Diamond pads or discs with 24–36 grit can be used in combination with slow speed grinders.
- Vacuum to thoroughly remove all dust and debris from grinding.
- Must provide a 50 grit sandpaper texture.

Patches, Cracks and Joints

Concrete Patching

For information on concrete patching, refer to “Epoxy Patching and Mortar Blends” in the Support Information section of this Application Manual.

Cracks

After shot-blasting, fill all non-moving cracks with 70714/70715 epoxy, mixed with P1934 fumed silica to form a paste. The mix ratio is one part 70714/70715 epoxy to 3 parts P1934 fumed silica by volume.

Control and Cold Joints

Fill control and cold joints flush with 70718/70719 flexible epoxy at 3/4” depth. Use proper size closed cell backer rod to control joint depth.

Expansion and Isolation Joints

Seal expansion and isolation joints =/<1” in width with 70991 single component polyurethane sealant. Apply sealant to inside of joint only, not to floor surface. Preparation and treatment of joints >1” in width is beyond the scope of this Application Manual; an expansion joint manufacturer should be consulted for those applications.

Moisture Testing and Verification

Excessive moisture content or high levels of moisture vapor transmission (MVT) in a concrete slab is a major concern when applying flooring systems. If concrete substrates don't have a properly installed vapor barrier underneath, moisture content/moisture vapor drive may cause the flooring system to delaminate, blister, bubble, or stain due to efflorescence (migration of a salt to the surface of a porous material, where it forms a coating).

Perform a test on concrete slabs prior to installing a the flooring system to check for levels of moisture content or moisture vapor drive. Below are two examples of common tests with brief descriptions of how the tests are performed. Follow the test procedures outlined by ASTM.

ASTM F1869-10 (Anhydrous Calcium Chloride Test)

Before conducting the test, the test area must be at the same temperature and humidity expected during normal conditions or between 65°F–85°F (18°C–30°C) and 40%–60% relative humidity for a minimum of 48 hours. Three tests should be run for the first 1,000 square feet and one test for each additional 1,000 square feet.

Calcium Chloride Test Kit

1. Expose a 20" X 20" test area. Lightly grind test area and make sure it is free of any dust.
2. Keep test area exposed for 24 hours before conducting test.
3. Weigh the test dish with tape on and record weight and time.
4. Remove sealing tape on dish and tape to underside of dome. Do not discard tape; it will be needed to seal the dish after test is completed.
5. Remove lid from dish and place it on the underneath side of dish.
6. Place dish in the center of test area.

Note: Do not spill any of the calcium chloride. If any is spilled, a new pre-weighed container must be used.

7. Immediately place plastic cover over dish and seal making sure cover is air tight.
8. Wait 60–72 hours.
9. Open plastic cover and reseal dish with original tape. Do not spill any calcium chloride. Immediately reweigh dish and record weight gain, date, and time.

Test results should not exceed 3 pounds per 1,000 square feet per 24 hours. If exceeded, contact Neogard Technical Services.

Note: When applying Neocrete urethane cement systems, test results should not exceed 20 lbs per 1,000 square feet.

ASTM F2170 (In-Situ Probe Test)

This test determines the relative humidity in a slab and only reflects conditions at the time the test is performed. The test requires drilling three holes for the first 1,000 square feet and one hole for each additional 1,000 square feet. Test area needs to be under normal temperature and humidity conditions for 48 hours prior to conducting test.

Drill the depth of the holes to 40% of the thickness of the slab. Example: In a 4” thick slab the holes should be drilled to a depth of 1.5 inches.

10. Using a rotary hammer drill with a carbide drill bit, drill holes to required depth. Drill bit diameter should not exceed 0.04 inches larger than the external diameter of the hole liner being used.

Caution: Holes need to be drilled dry as to not introduce water into the hole.

11. Vacuum to remove dust from hole.
12. Insert liner or sensor into bottom of hole and cover with cap or plug. Wait 72 hours before taking readings.
13. Remove cap and insert probe. Allow to reach equilibrium. Check for drift (<1% in 5 minutes).
14. Record relative humidity and temperature inside hole and ambient relative humidity and temperature.

Caution: If the relative humidity exceeds 75%, contact Neogard Technical Services before proceeding with application of the floor coating system.

In-Situ Probe Test Kit

Product Mixing Instructions

Use a low-to-medium speed drill and a Jiffy Mixer, shown at right, to mix materials thoroughly. Mixing at high speed or with the wrong mixer can introduce air bubbles into the coating. These bubbles may develop into blisters during application.

Jiffy Mixer

Two-Part Coatings (Epoxies, Urethanes, and Polyaspartic)

Caution: Two-component materials must be mixed thoroughly.

Check the product's mix ratio on container labels, Product Data Sheets, and in this Application Manual prior to mixing materials. Proper ratios are essential for coating performance and development of physical properties. Off-ratio materials will improperly cure and not meet their physical specifications.

The curing agent—sometimes called the catalyst or B-side—is always to be added to the base. Never add the base to the curing agent; the materials will not mix properly.

Mix the base thoroughly for 3–5 minutes before adding the curing agent. This ensures proper color distribution.

Once the base and curing agent are combined, mix them together. Mix 5-gallon or smaller buckets for a minimum of 5 minutes, and 55-gallon drums for a minimum of 20 minutes.

Thin two-part materials only after they are mixed. If materials are thinned prior to mixing, proper coating ratios will not be achieved. Thin materials by at most 10%. See "Thinning and Cleaning Solvents" in the Support Information section of this Application Manual.

Pigmented Slurry Mixes

When mixing pigmented epoxy and 86468 silica flour 1:1 by volume to create a slurry mix, the viscosity of the mix can increase, particularly in temperatures below 65°F/18°C. This will affect the flow and leveling characteristics of the mixed material. Add solvent or 7055 Odorless Reducer at approximately 3%–5% by volume to increase workability of the slurry mix. If solvent cannot be used, the amount of 86468 silica flour can be reduced to help with flow and leveling of the slurry mix.

Example: If initial mix (3 gallons epoxy to 3 gallons 86468 silica flour) is not flowing or leveling, try decreasing the 86468 silica flour by 1/2 to 1 gallon.

Note: Reducing the amount of 86468 silica flour will increase the amount of epoxy necessary to achieve specified mil thickness. Certain job conditions may require the addition of solvent as well as decreasing the amount of 86468 silica flour used. See "Thinning and Cleaning Solvents" in the Support Information section of this Application Manual.

Neocrete Coatings

Caution: Improper mix ratio of these components will cause the system to be soft or uncured.

Caution: To avoid color variation from mix to mix, scrape all pre-mixed 70800 from 70800 can into mixing container.

Caution: Once the powder component has been added to the mix, blend immediately. The material will begin reacting when the powder is added.

Adjusting for Temperature: In warm temperatures, adding 7055 Odorless Reducer at 3%–5% by volume will extend working time. In cooler temperatures, adding 7055 Odorless Reducer at 3%–5% by volume will improve flow and leveling. See “Thinning and Cleaning Solvents” in the Support Information section of this Application Manual.

Mix Ratio: All Neocrete products use 141 fluid ounces of 70800 resin (contents of one 2-gallon can) with 90 fluid ounces of 70801 hardener (contents of one 1-gallon can). Powder amounts:

- Neocrete SL (includes SL Brodcast, Flake, and Quartz): 70804 powder, one 38-lb bag.
- Neocrete Trowel: 70802 powder, two 44-lb bags.
- Neocrete RT: 70806 powder, one 51-lb bag.
- Neocrete V: 70803 powder, two 42-lb bags.
- Neocrete SL Topcoat: 70804 powder, one 8-lb bag.

Mixing: Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener. Mix the 70800 resin with the 70801 hardener. Slowly add the powder amount shown above. Mix with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color. Continue mixing until the powder has been uniformly blended with the resin mix.

Systems: Uses and Markets

Industrial Systems

Market Key:

F&B: Food & Beverage, PH: Pharmaceutical/Healthcare, ED: Education, CRO: Commercial/Retail/Office

AV: Aviation, MFG: Manufacturing and REC: Amusement & Recreation

System(s)	Markets	Description	Uses
CG-16, -32, -65, -125, -250 Trowel	**F&B, PH,MFG, ED & CRO**	100% solids epoxy resin. Superior mechanical and chemical resistance.	Food processing, resurfacing, heavy mechanical industry.
Floor-Gard HD High Traffic	**AV, MFG, ED & CRO**	Water-based urethane, low odor system with #220 grit aluminum oxide aggregate.	High-traffic areas that require a durable, non-slip surface..
Floor-Gard HD Grind & Seal	**AV, MFG, ED & CRO**	Water-based urethane, low odor system with #220 grit aluminum oxide aggregate.	High-traffic areas that require a durable, non-slip surface..
KitchenGard 3/16”	**F&B, PH, MFG & CRO**	100% solids, high-performance epoxy mortar, 100% solids novolac system.	Animal research, food processing, chemical rooms, freezers.
Neocrete RT	**F&B, PH, MFG & CRO**	Cement-based, water-dispersed polyurethane mortar. Rake-and-trowel grade.	Freezers, fast turnaround, food processing.
Neocrete SL	**F&B, PH, MFG & CRO**	Cement-based, water-dispersed polyurethane mortar. Self-level grade.	Freezers, fast turnaround, food processing.
Neocrete SL Broadcast	**F&B, PH, MFG & CRO**	Cement-based, water-dispersed polyurethane mortar. Self-level grade with texture.	Freezers, fast turnaround, food processing.
Neocrete Trowel	**F&B, PH, MFG & CRO**	Cement-based, water-dispersed polyurethane mortar. Trowel grade.	Freezers, fast turnaround, food processing.
Neocrete V	**F&B, PH, MFG & CRO**	Cement-based, water-dispersed polyurethane mortar.	Cove bases, especially with other Neocrete systems.
FTS MMA Ind Systems (5)	**F&B, PH, ED, MFG & REC**	Fast Return to Service Methyl Methacrylate resin systems	Flooring systems for Restaurants and food service, F&B, Manufacturing, Healthcare, Retail & Grocery and Rec & Amusement
Novolac 32, 125	**F&B, MFG**	Novolac 100% solids epoxy system, superior chemical resistance. Withstands thermal shock.	Animal research, food processing, chemical rooms, freezers.
SkyGard LD, MD, HD, MRO	**AV MFG**	High solids, chemical resistant, aliphatic polyurethane system. Resistant to UV.	Thickness and final coat suitable for heavy aircraft loads. Skydrol resistant.
TrafficTuff	**IM MFG**	100% solids epoxy vehicular/pedestrian traffic system	A two coat textured flooring system for substrates with no waterproofing requirements.

Decorative Systems

Market Key

F&B: Food & Beverage, PH: Pharmaceutical/Healthcare, ED: Education, CRO: Commercial/Retail/Office

AV: Aviation, MFG: Manufacturing and REC: Amusement & Recreation

System(s)	Market	Description	Uses
Neocrete SL Flake	**F&B, PH, CRO**	Cement based, water dispersed polyurethane mortar. Self-level grade with texture.	Fast turnaround applications for Laboratories, Locker Rooms, Lobbies, etc.
Neocrete SL Quartz	**F&B, PH, CRO**	Cement based, water dispersed polyurethane mortar. self-level grade with texture.	Fast turnaround applications for Laboratories, Locker Rooms, Lobbies, etc.
NeoQuartz Brodcast, NeoQuartz Trowel	**F&B, PH, CRO**	Slip resistant, colored quartz, 100% solids epoxy mortar.	Laboratories, Kitchens, Lobbies, Museums, Locker Rooms, Schools.
NeoQuartz HD	**F&B, PH, CRO**	Heavy-duty, lip resistant, colored quartz, 100% solids epoxy mortar.	Laboratories, Kitchens, Lobbies, Museums, Locker Rooms, Schools.
Neoflake	**F&B, PH, ED & REC**	Thin film, broadcast PVC flakes, 100% solids epoxy system.	Laboratories, Clean Rooms, Lobbies, Museums, Schools.
Neoflake RTS	**F&B, PH, ED & REC**	Decorative flake random broadcast or full rejection broadcast, fast return-to-service system utilizing CRU and/or polyaspartic.	Laboratories, Clean Rooms, Lobbies, Museums, Schools.
NeoQuartz Broadcast RTS	**F&B, PH, ED & REC**	Decorative color quartz broadcast system utilizing polyaspartic that allows fast return to service.	Laboratories, Kitchens, Lobbies, Museums, Locker Rooms, Schools.
FTS MMA Deco Systems (5)	**F&B, PH, ED & REC**	Fast Return to Service Methyl Methacrylate resin systems	Flooring systems for Restaurants and food service, F&B, Manufacturing, Healthcare, Retail & Grocery and Rec & Amusement

Application: Industrial Systems

Important General Principles

Factors That Affect Dry Film Thickness

Many factors can affect the amount of wet coating required to yield proper dry film thickness, including: Volume of solids; thinning; surface profile; application technique and equipment; overspray; squeegee; brush and roller wet out; container residue; spills and other waste.

To ensure that specified dry film thickness is achieved, use a wet mil gauge to check thickness of wet coating applied, adjusting as needed for those factors which directly affect the dry film build.

Special Application Windows

24-Hour Recoat Window: Applies to Primer Coats, Optional Chemical Resistant Topcoats, Optional Texture Coats with Neogrip Spheres, Second Seal Coats, or any other neat coat without aggregate. These coats must be applied within 24 hours after the previously applied coat is tack-free for the subsequent coat to properly bond. If this recoat window is missed, the surface must be lightly sanded to a dull finish and vacuumed, then solvent wiped with xylene or 7055 Odorless Reducer.

The 24-hour recoat window does not apply if aggregate was broadcast into the coating, which provides the necessary surface profile for the subsequent coat to bond.

Retouch: When applying the last pigmented coat, of either epoxy or urethane, there is a retouch time of 15 minutes. If retouch occurs beyond this 15 minute window, different shades in color may appear where the roller is applied, making it necessary to backroll the entire floor area.

Special Product Instructions

70869/70819

- Relative humdity during application and curing must be below 80%.
- Do not split 70869/70819 polyaspartic kits.
- Do not thin 70869/70819 polyaspartic.

Applicator is responsible for applying sufficient coating to the substrate.

CG-16

Limitations

- Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load.
- System should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills.

Materials

- Primer: 70714/70715 (45060) clear epoxy.
- Topcoat: 70714/70715 (45060) clear or pigmented epoxy.
- Optional Chemical Resistant Topcoat (two options):
  - 70817/70818 (5707000050) clear Chemical Resistant Urethane (CRU).
  - 70817-01/70818 (5707016640) white CRU.
- Optional Texture Coat (epoxy, or two 70817 series options):
  - 70714/70715 (45060) pigmented epoxy.
  - 70817/70818 (5707000050) clear or pigmented Chemical Resistant Urethane (CRU).
  - 70817-01/70818 (5707016640) white CRU.
- Optional Texture: 86500 (66XJB) Neogrip spheres.
- Optional Texture: Neogard 86364 (66030) 20/40 mesh silica sand.

Average Total Dry Film Thickness

- 16 dry mils (excluding Optional Texture Coat)

Application Instructions

1. Primer: Mix and apply 70714/70715 at a rate of 260 sf/gal (6 wet mils) to yield 6 dry mils. Allow primer coat to cure until tack free (8–9 hours at 75°F/23°C).
   - For a slip-resistant texture, broadcast Neogard 86364 20/40 mesh silica sand into wet primer coat at a rate of 10 lbs/100 sf. This will provide a more aggressive texture than adding Neogrip spheres as an Optional Texture Coat.
2. Topcoat: Mix and apply 70714/70715 at a rate of 160 sf/gal (10 wet mils) to yield 10 dry mils.
   - If applying Optional Chemical Resistant or Texture coats, allow topcoat to cure until tack free (8–9 hours at 75°F/23°C).
   - If this is the final coat, allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load.
3. Optional Chemical Resistant Topcoat: To optimize chemical resistance or UV stability, apply 70817/70818 series CRU as a second topcoat. Refer to Neogard Product Data Sheets for detailed CRU mixing instructions. Apply at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow system to cure a minimum of 12 hours at 75°F/23°C before allowing foot traffic.
4. Optional Texture Coat: For limited slip resistance apply a second topcoat of 70714/70715 epoxy or 70817/70818 series CRU. Add Neogrip spheres at 4–6 ounces by volume to 1.5 gallons of mixed 70714/70715 epoxy, or 5–8 ounces by volume to 2 gallons of mixed 70817/70818 series CRU, and mix for 3 minutes. Refer to Neogard Product Data Sheets for detailed CRU mixing instructions. Apply at a rate of 400 sf/gal (4 wet mils) to yield 4 dry mils.

- Installing the Optional Textured Coat thicker than 4 wet mils will cause the Neogrip spheres to sink into the coating, thus eliminating the desired slip-resistant texture.
- To prevent the Neogrip spheres from settling in the bucket, remix the material every 10–15 minutes.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	260 sf/gal	6/6	While tack-free (8–24 hrs)
Topcoat	70714/70715	Clear/ Pigmented	2:1	160 sf/gal	10/10	While tack-free (8–24 hrs)
Optional Chem/UV Resistant Topcoat	70817/70818 CRU	Clear/ Pigmented	1:1	200 sf/gal	8/8	NA
Optional Texture Coat	70714/70715 70817/70818 CRU	Clear/ Pigmented	2:1 1:1	400 sf/gal 400 sf/gal	4/4	NA
	86500 Neogrip Spheres	*Clear*	*see Step 4 above*			

CG-32

Limitations

- Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load.
- System should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills.

Materials

- Primer: 70714/70715 (45060) clear epoxy.
- Base Coat: 70714/70715(45060) clear or pigmented epoxy.
- Topcoat: 70714/70715 (45060) clear or pigmented epoxy.
- Optional Chemical Resistant Topcoat (70817 series, two options):
  - 70817/70818 (5707000050) clear or pigmented Chemical Resistant Urethane (CRU).
  - 70817-01/70818 (5707016640) white CRU.
- Optional Texture Coat (epoxy, or two 70817 series options):
  - 70714/70715 (45060) pigmented epoxy.
  - 70817/70818 (5707000050) clear or pigmented Chemical Resistant Urethane (CRU).
  - 70817-01/70818 (5707016640) white CRU.
  - Optional Texture: 86500 (66XJB) Neogrip spheres.

Average Total Dry Film Thickness

- 32 dry mils (excluding Optional Texture Coat)

Application Instructions

1. Primer: Mix and apply 70714/70715 clear epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C).
2. Base Coat: Mix and apply 70714/70715 clear or pigmented epoxy at a rate of 130 sf/gal (12 wet mils) to yield 12 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C) or until tack free.
3. Topcoat: Mix and apply 70714/70715 clear or pigmented epoxy at a rate of 130 sf/gal (12 wet mils) to yield 12 dry mils.
   - If applying Optional Chemical Resistant or Optional Texture coats, allow topcoat to cure until tack free (8–9 hours at 75°F/23°C).
   - If this is the final coat, allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load.
4. Optional Chemical/UV Resistant Topcoat: To optimize chemical resistance or UV stability, apply 70817/70818 series CRU as a second topcoat. Refer to Neogard Product Data Sheets for detailed CRU mixing instructions. Apply at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow system to cure a minimum of 12 hours at 75°F/23°C before allowing foot traffic.
5. Optional Texture Coat: For limited slip resistance apply a second topcoat of 70714/70715 epoxy, or 70817/70818 series CRU. Add Neogrip spheres at 4–6 ounces by volume to 1.5 gallons of mixed 70714/70715 epoxy, or 5–8 ounces by volume to 2 gallons of mixed 70817/70818 series CRU, and mix for 3 minutes. Refer to Neogard Product Data Sheets for detailed CRU mixing instructions. Apply at a rate of 400 sf/gal (4 wet mils) to yield 4 dry mils.

- Installing the Optional Textured Coat thicker than 4 wet mils will cause the Neogrip spheres to sink into the coating, thus eliminating the desired slip-resistant texture.
- To prevent the Neogrip spheres from settling in the bucket, remix the material every 10–15 minutes.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
Base Coat	70714/70715	Clear/ Pigmented	2:1	130 sf/gal	12/12	While tack-free (8–24 hrs)
Topcoat	70714/70715	Clear/ Pigmented	2:1	130 sf/gal	12/12	While tack-free (8–24 hrs)
Optional Chemical/UV Resistant Topcoat	70817/70818 CRU	Clear/ Pigmented	1:1	200 sf/gal	8/8	NA
Optional Texture Coat	70714/70715 70817/70818 CRU	Clear/ Pigmented	2:1 1:1	400 sf/gal 400 sf/gal	4/4	NA
	86500 Neogrip Spheres	*Clear*	*see Step 6 above*			

CG-65

Limitations

- Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load.
- System should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills.

Materials

- Aggregate: 86364 (66030) 20/40 mesh silica sand.
- Base Coat: 70714/70715 (45060) clear epoxy.
- Seal Coats: 70714/70715 (45060) pigmented epoxy.
- Optional Finish Coat (two options):
  - 70817/70818 (5707000050) clear or pigmented Chemical Resistant Urethane (CRU).
  - 70817-01/70818 (5707016640) white CRU.

Recommended Average System Thickness

- 65 mils or 1/16” (excluding Optional Finish Coat)

Application Instructions

1. Base Coat: Mix and apply 70714/70715 clear epoxy at a rate of 80 sf/gal (20 wet mils) to yield 20 dry mils.
2. Aggregate: Broadcast 86364 silica quartz into wet Base Coat until refusal (approximately 50 lbs/100 sf). Maintain a one to two foot wet edge without aggregate to allow for a smooth transition to the next pass of neat epoxy. Allow to cure 8–12 hours at 75°F/23°C. Remove excess aggregate and lightly sand to remove rough spots.
3. First Seal Coat: Mix and apply 70714/70715 pigmented epoxy at a rate of 160 sf/gal (10 wet mils) to yield 10 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C).
4. Second Seal Coat: Mix and apply 70714/70715 pigmented epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils.
5. Optional Finish Coat: To maximize chemical resistance or for UV protection, an Optional Finish Coat may be added to the system. After Second Seal Coat has been applied and cured, apply 70817/70818 series clear, pigmented, or white CRU at a rate of 400 sf/gal (4 wet mils) to yield 4 dry mils. Refer to Neogard Product Data Sheets for detailed mixing instructions for CRU.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Base Coat	70714/70715	Clear	2:1	80 sf/gal	20/20	While tack-free (8–24 hrs)
	86364 Silica Quartz Sand	*Natural*	*NA*	*50 lbs/100 sf*		
First Seal Coat	70714/70715	Pigmented	2:1	160 sf/gal	10/10	While tack-free (8–24 hrs)
Second Seal Coat	70714/70715	Pigmented	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
Optional Chemical/UV Resistant Finish Coat	70817/70818 CRU	Clear/ Pigmented	1:1	400 sf/gal	4/4	NA

CG-125

Limitations

- Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load.
- System should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills.

Materials

- Aggregate: 86364 (66030) 20/40 mesh silica sand.
- First Base Coat: 70714/70715 (45060) clear epoxy.
- Second Base Coat: 70714/70715 clear or pigmented epoxy.
- Seal Coats: 70714/70715 pigmented epoxy.
- Optional Finish Coat (two options):
  - 70817/70818 (5707000050) clear or pigmented Chemical Resistant Urethane (CRU).
  - 70817-01/70818 (5707016640) white CRU.

Recommended Average System Thickness

- 125 mils or 1/8” (excluding Optional Finish Coat)

Application Instructions

1. First Base Coat: Mix and apply 70714/70715 clear epoxy at a rate of 80 sf/gal (20 wet mils) to yield 20 dry mils.
   - Aggregate: Broadcast 86364 silica quartz into wet Base Coat until refusal (approximately 50 lbs/100 sf). Maintain a one to two foot wet edge without aggregate to allow for a smooth transition to the next pass of neat epoxy. Allow to cure 8–12 hours at 75°F/23°C. Remove excess aggregate and lightly sand to remove rough spots.
2. Second Base Coat: Mix and apply 70714/70715 clear or pigmented epoxy at a rate of 80 sf/gal (20 wet mils) to yield 20 dry mils.
   - Aggregate: Broadcast 86364 silica quartz into wet Second Base Coat until refusal (approximately 50 lbs/100 sf). Maintain a one to two foot wet edge without aggregate to allow for a smooth transition to the next pass of neat epoxy. Allow to cure 8–12 hours at 75°F/23°C. Remove excess aggregate and lightly sand to remove rough spots.
3. First Seal Coat: Mix and apply 70714/70715 pigmented epoxy at a rate of 160 sf/gal (10 wet mils) to yield 10 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C).
4. Second Seal Coat: Mix and apply 70714/70715 pigmented epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils
5. Optional Finish Coat: To maximize chemical resistance or for UV protection, an Optional Finish Coat may be added to the system. After Second Seal Coat has been applied and cured, apply 70817/70818 series clear, pigmented, or white CRU at a rate of 400 sf/gal (4 wet mils) to yield 4 dry mils. Refer to Neogard Product Data Sheets for detailed mixing instructions for CRU.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
1st Base Coat	70714/70715	Clear	2:1	80 sf/gal	20/20	While tack-free (8–24 hrs)
	86364 Silica Quartz Sand	*Natural*	*N/A*	*50 lbs/100 sf*		
2nd Base Coat	70714/70715	Pigmented	2:1	80 sf/gal	20/20	While tack-free (8–24 hrs)
	86364 Silica Quartz Sand	*Natural*	*N/A*	*50 lbs/100 sf*		
1st Seal Coat	70714/70715	Pigmented	2:1	160 sf/gal	10/10	While tack-free (8–24 hrs)
2nd Seal Coat	70714/70715	Pigmented	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
Optional Chemical/UV Resistant Finish Coat	70817/70818 CRU	Clear/ Pigmented	1:1	400 sf/gal	4/4	NA

CG-250 Trowel

Limitations

- Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load.
- System should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills.

Materials

- Aggregate: 67BUS99983 CG Epoxy Mortar Blend.
- Primer: 70714/70715 (45060) clear epoxy.
- Trowel Grade Mortar: 70714/70715 clear or pigmented epoxy.
- Grout Coat: 70714/70715 clear or pigmented epoxy.
- Seal Coats: 70714/70715 pigmented epoxy.
- Optional Finish Coat (two options):
  - 70817/70818 (5707000050) clear or pigmented Chemical Resistant Urethane (CRU).
  - 70817-01/70818 (5707016640) white CRU.

Recommended Average System Thickness

- 1/4” or required thickness (excluding Optional Finish Coat)

Note: Mixing 1 gallon of mixed epoxy with 4 parts of aggregate (86364) will cover approximately 21 sf at 1/4” thick.

Application Instructions

1. Primer: Mix and apply 70714/70715 clear epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Immediately lightly broadcast 67BUS99983 CG Epoxy Mortar Blend aggregate into wet primer, creating an anchor profile for mortar mix. Allow to cure until tack free (8–9 hours at 75°F/23°C).
2. Trowel Grade Mortar: Mix 70714/70715 clear or pigmented epoxy with 67BUS99983 aggregate at a ratio of 1 part mixed epoxy to 4 parts aggregate by volume. Screed, rake or trowel mix to desired thickness. Smooth and tightly close surface by hand or power trowel. Lightly mist surface with mineral spirits or 7055 Odorless Reducer (086JB) as a lubricant to help smooth surface. Allow to cure 6–12 hours at 75°F/23°C. Lightly sand to remove rough spots or trowel marks.
3. Grout Coat: Mix and apply 70714/70715 clear or pigmented epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C).
4. First Seal Coat: Mix and apply 70714/70715 pigmented epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C).
5. Second Seal Coat: Mix and apply 70714/70715 pigmented epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils.
6. Optional Finish Coat: To maximize chemical resistance or for UV protection, an Optional Finish Coat may be added to the system. After Second Seal Coat has been applied and cured, apply 70817/70818 series clear, pigmented, or white CRU at a rate of 400 sf/gal (4 wet mils) to yield 4 dry mils. Refer to Neogard Product Data Sheets for detailed mixing instructions for CRU.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
	67BUS99983 aggregate	*Natural*	*N/A*	*20 lbs/100 sf*		
Mortar	70714/70715	Clear/ Pigmented	2:1	Specified Thickness		While tack-free (8–24 hrs)
	67BUS99983 aggregate	*Natural*	*4:1*			
Grout Coat	70714/70715	Pigmented	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
1st Seal Coat	70714/70715	Pigmented	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
2nd Seal Coat	70714/70715	Pigmented	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
Optional Chemical/UV Resistant Finish Coat	70817/70818 CRU	Clear/ Pigmented	1:1	400 sf/gal	4/4	NA

Floor-Gard HD Grind & Seal System

Materials

- Aggregate: #220 grit aluminum oxide (contact Neogard for source of supply).
- First and Second Coats: 70900/70910 (47DJB) series water-based urethane, gloss finish.

Average Total Dry Film Thickness

- 18 dry mils (approximately)

Application Instructions

1. First Coat: Mix 70900/70910 gloss or 70901/70910 semi-gloss at a ratio of 3:1 by volume for three minutes. Reduce the mix 5% with water. Apply at a rate of 200–267 sf/gal. (6–8 mils WFT to yield 3–6 mils DFT). Allow to cure until tack free for 4–6 hours at 75°F/23°C.
2. Second Coat: Mix 70900/70910 gloss or 70901/70910 semi-gloss at a ratio of 3:1 by volume for three minutes. Add 24 ounces of #220 grit aluminum oxide by volume per mixed gallon and apply at a rate of 400– 450 sf/gal. Allow to cure for 4–6 hours at 75°F/23°C.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
First Coat	70900/70910 or 70901/70910	Pigmented	3:1 + Water 5%	200–267 sf/gal	6–8 / 3–6	4–6 hrs
Second Coat	70900/70910 or 70901/70910 + #220 alum. oxide	Pigmented	3:1 + 24 oz/gal	400–450 sf/gal	NA	NA

Floor-Gard HD High Traffic System

Materials

- Primer: 70714/70715 (45060) clear epoxy.
- Base Coat: 70714/70715 (45060) pigmented epoxy.
- Aggregate: #220 grit aluminum oxide (67BUS99981).
- Topcoats:
  - 70900/70910 (47DJB) series water-based urethane, gloss finish.
  - 70901/70910 (47VJB) series water-based urethane, semi-gloss finish.
  - 70902/70910 (47ZJB) series water-based urethane, satin finish.

Average Total Dry Film Thickness

- 18 dry mils (approximately)

Application Instructions

1. Primer: Mix 70714/70715 clear at a ratio of 2:1 by volume for three minutes. Apply at a rate of 200 sf/gal. (8 WFT) to yield 8 DFT. Allow to cure until tack-free for 8-9 hours at 75°F/23°C.
2. Base Coat: Mix 70714/70715 pigmented at a ratio of 2:1 for three minutes. Apply at a rate of 200 sf/gal. (8 WFT) to yield 8 DFT. Allow to cure for 8-9 hours at 75°F/23°C or until tack free.
3. Topcoat: Mix 70900/70910 gloss, 70901/70910 semi-gloss at a ratio of 3:1, or 70902/70910 satin at a ratio of 2:1 for three minutes. Add 24 ounces of #220 grit aluminum oxide by volume per mixed gallon and apply at a rate of 350–400 sf/gal. Allow to cure 4-6 hours at 75°F/23°C.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
Base Coat	70714/70715	Pigmented	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
Topcoat	70900/70910 or 70901/70910 or 70902/70910 + 67BUS99981 #220 alum. oxide	Pigmented	3:1 3:1 2:1 + 24 oz/gal	350–400 sf/gal	NA	NA

Integral Troweled Epoxy Cove Base

Materials

- Epoxy (100% Solids): 70714/70715 (45060), clear or pigmented.
- Aggregates: 86364 (66030) 20/40 mesh silica sand or blended colored quartz
- Fumed Silica: P1934 (D261)
- Topcoat (four choices):
  - 70704/70705 (45020) novolac epoxy.
  - 70734/70735 (45040) low yellowing epoxy.
  - 70817/70818 (57070) clear chemical-resistant urethane (CRU).
  - 70869/70819 (57031) clear polyaspartic.

Average Total Dry Film Thickness

- See Application Instructions below

Application Instructions

A. Primer: Mix and apply by brush or roller 70714/70715 clear epoxy at a rate of 250 sf/gal. Immediately lightly broadcast 86364 aggregate into wet primer, creating an anchor profile for mortar mix. Allow to tack or fully cure before applying cove base mix.

4. Epoxy Cove Base Mix:

   A. Mix and apply 70714/70715 clear or pigmented epoxy with 86364 aggregate or blended colored quartz at a ratio of 1 part mixed epoxy, 1 part P1934 (fumed silica) to 4 parts aggregate by volume. If using blended colored quartz, use 70714/70715 clear epoxy.

   B. Apply epoxy cove base mix using a margin trowel to place material onto the wall. Smooth and tightly close the surface by hand with a coving trowel. Apply a light mist of 7055 Odorless Reducer as a trowel lubricant to help smooth and finish the application.

   - Example: One gallon of mixed 70714/70715, one gallon of P1934 (fumed silica) and 4 gallons of aggregate covers approximately 40-50 linear feet at 1/8" thickness and 4” in height. Thickness and coverage rate can vary due to finish of wall.
   - Note: Metal or plastic termination strip is recommended to be installed at the desired height prior to the application of the cove base mix in order to have a clean and proper thickness termination.

5. Topcoat: Apply topcoat by brush or roller at a rate of 200-300 sf/gal (8 wet mils). Topcoat will typically take two or three applications in order to achieve a smooth finish texture. A smooth finish texture helps reduce buildup of dirt, grease or other contaminant and allows for ease of cleaning. Take precautions to avoid sagging or runs when applying.
   - Contact Neogard for recommended topcoat.
6. Allow to cure 8-12 hours at 70°F (21°C)

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer ***Aggregate***	70714/70715 86364	Clear, *Pigmented*	2:1	200 sf/gal *Lightly*	8/8	While tack-free (8–24 hrs)
Epoxy Cove Base Mix	70714/70715+ P1934+ 86364	Pigmented (clear for color quartz)	1 part (2:1)+ 1 part+ 4 parts	40-50 linear feet at 1/8" thick, 4" height	NA	When tack-free
Topcoat	70704/70705 70734/70735 70817/70818 70869/70819	Contact Neogard for recommended topcoat.				

KitchenGard 3/16"

Materials

- Aggregate: 86468 (66040) silica flour and 86364 (66030) silica quartz.
- First Slurry Base Coat: 70714/70715 (45060) clear epoxy mixed 1:1 with 86468 silica flour.
- Second Slurry Base Coat: 70714/70715 clear or pigmented epoxy mixed 1:1 with 86468 silica flour.
- Seal Coats: 70704/70705 (45020) pigmented novolac epoxy.

Average System Thickness

- 3/16” (approximately 176 dry mils)

Note: Each Slurry Base Coat when mixed with sand provides approximately 80 mils thickness.

Note: 1½ gallons of 86468 silica flour mixed with 1½ gallons of mixed 70714/70715 epoxy will yield approximately 3 gallons of material.

Application Instructions

1. First Slurry Base Coat: Mix 70714/70715 clear epoxy at a ratio of 2:1 by volume for three minutes. Add 86468 silica flour at a ratio of 1:1 by volume with mixed epoxy. Continue to mix until the slurry’s consistency is smooth with no clumps. Spread mix using a 1/4” notched squeegee or trowel at a rate of 40 sf/gal (40 wet mils) to yield 40 dry mils. Allow to self-level, backroll with a 1/4" or 3/16" nap phenolic roller and then de-air with a spiked roller. Note: First Slurry Base Coat must be clear.
    - Aggregate: Broadcast 86364 silica quartz into wet slurry matrix until refusal at a rate of approximately 100 lb/100 sf. Maintain a one to two foot wet edge without aggregate to allow for a smooth transition to the next pass of neat epoxy. Allow to cure 8–12 hours at 75°F/23°C. Remove excess aggregate and lightly sand to remove rough spots. Vacuum thoroughly.
2. Second Slurry Base Coat: Mix 70714/70715 clear or pigmented epoxy at a ratio of 2:1 by volume for three minutes. Add 86468 silica flour at a ratio of 1:1 by volume with mixed epoxy. Continue to mix until the slurry’s consistency is smooth with no clumps. Spread mix using a 1/4” notched squeegee or trowel at a rate of 40 sf/gal (40 wet mils) to yield 40 dry mils. Allow to self-level, backroll with a 1/4" or 3/16" nap phenolic roller and then de-air with a spiked roller.
    - Aggregate: Broadcast 86364 silica quartz into wet slurry matrix until refusal at a rate of approximately 100 lb/100 sf. Maintain a one to two foot wet edge without aggregate to allow for a smooth transition to the next pass of neat epoxy. Allow to cure 8–12 hours at 75°F/23°C. Remove excess aggregate and lightly sand to remove rough spots. Vacuum thoroughly.
3. First Seal Coat: Mix 70704/70705 pigmented Novolac epoxy at a ratio of 3:2 by volume for three minutes. Apply using a 1/4" or 3/16" nap phenolic roller at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack-free (8–9 hours at 75°F/23°C).
4. Second Seal Coat: Mix 70704/70705 pigmented Novolac epoxy at a ratio of 3:2 by volume for three minutes. Apply using a 1/4" or 3/16" nap phenolic roller at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils.
5. Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load. System should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
1st Slurry Base Coat	70714/70715	Clear	2:1	40 sf/gal	40/40	While tack-free (8–24 hrs)
	86468 Silica Flour #200	Natural	1:1 w/epoxy			
	86364 Silica Quartz Sand	*Natural*	*Broadcast*	*100 lbs/100 sf*		
2nd Slurry Base Coat	70714/70715	Clear/ Pigmented	2:1	40 sf/gal	40/40	While tack-free (8–24 hrs)
	86468 Silica Flour #200	Natural	1:1 w/epoxy			
	86364 Silica Quartz Sand	*Natural*	*Broadcast*	*100 lbs/100 sf*		
1st Seal Coat	70704/70705	Pigmented	3:2	200 sf/gal	8/8	While tack-free (8–24 hrs)
2nd Seal Coat	70704/70705	Pigmented	3:2	200 sf/gal	8/8	NA

Neocrete SL

Materials

- Neocrete SL mix (48012):
  - Resin: 70800 (48019) series, gray, tan, or red in color.
  - Hardener: 70801 (98010).
  - Powder: Neocrete SL 70804 (6602209990P038, 38-lb bag).
- Optional: Neocrete SL Topcoat mix (4101A):
  - Resin: 70800 (48019) series, gray, tan, or red in color.
  - Hardener: 70801 (98010).
  - Powder: Neocrete SL 70804 (6602209990P008, 8-lb bag).

Average System Thickness

- Nominal 3/16”

Application Instructions

1. Primer: Neocrete SL does not require a primer.
2. Cementitious Polyurethane Mix:
   A. To avoid color variation from mix to mix, scrape all of the pre-mixed 70800 from the 70800 can into the mixing container.
   B. Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener. Mix 141 fluid ounces of 70800 (one 2-gallon can) with 90 fluid ounces of 70801 (one 1-gallon can). Slowly add one 38-pound bag of 70804 powder to the resin mix. Mix with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color. Continue mixing until the powder has been uniformly blended with the resin mix. Mix blended material for an additional 2 minutes (time will vary depending on temperature conditions).
   C. Pour the cementitious polyurethane mix onto the floor and spread using a gauge rake. Immediately backroll with a spike roller to de-air and level the material.
   D. One unit of mixed material covers approximately 32 square feet at 3/16" thickness. Thickness and coverage rate can vary due to finish of substrate.
3. Optional: Neocrete SL Topcoat:
   A. Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener.
   B. To avoid color variation from mix to mix, scrape all of the pre-mixed 70800 from the 70800 can into the mixing container.
   C. Mix 141 fluid ounces of 70800 resin (contents of one 2-gallon can) with 90 fluid ounces of 70801 hardener (contents of one 1-gallon can). Slowly add one 8-pound bag of 70804 powder to the resin mix. Mix with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color. Continue mixing until the powder has been uniformly blended with the resin mix.
   D. Pour the cementitious polyurethane mix onto the floor and spread using a V-notched squeegee; backroll with a 3/8” phenolic-core roller to smooth coating and remove imperfections.
   E. One unit of mixed material covers approximately 100 square feet at 16 mils thickness.
4. Allow to cure 6–10 hours at 70°F (21°C) before allowing foot traffic.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Cementitious Polyurethane Mix	70800 Resin 70801 Hardener 70804 Powder	Gray, Red, or Desert (resin)	141 oz/ 90 oz/ 38 lb	32 sf at 3/16" thickness per mixed unit	187/187	NA
Neocrete SL Topcoat	70800 Resin 70801 Hardener 70804 Powder	Gray, Red, Desert	141 oz 90 oz 8 lb	100 sf	16/16	NA

Neocrete SL Broadcast

Materials

- Neocrete SL mix (48012):
  - Resin: 70800 (48019) series, gray, tan, or red in color.
  - Hardener: 70801 (98010).
  - Powder: Neocrete SL 70804 (6602209990P038, 38-lb bag).
- Aggregate: Blended Silica Quartz 86364 (66030)
- Topcoat (two options):
  - Novolac Epoxy: 100% solids 70704/70705 (45020).
  - Neocrete SL Topcoat mix (4101A):
    - Resin: 70800 (48019) series, gray, tan, or red in color.
    - Hardener: 70801 (98010).
    - Powder: Neocrete SL 70804 (6602209990P008, 8-lb bag).

Average System Thickness

- Nominal 3/16”

Application Instructions

1. Primer: Neocrete SL Broadcast does not require a primer.
2. Cementitious Polyurethane Mix:

   A. Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener.

   B. To avoid color variation from mix to mix, scrape all of the pre-mixed 70800 from the 70800 can into the mixing container.

   C. Mix 141 fluid ounces of 70800 resin (contents of one 2-gallon can) with 90 fluid ounces of 70801 hardener (contents of one 1-gallon can). Slowly add one 38-pound bag of 70804 powder to the resin mix. Mix with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color. Continue mixing until the powder has been uniformly blended with the resin mix

   D. Pour the cementitious polyurethane mix onto the floor and spread using a gauge rake. Immediately backroll with a spike roller to de-air and level the material.

   E. One unit of mixed material covers approximately 32 square feet at 3/16" thickness. Thickness and coverage rate can vary due to finish of substrate.
3. Aggregate: Immediately broadcast aggregate (blended silica quartz), evenly distributed, in wet cementitious polyurethane mix until refusal at a rate of approximately 40 pounds per 100 square feet. Make sure the aggregate is thrown up into the air so it will fall vertically into the wet cementitious polyurethane mix. Maintain a 1 to 2 foot wet edge without any aggregate to allow for a smooth transition to the next application of cementitious polyurethane mix.
4. Allow to cure 6–10 hours at 70°F/21°C. After curing, remove excess aggregate and lightly sand with a circular floor sander and #50-60 grit sandpaper to remove any rough spots. All debris from sanding must be removed to provide a clean, moisture-free surface.
5. Topcoat: Choose depending on chemical exposure (see Chemical Resistance Charts at www.neogard.com):

A. Novolac Epoxy: Mix and apply pigmented 70704/70705 at a rate of 130 sf/gal (12 wet mils) to yield 12 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C).

B. Neocrete SL Topcoat:

1. Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener.
2. To avoid color variation from mix to mix, scrape all of the pre-mixed 70800 from the 70800 can into the mixing container.
3. Mix 141 fluid ounces of 70800 resin (contents of one 2-gallon can) with 90 fluid ounces of 70801 hardener (contents of one 1-gallon can). Slowly add one 8-pound bag of 70804 powder to the resin mix. Mix with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color. Continue mixing until the powder has been uniformly blended with the resin mix.
4. Pour the cementitious polyurethane mix onto the floor and spread using a V-notched squeegee; backroll with a 3/8” phenolic-core roller to smooth coating and remove imperfections.
5. One unit of mixed material covers approximately 100 square feet at 16 mils thickness.
6. Allow to cure 6–10 hours at 70°F/21°C before allowing foot traffic.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Cementitious Polyurethane Mix	70800 Resin 70801 Hardener 70804 Powder	Gray, Red, Desert	141 oz 90 oz 38 lb	32 sf at 3/16" thickness per mixed unit	187/187	While tack-free (8–12 hrs)
	86364 Silica Quartz Sand	*Natural*	*NA*	*40 lbs/100 sf*		
Novolac Topcoat	70704/70705	Pigmented	3:2	130 sf/gal	12/12	NA
or						
Neocrete SL Topcoat	70800 Resin 70801 Hardener 70804 Powder	Gray, Red, Desert	141 oz 90 oz 8 lb	100 sf	16/16	NA

Neocrete RT

Materials

- Neocrete RT mix (48021):
  - Resin: 70800 (48019) series, gray, tan, or red in color.
  - Hardener: 70801 (98010).
  - Powder: 70806 (66023).
- Optional: Neocrete SL Topcoat mix (4101A):
  - Resin: 70800 (48019) series, gray, tan, or red in color.
  - Hardener: 70801 (98010).
  - Powder: Neocrete SL 70804 (6602209990P008, 8-lb bag).

Average System Thickness

- Nominal 3/16”

Application Instructions

1. Primer: Neocrete Trowel does not require a primer.
2. Cementitious Polyurethane Mix:
   A. To avoid color variation from mix to mix, scrape all of the pre-mixed 70800 from the 70800 can into the mixing container.
   B. Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener. Mix 141 fluid ounces of 70800 (one 2-gallon can) with 90 fluid ounces of 70801 (one 1-gallon can). Slowly add one 51-pound bag of 70806 powder to the resin mix. Mix with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color. Continue mixing until the powder has been uniformly blended with the resin mix. Mix blended material for an additional 2 minutes (time will vary depending on temperature conditions).
   C. Pour the cementitious polyurethane mix onto the floor and spread using a gauge rake. Immediately backroll with a spike roller to de-air and level the material.
   D. One unit of mixed material covers approximately 36 square feet at 3/16" thickness. Thickness and coverage rate can vary due to finish of substrate.
3. Optional: Neocrete SL Topcoat:
   A. Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener.
   B. To avoid color variation from mix to mix, scrape all of the pre-mixed 70800 from the 70800 can into the mixing container.
   C. Mix 141 fluid ounces of 70800 resin (contents of one 2-gallon can) with 90 fluid ounces of 70801 hardener (contents of one 1-gallon can). Slowly add one 8-pound bag of 70804 powder to the resin mix. Mix with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color. Continue mixing until the powder has been uniformly blended with the resin mix.
   D. Pour the cementitious polyurethane mix onto the floor and spread using a V-notched squeegee; backroll with a 3/8” phenolic-core roller to smooth coating and remove imperfections.
   E. One unit of mixed material covers approximately 100 square feet at 16 mils thickness.
4. Allow to cure 6–10 hours at 70°F (21°C) before allowing foot traffic.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Cementitious Polyurethane Mix	70800 Resin 70801 Hardener 70806 Powder	Gray, Red, or Desert (resin)	141 oz/ 90 oz/ 51 lb	36 sf at 3/16" thickness per mixed unit	187/187	NA
Neocrete SL Topcoat	70800 Resin 70801 Hardener 70804 Powder	Gray, Red, Desert	141 oz 90 oz 8 lb	100 sf	16/16	NA

Neocrete Trowel

Materials

- Neocrete Trowel mix (48010):
  - Resin: 70800 (48019) series, gray, desert or red in color.
  - Hardener: 70801 (98010).
  - Powder: Neocrete Trowel 70802 (66020); two 44-lb bags required for one unit of 48010 mix.
- Odorless Reducer: 7055 (086JB).
- Optional: Neocrete SL Topcoat mix (4101A):
  - Resin: 70800 (48019) series, gray, tan, or red in color.
  - Hardener: 70801 (98010).
  - Powder: Neocrete SL 70804 (6602209990P008, 8-lb bag).

Average System Thickness

- Nominal 1/4” or desired thickness

Application Instructions

1. Primer: Neocrete Trowel does not require a primer.
2. Trowel Grade Cementitious Polyurethane Mix:
   A. Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener. To avoid color variation from mix to mix, scrape all pre-mixed 70800 from 70800 can into mixing container.
   B. Mix 141 fluid ounces of 70800 resin (contents of one 2-gallon can) with 90 fluid ounces of 70801 hardener (contents of one 1-gallon can). Slowly add two 44-lb bags of Neocrete Trowel 70802 powder to the resin mix. Continue mixing until the powder has been uniformly blended with the resin mix.
   C. Spread the cementitious polyurethane mix onto the floor using a screed box or gauge rake to desired thickness. Smooth and tightly close the surface with hand or power trowels. Apply a light mist of 7055 Odorless Reducer as a trowel lubricant to help smooth and finish the application.
   D. One unit of mixed material covers approximately 44 square feet at 1/4" thickness. Thickness and coverage rate can vary due to finish of substrate.
3. Optional: Neocrete SL Topcoat:
   A. Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener.
   B. To avoid color variation from mix to mix, scrape all of the pre-mixed 70800 from the 70800 can into the mixing container.
   C. Mix 141 fluid ounces of 70800 resin (contents of one 2-gallon can) with 90 fluid ounces of 70801 hardener (contents of one 1-gallon can). Slowly add one 8-pound bag of 70804 powder to the resin mix. Mix with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color. Continue mixing until the powder has been uniformly blended with the resin mix.
   D. Pour the cementitious polyurethane mix onto the floor and spread using a V-notched squeegee; backroll with a 3/8” phenolic-core roller to smooth coating and remove imperfections.
   E. One unit of mixed material covers approximately 100 square feet at 16 mils thickness.
4. Allow to cure 18 hours at 75°F/23°C before allowing foot traffic.

Summary Application Table

Neocrete V

Materials

- Resin: 70800 (48019) series, gray, desert or red in color.
- Hardener: 70801 (98010).
- Powder: 70803 (66021).

Average System Thickness

- See Application Instructions below

Application Instructions

1. Primer: Apply a scratch coat of 70800/70801 liquids only at a rate of 350 square feet per gallon.
2. Neocrete V Cementitious Polyurethane Mix:
   A. Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener.
   B. To avoid color variation from mix to mix, scrape all pre-mixed 70800 from 70800 can into mixing container.
   C. Mix 141 fluid oz. of 70800 series resin with 90 fluid oz. of 70801 hardener for one minute. Slowly add two 42-lb bags of 70803 powder to the resin mix. Continue mixing until the powder has been uniformly blended with the resin mix. Mix blended material for an additional 2 minutes.
   D. Apply the cementitious polyurethane mix using a margin trowel to place material onto the wall. Smooth and tightly close the surface by hand with a coving trowel. Apply a light mist of 7055 Odorless Reducer as a trowel lubricant to help smooth and finish the application.
   E. One unit of mixed material covers approximately 84 linear feet at 1/8" thickness and 4” in height. Thickness and coverage rate can vary due to finish of wall.
3. Allow to cure 6–10 hours at 70°F (21°C).

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70800 Resin 70801 Hardener	Gray, Red, or Desert	141 oz/ 90 oz/	350 sf/gal	NA	While tack-free (8–24 hrs)
Cementitious Polyurethane Mix	70800 Resin 70801 Hardener 70803 Powder	Gray, Red, or Desert (resin)	141 oz/ 90 oz/ 2 bags	84 linear feet at 1/8" thick, 4” high	187/187	NA

FTS Heavy Duty SL Membrane Solid Color System

Materials

- Initiator: FTS 600 Initiator (960JB)
- Primer: FTS 100 Concrete MMA primer (883J9) FTS 101 Adhesion promotor (884J9)
- Body Coat: FTS 200 Body Coat MMA coating (885J9)
- Topcoat: 450 RTS Topcoat MMA coating (891J9)
- Filler: FTS 40 SL Filler (390JB)
- Aggregate: 86364 20/40 mesh sand

Average System Thickness

- Nominal 3/16" (approximately 187 dry mils)

Application Instructions

Important: All fluid-appied FTS materials must be mixed with Neogard 600 BPO Initiator before applying. Refer to the FTS BPO Initiator Dosage Chart in the Support Information section of this Application Manual for the correct amounts.

1. Primer: Apply FTS 100 Concrete Primer (104 fluid oz.) and FTS 101 Adhesion promotor (24 oz.) .) at a rate of 90 sf/gal to yield 17 mils to all surfaces. Allow to dry approximately 45 minutes.
2. Body coat: Apply 2 gallons of FTS 200 Body coat mixed with one can of 700 RTS series pigment and one bag of FTS 40 SL filler and apply at a rate of 40 sf. ft. to yield 125 dry mils.
3. Topcoats: Mix and apply first FTS 450 Topcoat at a rate of 80 sf/gal to yield 20 dry mils. Apply second FTS 450 Topcoat at a rate of 100 sf/gal to yield 16 dry mils.
4. System may be opened to traffic 1 hour after application.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	FTS100/FTS 101	Clear	See BPO chart 104 oz. FTS 100 24 oz. FTS 101	90 sf/gal	17	When dry approximately 1 hour
Membrane Coat	FTS 200	Clear	See BPO chart 2 gal of FTS 200	46 sf/gal	35	When dry approximately 1 hour
Body Coat	FTS 200 + pigment + FTS 40 SL Filler + 20/40 mesh sand	Clear	See BPO chart 2 gal of FTS 200 + 8 oz. pigment + one bag FTS 40 SL Filler	40 sf per mix	125	When dry approximately 1 hour
1st Topcoat	FTS 450 pigmented	Clear	See BPO chart	80 sf/gal	20	When dry approximately 1 hour
2nd Topcoat	FTS 450 pigmented	Clear	See BPO chart	100 sf/gal	16	When dry approximately 1 hour

FTS Heavy Duty SL Roll Coat Solid Color System

Materials

- Initiator: FTS 600 Initiator (960JB)
- Primer: FTS 100 Concrete MMA primer (883J9) FTS 101 Adhesion promotor (884J9)
- Body Coat: FTS 300 Body Coat MMA coating (887J9)
- Topcoat: 450 RTS Topcoat MMA coating (891J9)
- Filler: 86468 Silica Flour
- Aggregate: 86364 20/40 mesh sand

Average Total Dry Film Thickness

- Nominal 1/16" (approximately 75 dry mils)

Application Instructions

Important: All fluid-applied FTS materials must be mixed with Neogard FTS 600 BPO Initiator before applying. Refer to the FTS BPO Initiator Dosage Chart in the Support Information section of this Application Manual for the correct amounts.

1. Primer: Apply FTS 100 Concrete Primer (104 fluid oz.) and FTS 101 Adhesion promotor (24 oz.) at a rate of 90 sf/gal to yield 17 mils to all surfaces. Allow to dry approximately 45 minutes.
2. Body Coat: Apply 1 gallon of FTS 300 Body coat mixed with one can of 700 RTS series pigment and 32 oz. of 86468 Silica flour and apply at a rate of 80 sf. ft. to yield 20 dry mils. Immediately broadcast 20/40 mesh, evenly distributed, to refusal into wet coating (50 lbs per 100 sf)
3. Topcoat: Mix and apply first FTS 450 Topcoat at a rate of 80 sf/gal to yield 20 dry mils. Apply second FTS 450 Topcoat at a rate of 100 sf/gal to yield 16 dry mils.
4. System may be opened to traffic 1 hour after application.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Dry Film Thickness	Recoat Window at 75°F/23°C
Primer	FTS100/FTS 101	Clear	See BPO chart 104 oz. FTS 100 24 oz. FTS 101	90 sf/gal	17	When dry approximately 1 hour
Base Coat	FTS 300 + pigment + 86468 Silica flour + 20/40 mesh sand	Clear	See BPO chart 1 gal of FTS 300 + 8 oz. pigment + 32 oz. 86468 Silica flour	80 sf per mix	20	When dry approximately 1 hour
1st Topcoat	FTS 450 pigmented	Clear	See BPO Chart	80 sf/gal	20	When dry approximately 1 hour
2nd Topcoat	FTS 450 pigmented	Clear	See BPO Chart	100 sf/gal	16	When dry approximately 1 hour

FTS Heavy Duty SL Solid Color System

Materials

- Initiator: FTS 600 Initiator (960JB)
- Primer: FTS 100 Concrete MMA primer (883J9) FTS 101 Adhesion promotor (884J9)
- Body Coat: FTS 300 Body Coat MMA coating (887J9)
- Topcoat: 450 RTS Topcoat MMA coating (891J9)
- Filler: FTS 40 SL Filler (390JB)
- Aggregate: 86364 20/40 mesh sand

Average System Thickness

- Nominal 3/16" (approximately 187 dry mils)

Application Instructions

Important: All fluid-applied FTS materials must be mixed with Neogard FTS 600 BPO Initiator before applying. Refer to the FTS BPO Initiator Dosage Chart in the Support Information section of this Application Manual for the correct amounts.

1. Primer: Apply FTS 100 Concrete Primer (104 fluid oz.) and FTS 101 Adhesion promotor (24 oz.) at a rate of 90 sf/gal to yield 17 mils to all surfaces. Allow to dry approximately 45 minutes.
2. Body Coat: Apply 1.75 gallons of FTS 300 Body coat mixed with one can of 700 RTS series pigment and one bag of FTS 40 SL filler and apply at a rate of 36-40 sf. ft. to yield 125 dry mils. Immediately broadcast 20/40 mesh, evenly distributed, to refusal into wet coating (50 lbs per 100 sf)
3. Topcoats: Mix and apply first FTS 450 Topcoat at a rate of 80 sf/gal to yield 20 dry mils. Apply second FTS 450 Topcoat at a rate of 100 sf/gal to yield 16 dry mils.
4. System may be opened to traffic 1 hour after application.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Dry Film Thickness	Recoat Window at 75°F/23°C
Primer	FTS100/FTS 101	Clear	See BPO chart 104 oz. FTS 100 24 oz. FTS 101	90 sf/gal	17 mils	When dry approximately 1 hour
Body Coat	FTS 300 + RTS 700 pigment + FTS 40 SL Filler + 20/40 mesh sand	Clear	See BPO chart 1.75 gal of FTS 300 + one can RTS 700 pigment + one bag FTS 40 SL Filler	36-40 sf per mix	125 mils	When dry approximately 1 hour
1st Topcoat	FTS 450 pigmented	Clear	See BPO chart	80 sf/gal	20 mils	When dry approximately 1 hour
2nd Topcoat	FTS 450 pigmented	Clear	See BPO chart	100 sf/gal	16 mils	When dry approximately 1 hour

FTS Solid Color Cove Base System

Materials

- Initiator: FTS 600 Initiator (960JB)
- Primer: FTS 100 Concrete MMA primer (883J9) FTS 101 Adhesion promotor (884J9)
- Body Coat: FTS 301 Body Coat MMA coating (888J9)
- Topcoat: 450 RTS Topcoat MMA coating (891J9)
- Aggregate: 7992 16/30 mesh sand

Average System Thickness

- Nominal 3/16" 16/30 mesh sand

Application Instructions

Important: All fluid-applied FTS materials must be mixed with Neogard FTS 600 BPO Initiator before applying. Refer to the FTS BPO Initiator Dosage Chart in the Support Information section of this Application Manual for the correct amounts.

1. Primer: Apply FTS 100 Concrete Primer (104 fluid oz.) and FTS 101 Adhesion promotor (24 oz.) at a rate of 90 sf/gal to yield 17 mils to all surfaces. Allow to dry approximately 45 minutes.
2. Cove Coat: Trowel 2 quarts of FTS 301 mixed with 3 quarts of 7992 16/30 mesh sand =12 lineal feet @ 4” high.
3. Topcoats: Mix and apply first FTS 450 Topcoat at a rate of 80 sf/gal to yield 20 dry mils. Apply second FTS 450 Topcoat at a rate of 100 sf/gal to yield 16 dry mils.
4. System may be opened to traffic 1 hour after application.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Dry Film Thickness	Recoat Window at 75°F/23°C
Primer	FTS100/FTS 101	Clear	See BPO chart 104 oz. FTS 100 24 oz. FTS 101	90 sf/gal	17 mils	When dry approximately 1 hour
Cove Coat	FTS 301 + 7992 16/30 mesh sand	Clear	See BPO chart 2 quarts of FTS 301 + 3 quarts 7992 16/30 mesh sand	12 lf per mix @ 4” high	125 mils	When dry approximately 1 hour
1st Topcoat	FTS 450 pigmented	Clear	See BPO chart	3/16” thick with cove strip	20 mils	When dry approximately 1 hour
2nd Topcoat	FTS 450 pigmented	Clear	See BPO chart	100 sf/gal	16 mils	When dry approximately 1 hour

FTS Heavy Duty SL Flexible Solid Color System

Materials

- Initiator: FTS 600 Initiator (960JB)
- Primer: FTS 100 Concrete MMA primer (883J9) FTS 101 Adhesion promotor (884J9)
- Body Coat: FTS 200 Body Coat MMA coating (885J9)
- Topcoat: 450 RTS Topcoat MMA coating (891J9)
- Filler: FTS 40 SL Filler (390JB)
- Aggregate: 86364 20/40 mesh sand

Average Total Dry Film Thickness

- Nominal 3/16" (approximately 187 dry mils)

Application Instructions

Important: All fluid-appied FTS materials must be mixed with Neogard 600 BPO Initiator before applying. Refer to the FTS BPO Initiator Dosage Chart in the Support Information section of this Application Manual for the correct amounts.

1. Primer: Apply FTS 100 Concrete Primer (104 fluid oz.) and FTS 101 Adhesion promotor (24 oz.) .) at a rate of 90 sf/gal to yield 17 mils to all surfaces. Allow to dry approximately 45 minutes.
2. Base Coat: Apply 2 gallons of FTS 200 Body coat mixed with 8 oz. pigment and one bag of FTS 40 SL filler and apply at a rate of 40 sf. ft. to yield 125 dry mils. Immediately broadcast 20/40 mesh, evenly distributed, to refusal into wet coating (50 lbs per 100 sf).
3. Topcoat: Mix and apply first FTS 450 Topcoat at a rate of 80 sf/gal to yield 20 dry mils. Apply second FTS 450 Topcoat at a rate of 100 sf/gal to yield 16 dry mils).
4. System may be opened to traffic 1 hour after application.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	FTS100/FTS 101	Clear	See BPO chart 104 oz. FTS 100 24 oz. FTS 101	90 sf/gal	17	When dry approximately 1 hour
Base Coat	FTS 200 + pigment + FTS 40 SL Filler + 20/40 mesh sand	Clear	See BPO chart 1.75 gal of FTS 200 + 8 oz. pigment + one bag FTS 40 SL Filler	40 sf/gal	125	When dry approximately 1 hour
1st Topcoat	70704/70705	Clear	See BPO Chart	80 sf/gal	20	When dry approximately 1 hour
2nd Topcoat	70704/70705	Clear	See BPO Chart	160 sf/gal	4/4	When dry approximately 1 hour

Novolac 32

Limitations

System should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills.

Materials

- Aggregate: Silica quartz 86364 (66030) blended aggregate.
- Base Coat: 70714/70715 (45060) clear epoxy.
- Novolac Epoxy: 70704/70705 (45020) pigmented epoxy.
- Optional Texture: 86500 (66XJB) Neogrip spheres.

Average Total Dry Film Thickness

- 32 dry mils (excluding Optional Texture Coat)

Application Instructions

1. Primer: Mix and apply 70714/70715 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C).
2. Base Coat: Mix and apply 70704/70705 at a rate of 100 sf/gal (16 wet mils) to yield 16 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C).
3. Topcoat: Mix and apply 70704/70705 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. If applying Optional Texture Coat, allow Topcoat to cure until tack free (8–9 hours at 75°F/23°C).
4. Optional Texture Coat: For limited slip resistance apply a third coat of 70704/70705 pigmented Novolac epoxy. Add 20 ounces by volume of Neogrip spheres to 5 gallons of 70704. Mix for 3 minutes, then add 70705 hardener and mix for an additional 3 minutes. Apply at a rate of 400 sf/gal (4 wet mils) to yield 4 dry mils.
    - Installing the Optional Texture Coat thicker than 4 wet mils will cause the Neogrip spheres to sink into the 70704/70705 Novolac epoxy coating, thus eliminating the desired slip-resistant texture.
    - To prevent the Neogrip spheres from settling in the bucket, remix the material every 10–15 minutes.
5. Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load. System should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
Base Coat	70704/70705	Pigmented	3:2	100 sf/gal	16/16	While tack-free (8–24 hrs)
Topcoat	70704/70705	Pigmented	3:2	200 sf/gal	8/8	While tack-free (8–24 hrs)
Optional Texture Coat	70704/70705 86500 Neogsrip Spheres	Pigmented Clear	3:2 20 oz/5 oz	400 sf/gal	4/4	NA

Novolac 125

Limitations

System should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills.

Materials

- Aggregate: Silica quartz 86364 (66030) blended aggregate.
- Fillers: P1934 (D261) fumed silica and 86364 blended aggregates
- First Base Coat: 70714/70715 (45060) pigmented epoxy.
- Novolac Epoxy: 70704/70705 (45020) pigmented epoxy.

Average Total Dry Film Thickness

- 1/8' double broadcast (approximately 125 dry mils)

Application Instructions

1. First base coat First Base Coat: Mix and apply 70714/70715 clear epoxy at a minimum rate of 80 square feet per gallon (20 mils DFT) to prepared substrate with a notched squeegee or notched trowel. Back roll with a short napped phenolic roller to assure even coverage.
   ◦ Aggregate: Broadcast blended 86364 silica quartz into wet epoxy base coat until refusal at a rate of approximately 50 pounds per 100 square feet. Maintain a one to two foot wet edge without any aggregate to allow for a smooth transition to the next pass of neat epoxy. Allow to cure 8 to 12 hours at 70°F (21°C). Remove excess aggregate and lightly sand with a circular floor sander and #50 grit sandpaper to remove any rough spots.
2. Second Base Coat: Mix and apply 70704/70705 pigmented novolac epoxy at a rate of 80 square feet per gallon (20 mils DFT) to prepared substrate with a notched squeegee or notched trowel. Back roll with a short napped phenolic roller to assure even coverage. Topcoat: Mix and apply 70704/70705 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. If applying Optional Texture Coat, allow Topcoat to cure until tack free (8–9 hours at 75°F/23°C).
   ◦ Aggregate: Broadcast blended 86364 silica quartz into wet epoxy base coat until refusal at a rate of approximately 50 pounds per 100 square feet. Maintain a one to two foot wet edge without any aggregate to allow for a smooth transition to the next pass of neat epoxy. Allow to cure 8 to 12 hours at 70°F (21°C). Remove excess aggregate and lightly sand with a circular floor sander and #50 grit sandpaper to remove any rough spots.
3. Steps 1 and 2 achieve a nominal thickness of 1/16". Applying Steps 1 and 2 achieves a nominal system thickness of 1/8". Repeat Steps 1 and 2 until required thickness is achieved. The minimum thickness for a broadcast system should be 1/8".
4. First Seal Coat: mix and apply the 70704/70705 pigmented Novolac epoxy at a rate of f 160 square feet per gallon (10 mils DFT).
5. Second Seal Coat: Mix and apply 70704/70705 novolac pigmented epoxy at a rate of 200 square feet per gallon (8 mils DFT).
6. Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load. System should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills.

Novolac 125 continued

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
Base Coat	70704/70705	Pigmented	3:2	100 sf/gal	16/16	While tack-free (8–24 hrs)
Topcoat	70704/70705	Pigmented	3:2	200 sf/gal	8/8	While tack-free (8–24 hrs)
Optional Texture Coat	70704/70705	Pigmented	3:2	400 sf/gal	4/4	NA

SkyGard LD

Materials

- Texture (Optional): 86500 (66XJB) Neogrip spheres.
- Primer: 70714/70715 (45060) clear or pigmented epoxy.
- Topcoat (two options):
  - 70817/70818 (57070) clear or pigmented Chemical Resistant Urethane (CRU).
  - 70817-01/70818 (5707016640) white CRU.

Average Total Dry Film Thickness

- 16 dry mils (excluding Optional Texture Coat)

• Application Instructions

1. Primer: Mix and apply 70714/70715 clear epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Primer should be tack free (8–9 hours at 75°F/23°C) before applying base coat.
2. Topcoat: Pre-mix 70817 series for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Apply mixed 70817/70818 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils and allow to cure 11 hours at 75°F/23°C before allowing foot traffic. If applying the Optional Texture Coat, allow to cure until tack free (8–9 hours at 75°F/23°C).
3. Optional Texture Coat: Pre-mix 70817 series for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Add 86500 Neogrip spheres at the rate of 8–12 ounces by volume to 2 gallons of mixed 70817/70818 and mix for 3 minutes. Apply at a rate of 400 sf/gal (4 wet mils) to yield 4 dry mils.
   - Installing the Optional Texture Coat at a rate greater than 4 wet mils will cause the Neogrip spheres to sink into the 70817/70818 urethane coating, thus eliminating the desired slip-resistant texture.
   - To prevent the Neogrip spheres from settling in the bucket, remix the material every 10–15 minutes.
   - Must be applied within 24 hours of initial topcoat. If this 24 hour recoat window is exceeded, lightly sand topcoat using 60–80 grit sandpaper, vacuum thoroughly and solvent wipe before proceeding
4. Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load, and 7 days before floor is subjected to chemical exposure/spills.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack-free (8–24 hrs)
Topcoat	70817/70818	Pigmented	1:1	200 sf/gal	8/8	While tack-free (8–9 hrs)
Optional Texture Coat	70817/70818	Pigmented	1:1	400 sf/gal	4/4	NA
	86500 Neogrip Spheres	*Clear*	*Mixed*	*8–12 oz/2 gal*		

SkyGard MD

Materials

- Texture (Optional): 86500 (66XJB) Neogrip spheres.
- Primer: 70714/70715 (45060) clear or pigmented epoxy.
- Base Coat: 70714/70715 (45060) pigmented epoxy.
- Topcoat (two options):
  - 70817/70818 (57070) clear or pigmented Chemical Resistant Urethane (CRU).
  - 70817-01/70818 (5707016640) white CRU.

Average Total Dry Film Thickness

- 36 dry mils (excluding Optional Texture Coat)

Application Instructions

1. Primer: Mix and apply 70714/70715 clear epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Primer should be tack free (8–9 hours at 75°F/23°C) before applying base coat.
   - If base coat cannot be applied within 24 hours of prime coat application, the prime coat must be lightly sanded with 60-80 grit sandpaper, solvent wiped with urethane grade solvent, and re-primed with 70714/70715 clear epoxy. If this procedure is not strictly followed, inner coat delamination will occur.
2. Base Coat: Mix and apply 70714/70715 at a rate of 80 sf/gal (20 wet mils) to yield 20 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C).
3. Topcoat: Pre-mix 70817 series for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Apply mixed 70817/70818 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils and allow to cure 11 hours at 75°F/23°C before allowing foot traffic. If applying the Optional Texture Coat, allow to cure until tack free (8–9 hours at 75°F/23°C).
4. Optional Texture Coat: Pre-mix 70817 series for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Add 86500 Neogrip spheres at the rate of 8–12 ounces by volume to 2 gallons of mixed 70817/70818 and mix for 3 minutes. Apply at a rate of 400 sf/gal (4 wet mils) to yield 4 dry mils.
   - Installing the Optional Texture Coat at a rate greater than 4 wet mils will cause the Neogrip spheres to sink into the 70817/70818 urethane coating, thus eliminating the desired slip-resistant texture.
   - To prevent the Neogrip spheres from settling in the bucket, remix the material every 10–15 minutes.
   - Must be applied within 24 hours of initial topcoat. If this 24 hour recoat window is exceeded, lightly sand topcoat using 60–80 grit sandpaper, vacuum thoroughly and solvent wipe before proceeding.
5. Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load, and 7 days before floor is subjected to chemical exposure/spills.

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SkyGard MD continued

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack-free (8–9 hrs)
Base Coat	70714/70715	Pigmented	2:1	80 sf/gal	20/20	While tack-free (8–9 hrs)
Topcoat	70817/70818	Pigmented	1:1	200 sf/gal	8/8	While tack-free (8–9 hrs)
Optional Texture Coat	70817/70818	Pigmented	1:1	400 sf/gal	4/4	NA
	86500 Neogrip Spheres	*Clear*	*Mixed*	*8–12 oz/2 gal*		

SkyGard HD

Materials

- Fillers: 86468 (66040) silica flour.
- Texture (Optional): 86500 (66XJB) Neogrip spheres.
- Primer: 70714/70715 (45060) clear epoxy.
- Base Coat: 70714/70715 (45060) pigmented epoxy.
- Topcoat (two options):
  - 70817/70818 (57070) clear or pigmented Chemical Resistant Urethane (CRU).
  - 70817-01/70818 (5707016640) white CRU.

Average Total Dry Film Thickness

- 56 dry mils (excluding Optional Texture Coat)

Application Instructions

1. First base coat First Base Coat: Mix and apply 70714/70715 clear epoxy at a minimum rate of 80 square feet per Primer: Mix and apply 70714/70715 clear epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Primer should be tack free (8–9 hours at 75°F/23°C) before applying base coat.
   - If base coat cannot be applied within 24 hours of primer application, the primer must be lightly sanded with 60-80 grit sandpaper, solvent wiped with urethane grade solvent, and re-primed with 70714/70715 clear epoxy. If this procedure is not strictly followed, inner coat delamination will occur.
2. Base Coat: Mix 70714/70715 pigmented epoxy for three minutes. Add silica flour 86468 at a ratio of 1:1 with mixed epoxy. Continue mixing until a smooth consistency is attained. Spread mix using a 1/4" notched trowel or squeegee at a minimum rate of 40 sf/gal to achieve 40 mils DFT. Allow to self-level and de-air with a spiked roller. Allow to cure 8–12 hours at 70°F (21°C) or until tack free.
3. Topcoat: Pre-mix 70817 series for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Apply mixed 70817/70818 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils and allow to cure 11 hours at 75°F/23°C before allowing foot traffic. If applying the Optional Texture Coat, allow to cure until tack free (8–9 hours at 75°F/23°C).
4. Optional Texture Coat: Pre-mix 70817 series for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Add 86500 Neogrip spheres at the rate of 8–12 ounces by volume to 2 gallons of mixed 70817/70818 and mix for 3 minutes. Apply at a rate of 400 sf/gal (4 wet mils) to yield 4 dry mils.
   - Installing the Optional Texture Coat at a rate greater than 4 wet mils will cause the Neogrip spheres to sink into the 70817/70818 urethane coating, thus eliminating the desired slip-resistant texture.
   - To prevent the Neogrip spheres from settling in the bucket, remix the material every 10–15 minutes.
   - Must be applied within 24 hours of initial topcoat. If this 24 hour recoat window is exceeded, lightly sand topcoat using 60–80 grit sandpaper, vacuum thoroughly and solvent wipe before proceeding.
5. Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load, and 7 days before floor is subjected to chemical exposure/spills.

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SkyGard HD continued

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack-free (8–9 hrs)
Base Coat	70714/70715	Pigmented	2:1	80 sf/gal	20/20	While tack-free (8–9 hrs)
Topcoat	70817/70818	Pigmented	1:1	200 sf/gal	8/8	While tack-free (8–9 hrs)
Optional Texture Coat	70817/70818	Pigmented	1:1	400 sf/gal	4/4	NA
	86500 Neogrip Spheres	*Clear*	*Mixed*	*8–12 oz/2 gal*		

SkyGard MRO

Materials

- Aggregate: 86364 silica quartz or 20/40 mesh aluminum oxide aggregate
- Slurry Base Coat: 70714/70715 (45060) clear epoxy
- First Seal Coat: 70714/70715 pigmented epoxy
- Second Seal Coat (three options):
  - 70714/70715 pigmented epoxy.
  - 70817/70818 (57070) clear or pigmented Chemical Resistant Urethane (CRU).
  - 70817-01/70818 (5707016640) white CRU.

Average Total Dry Film Thickness

- 80 dry mils minimum

Application Instructions

1. Slurry Base Coat: Mix 70714/70715 pigmented epoxy for three minutes. Add 86468 silica flour at a ratio of 1:1 with mixed epoxy. Continue mixing until a smooth consistency is attained. Spread mix using a 1/4" notched trowel or squeegee at a minimum rate of 40 sf/gal to achieve 40 mils DFT. Allow to self-level and de-air with a spiked roller. Allow to cure 8–12 hours at 70°F (21°C) or until tack free.
2. Aggregate: Broadcast 86364 silica quartz or 20/40 mesh aluminum oxide into wet Slurry Base Coat until refusal (approximately 100 lb/100 sf). Maintain a one to two foot wet edge without any aggregate to allow for a smooth transition to the next application of epoxy matrix. Allow to cure 8–12 hours at 75°F/23°C. Remove excess aggregate and lightly sand with a circular floor sander and #50 grit sandpaper to remove rough spots.
3. To achieve additional thickness, repeat Steps 1 and 2.
4. First Seal Coat: Mix and apply 70714/70715 pigmented epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C).
5. Second Seal Coat:

   A. For general conditions: Mix and apply 70714/70715 pigmented epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils.

   B. For high resistance to Skydrol and other chemicals: Pre-mix 70817 series for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Apply mixed 70817/70818 at a rate of 285 sf/gal (5 wet mils) to yield 5 dry mils.
6. Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load, and 7 days before floor is subjected to chemical exposure/spills.

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TrafficTuff

Materials

- Epoxy: 70714/70715-09 (45062) clear.
- Topcoat (choose one):
  - UV-resistant, exterior application: FC7540/FC7964 (47QJB) aliphatic urethane.
  - Non-UV resistant, interior application: FC7510/FC7961 (47PJB) aromatic urethane.
  - Non-UV resistant, interior application: 70714/70715 (45062) pigmented epoxy.

Average Total Dry Film Thickness

- 28 dry mils (excluding Optional Texture Coat)

Application Instructions

1. Base Coat: Thoroughly mix 70714/70715-09 and apply at a rate of 100 sf/gal to yield 16 dry mils. Apply to prepared substrate with a notched squeegee, notched trowel, or short nap (3/8") phenolic core roller. Backroll with a short-napped phenolic core roller.
   - Aggregate: Broadcast 7992-U into wet epoxy base coat at a rate of approximately 15 lbs/100sf. Maintain a one- to two-foot wet edge without any aggregate to allow for a smooth transition to the next pass of neat epoxy.
   - Allow to cure 8–9 hours at 75°F/23°C. Remove excess aggregate.
2. Topcoat (choose one):

   A. UV-resistant, exterior application: Thoroughly mix FC7540/FC7964 and apply at a rate of approximately 120 sf/gal to yield 12 dry mils.

   B. Non-UV resistant, interior application: Thoroughly mix FC7510/FC7961 and apply at a rate of approximately 133 sf/gal to yield 12 dry mils.

   C. Non-UV resistant, interior application: Thoroughly mix 70714/70715 and apply at a rate of 133 sf/gal to yield 12 dry mils.
3. Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load, or until completely cured for 7 days.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Base	70714/70715-09	Clear	2:1	100 sf/gal	12/12	While tack-free (8–24 hrs)
Aggregate	7992-U	NA	NA	15 lbs/100 sf		
Topcoat: **UV Exterior** **Non-UV Interior** **Non-UV Interior**	 FC7540/FC7964 FC7510/FC7961 70714/70715	 Pigmented	 2:1 3:1 2:1	 120 sf/gal 133 sf/gal 133 sf/gal	12/12	NA

Waterproofing Rider

Use

As a waterproofing membrane for flooring systems where water, chemicals, hazardous waste materials or other fluid types must be contained.

Important: Flooring Systems installed over a Waterproofing Rider membrane must be minimum 32 dry mils, exclusive of aggregates.

Materials

- Primer (choose one):
  - 7779/7781 (254JB) epoxy.
  - 70714/70715 (45060) epoxy.
- Waterproofing Membrane (choose one):
  - FC7500/FC7960 fast-cure urethane.
  - 7430 series urethane.
- Aggregate: 7992 (66010) silica quartz sand or other aggregate approved by Neogard

Application Instructions

1. Primer: Mix epoxy primer in accordance with procedures outlined by Neogard. Apply at a rate of 200–300 square feet per gallon to prepared substrate. Primer should be tack free before applying waterproofing membrane.
2. Base Coat: Apply FC7500/FC7960 urethane coating at a rate of 1.25 gal/100 sf (80 sf/gal) or 7430 series urethane coating at a rate of 1.66 gal/100 sf (60 sf/gal) to deck surfaces in strict accordance with procedures outlined by Neogard. Extend base coat over cracks and control joints which have received treatment.
3. Aggregate Coat (Not applicable if applying a smooth, non-aggregated flooring system): When base coat is dry, recoat surface with 0.5 gallon per 100 square feet (200 sf/gal) of FC7500/FC7960 or 7430 series urethane coating and immediately broadcast aggregate at a rate of approximately 12–15 pounds per 100 square feet and allow to cure.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	7779/7781 70714/70715	NA	4:1 2:1	200–300 sf/gal	Up to 8/8	While tack-free (8–24 hrs)
Base Coat	FC7500/FC7960 7430	NA	9:1 NA	80 sf/gal 60 sf/gal	20/20 27/20	While tack-free (8–24 hrs)
Aggregate Coat (if applicatble)	FC7500/FC7960 7430 series	NA	9:1 NA	100 sf/gal	16/16 16/12	NA
	7992 aggregate	*NA*	*NA*	*12–15 lbs/100sf*		

SkyGard MRO continued

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Slurry Base Coat	70714/70715	Clear	2:1	40 sf/gal	40/40	While tack-free (8– 32 hrs)
	86468 #200 Silica Flour	*Natural*	*Mixed*			
Aggregate	*86364 Silica Quartz Sand* or *20-40 Aluminum Oxide*	*Natural*	*Broadcast*	*100 lbs/ 100sf*		
1st Seal Coat	70714/70715	Pigmented	2:1	200 sf/gal	8/8	While tack-free (8– 32 hrs)
2nd Seal Coat: Standard Finish	70714/70715	Pigmented	2:1	200 sf/gal	8/8	NA
or						
2nd Seal Coat: High Chemical Resistance Finish	70817/70818	Pigmented	1:1	285 sf/gal	5/5	NA

Application: Decorative Systems

Important General Principles

Factors That Affect Dry Film Thickness

Many factors can affect the amount of wet coating required to yield proper dry film thickness, including: Volume of solids; thinning; surface profile; application technique and equipment; overspray; squeegee; brush and roller wet out; container residue; spills and other waste.

To ensure that specified dry film thickness is achieved, use a wet mil gauge to check thickness of wet coating applied, adjusting as needed for those factors which directly affect the dry film build.

Special Application Windows

24-Hour Recoat Window: Applies to Primer Coats, Optional Chemical Resistant Topcoats, Optional Texture Coats with Neogrip Spheres, Second Seal Coats, or any other neat coat without aggregate. These coats must be applied within 24 hours after the previously applied coat is tack-free for the subsequent coat to properly bond. If this recoat window is missed, the surface must be lightly sanded to a dull finish and vacuumed, then solvent wiped with xylene or 7055 Odorless Reducer.

The 24-hour recoat window does not apply if aggregate was broadcast into the coating, which provides the necessary surface profile for the subsequent coat to bond.

Retouch: When applying the last pigmented coat, of either epoxy or urethane, there is a retouch time of 15 minutes. If retouch occurs beyond this 15 minute window, different shades in color may appear where the roller is applied, making it necessary to backroll the entire floor area.

Special Product Instructions

70869/70819

- Relative humdity during application and curing must be below 80%.
- Do not split 70869/70819 polyaspartic kits.
- Do not thin 70869/70819 polyaspartic.

Applicator is responsible for applying sufficient coating to the substrate.

Neocrete SL Flake

Materials

- Neocrete SL mix (48012):
  - Resin: 70800 (48019) series, gray, tan, or red in color.
  - Hardener: 70801 (98010).
  - Powder: Neocrete SL 70804 (6602209990P038, 38-lb bag).
- Topcoat (two options):
  - 70817/70818 (57070) clear Chemical Resistant Urethane (CRU).
  - 70869/70819 (57031) clear Polyaspartic.
- Color Chips: Integrally colored, random sized chips (contact Neogard for source of supply).

Average System Thickness

- Nominal 3/16” (approximately 187 dry mils)

Application Instructions

1. Primer: Neocrete SL Flake does not require a primer.
2. Cementitious Polyurethane Mix:
   A. To avoid color variation from mix to mix, scrape all of the pre-mixed 70800 from the 70800 can into the mixing container.
   B. Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener. Mix 141 fluid ounces of 70800 (one 2-gallon can) with 90 fluid ounces of 70801 (one 1-gallon can). Slowly add one 38-pound bag of 70804 powder to the resin mix. Mix with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color. Continue mixing until the powder has been uniformly blended with the resin mix. Mix blended material for an additional 2 minutes (time will vary depending on temperature conditions).
   C. Pour the cementitious polyurethane mix onto the floor and spread using a gauge rake. Immediately backroll with a spike roller to de-air and level the material.
   D. One unit of mixed material covers approximately 32 square feet at 3/16" thickness. Thickness and coverage rate can vary due to finish of substrate.
3. Color Chips: Immediately broadcast blended color chips into wet cementitious polyurethane mix at a rate of 15–20 lbs. by weight per 100 square feet until desired pattern is achieved. Make sure the blended color chips are thrown up into the air so they will fall vertically into the wet cementitious polyurethane mix. Maintain a one to two foot wet edge without any chips to allow for a smooth transition to the next application of cementitious polyurethane mix. Allow to cure 8–12 hours at 70°F (21°C).
   - After curing, remove excess aggregate and lightly sand with a circular floor sander and #50 grit sandpaper to remove any rough spots. All debris from sanding must be removed to provide a clean, moisture-free surface.
4. Topcoat:
   A. CRU: Pre-mix 70817 for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Apply mixed 70817/70818 at a rate of 125 square feet per gallon to achieve 12 mils DFT to prepared substrate. Allow to cure 8–12 hours at 75°F/23°C before allowing foot traffic.
   B. Polyaspartic: Pre-mix 70869 for 3 minutes. Add entire contents of 70819 container to 70869 container and immediately mix for 3 minutes. Mix using a slow-speed drill with a Jiffy Mixer paddle.

Take precautions not to introduce air into the material while mixing. Apply mixed 70869/70819 at a rate of 125 square feet per gallon to achieve 12 mils DFT to prepared substrate.

5. Allow to cure 7 days before floor is subjected to chemical exposure/spills.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Cementitious Polyurethane Mix	70800 Resin 70801 Hardener 70804 Powder	Gray, Red, Desert	141 oz 90 oz 38 lb	32 sf at 3/16" thickness per mixed unit	187/187	While tack-free (8–12 hrs)
Broadcast	Colored Micro Flakes	Selected Blend	Desired pattern	15–20 lbs/100 sf		
Topcoat	70817/70818 70869/70819	Clear	1:1 Kit	125 sf/gal	12/12	NA

Neocrete SL Quartz

Materials

- Neocrete SL mix (48012):
  - Resin: 70800 (48019) series, gray, tan, or red in color.
  - Hardener: 70801 (98010).
  - Powder: Neocrete SL 70804 (6602209990P038, 38-lb bag).
- Seal Coats (two options):
  - 70817/70818 (57070) clear Chemical Resistant Urethane (CRU).
  - 70869/70819 (57031) clear Polyaspartic.
- Aggregate: Blended Color Quartz

Average System Thickness

- Nominal 3/16” (approximately 187 dry mils)

Application Instructions

1. Primer: Neocrete SL Quartz does not require a primer.
2. Cementitious Polyurethane Mix:

   A. To avoid color variation from mix to mix, scrape all of the pre-mixed 70800 from the 70800 can into the mixing container.

   B. Pre-mix 70800 for a minimum of one minute before mixing with 70801 hardener. Mix 141 fluid ounces of 70800 (one 2-gallon can) with 90 fluid ounces of 70801 (one 1-gallon can). Slowly add one 38-pound bag of 70804 powder to the resin mix. Mix with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color. Continue mixing until the powder has been uniformly blended with the resin mix. Mix blended material for an additional 2 minutes (time will vary depending on temperature conditions).

   C. Pour the cementitious polyurethane mix onto the floor and spread using a gauge rake. Immediately backroll with a spike roller to de-air and level the material.

   D. One unit of mixed material covers approximately 32 square feet at 3/16" thickness. Thickness and coverage rate can vary due to finish of substrate.
3. Aggregate: Immediately broadcast aggregate (blended color quartz), evenly distributed, in wet cementitious polyurethane mix until refusal at a rate of approximately 40 pounds per 100 square feet. Make sure the aggregate is thrown up into the air so it will fall vertically into the wet cementitious polyurethane mix. Note: Maintain a one to two foot wet edge without any aggregate to allow for a smooth transition to the next application of cementitious polyurethane mix. Allow to cure 8–12 hours at 70°F (21°C). After curing, remove excess aggregate and lightly sand with a circular floor sander and #50 grit sandpaper to remove any rough spots. All debris from sanding must be removed to provide a clean, moisture free surface.
4. Seal Coats:

   A. CRU:

      1. First Seal Coat: Pre-mix 70817 for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Apply mixed 70817/70818 at a rate of 160 square feet per gallon to achieve 10 mils DFT to prepared substrate and allow to cure 6 to 8 hours at 75°F/23°C.

2. Second Seal Coat: Pre-mix 70817 for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Apply mixed 70817/70818 at a rate of 200 square feet per gallon to achieve 8 mils DFT and allow to cure 8–12 hours at 75°F/23°C. before allowing foot traffic.

B. Polyaspartic: (Note: Do not split kits. Do not thin.)

1. First Seal Coat: Pre-mix 70869 for 3 minutes. Add entire contents of 70819 container to 70869 container and immediately mix for 3 minutes. Mix using a slow-speed drill with a Jiffy Mixer paddle. Take precautions not to introduce air into the material while mixing. Apply mixed 70869/70819 at a rate of 125 square feet per gallon to achieve 12 mils DFT to prepared substrate. Allow to cure 8–12 hours at 75°F/23°C before allowing foot traffic.
2. Second Seal Coat: Pre-mix 70869 for 3 minutes. Add entire contents of 70819 container to 70869 container and immediately mix for 3 minutes. Mix using a slow-speed drill with a Jiffy Mixer paddle. Take precautions not to introduce air into the material while mixing. Apply mixed 70869/70819 at a rate of 125 square feet per gallon to achieve 12 mils DFT to prepared substrate. Allow to cure 8–12 hours at 75°F/23°C before allowing foot traffic.

5. Allow to cure 7 days before floor is subjected to chemical exposure/spills.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Cementitious Polyurethane Mix	70800 Resin 70801 Hardener 70804 Powder	Gray, Red, Desert	141 oz 90 oz 38 lb	32 sf at 3/16" thickness per mixed unit	187/187	While tack-free (8–12 hrs)
Broadcast	Color Quartz	Selected Blend	Broadcast	40 lbs/100 sf		
1st CRU Seal Coat	70817/70818	Clear	1:1	160 sf/gal	10/10	While tack-free (8–9 hrs)
2nd CRU Seal Coat	70817/70818	Clear	1:1	200 sf/gal	8/8	NA
or						
1st Polyaspartic Seal Coat	70869/70819	Clear	Kit	160 sf/gal	10/10	While tack-free (6–8 hrs)
2nd Polyaspartic Seal Coat	70869/70819	Clear	Kit	200 sf/gal	8/8	NA

Neoflake

Materials

- Color Chips: Integrally colored, random sized chips (contact Neogard for source of supply)
- Primer: 70714/70715 (45060) clear epoxy
- Base Coat: 70714/70715 pigmented epoxy
- Seal Coats: 70734/70735 (45040) clear epoxy
- Optional Texture: 86500 (66XJB) Neogrip spheres
- Optional Texture Coat: 70734/70735 clear epoxy

Average Total Dry Film Thickness

- 40 dry mils (excluding Optional Texture Coat)

Application Instructions

1. Primer: Mix and apply 70714/70715 clear epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack free (8–9 hours at 75°F/23°C).
2. Base Coat: Mix and apply 70714/70715 pigmented epoxy at a rate of 100 sf/gal (16 wet mils) to yield 16 dry mils. Backroll applied material to ensure a uniform coverage. De-air and finish leveling with a spiked roller.
3. Color Chips: Wearing spiked shoes, broadcast blended color chips into wet base coat until desired pattern is achieved. Allow a 1–2 ft wet working edge without color chips to allow for a smooth transition to continuation of application of next pass of neat epoxy. Allow to cure until tack free (8–12 hours at 75°F/23°C). Lightly sand with circular floor sander using 60-grit paper to remove rough spots, followed by sweeping and vacuuming.
4. First Seal Coat: Mix and apply 70734/70735 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack free (12–16 hours at 75°F/23°C).
5. Second Seal Coat: Mix and apply 70734/70735 clear epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. If applying an Optional Texture Coat, allow to cure until tack free (12–16 hours at 75°F/23°C). If this is the final coat, allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load.
6. Optional Texture Coat: To achieve a limited slip-resistant surface, apply a third topcoat of 70734/70735 clear epoxy. Add 4 ounces by volume of Neogrip spheres to 1 gallon of 70734 and mix with 1/2 gallon of 70735 for three minutes. Apply at 400 sf/gal (4 wet mils) to yield 4 dry mils.
    - Installing the Optional Texture Coat at a rate greater than 4 wet mils will cause the Neogrip spheres to sink into the 70817/70818 urethane coating, thus eliminating the desired slip-resistant texture.
    - To prevent the Neogrip spheres from settling in the bucket, remix the material every 10–15 minutes.
    - Must be applied within 24 hours of initial topcoat. If this 24 hour recoat window is exceeded, lightly sand topcoat using 60–80 grit sandpaper, vacuum thoroughly and solvent wipe before proceeding.
7. Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load, and 7 days before floor is subjected to chemical exposure/spills.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack-free (8–32 hrs)
Base	70714/70715-09	Pigmented	2:1	100 sf/gal	16/16	While tack-free (8–32 hrs)
	Color Flakes	*Colors*	*NA*	*6–16 oz/ 100 sf*		
1st Seal Coat	70734/70735	Clear	2:1	200 sf/gal	8/8	While tack-free (12–36 hrs)
2nd Seal Coat	70734/70735	Clear	2:1	200 sf/gal	8/8	While tack-free (12–36 hrs)
Optional Texture Coat	70734/70735	Clear	2:1	400 sf/gal	4/4	NA
	Neogrip Spheres	*Clear*	*Mixed*	*4 oz/1.5 gal*		

NeoQuartz Broadcast

Materials

- Aggregate: Colored Quartz Aggregate (specify blend desired).
- Base Coat: 70714/70715 (45060) clear epoxy.
- Interior Seal Coats: 70734/70735 (45040) clear, low-yellowing epoxy.
- Exterior Seal Coats: 70817/70818 (57070) clear Chemical Resistant Urethane (CRU).

Recommended Average System Thickness

- 1/8” (approximately 125 dry mils)

Application Instructions

1. Base Coat: Mix 70714/70715 clear epoxy at a ratio of 2:1 by volume. Apply at a rate of 80 sf/gal (20 wet mils) to yield 20 dry mils. Backroll to ensure even coverage.
2. Aggregate: Broadcast color quartz aggregate into wet epoxy base coat until refusal at a rate of approximately 50 lbs/100 sq ft. Maintain a one to two foot wet edge without aggregate to allow for a smooth transition to the next pass of neat epoxy. Allow to cure 8–12 hours at 75°F/23°C. Remove excess aggregate and lightly sand to remove rough spots.
3. Steps 1 and 2 achieve a nominal thickness of 1/16". Repeat steps 3.3B and 3.3C until required thickness is achieved or a minimum of 1/8".
4. Seal Coats:

   A. Interior:

      1. First Interior Seal Coat: Mix and apply 70734/70735 clear epoxy at a rate of 160 sf/gal (10 wet mils) to yield 10 dry mils and allow to cure until tack free (12–16 hours at 75°F/23°C).
      2. Second Interior Seal Coat: Mix and apply 70734/70735 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils.

   B. Exterior:

      1. First Exterior Seal Coat: Pre-mix 70817 for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Apply mixed 70817/70818 at a rate of 160 sf/gal (10 wet mils) to yield 10 dry mils and allow to cure until tack free (8–9 hours at 75°F/23°C).
      2. Second Exterior Seal Coat: Pre-mix 70817 for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Apply mixed 70817/70818 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils.

5. Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load, and 7 days before floor is subjected to chemical exposure/spills.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate (sf/gal)	Mils WFT/DFT	Recoat Window at 75ºF (23°C)
1st Base Coat	70714/70715	Clear	2:1	80	20/20	While tack free (8–32 hrs)
	Color Quartz	*Blend*	*Broadcast*	*50 lbs/100 sf*		
2nd Base Coat	70714/70715	Clear	2:1	80	20/20	While tack free (8–32 hrs)
	Color Quartz	*Blend*	*Broadcast*	*50 lbs/100 sf*		
1st Interior Seal Coat	70734/70735	Clear	2:1	160	10/10	While tack free (8–32 hrs)
2nd Interior Seal Coat	70734/70735	Clear	2:1	200	8/8	NA
or						
1st Exterior Seal Coat	70817/70818	Clear	1:1	160	10/10	While tack free (8–9 hrs)
2nd Exterior Seal Coat	70817/70818	Clear	1:1	200	8/8	NA

NeoQuartz Trowel

Materials

- Aggregate: 86364 (66030) colored silica quartz aggregate; specify desired blend.
- Primer: 70714/70715 (45060) clear epoxy.
- Trowel Grade Mortar: 70714/70715 (45060) clear epoxy.
- Grout Coat: 70734/70735 (45040) clear epoxy.
- Interior Seal Coat: 70734/70735 (45040) clear epoxy.
- Exterior Seal Coats: 70817/70818 (57070) clear Chemical Resistant Urethane (CRU).

Recommended Average System Thickness

- 1/4" (approximately 250 dry mils)

Application Instructions

1. Primer: Mix and apply 70714/70715 clear epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Immediately broadcast 86364 aggregate into wet primer at approximately 20 lbs/100 sf, creating an anchor profile for the Trowel Grade Mortar. Allow to cure until tack free (8–9 hours at 75°F/23°C).
2. Trowel Grade Mortar: Mix 70714/70715 clear epoxy. Slowly add blended colored quartz aggregate at a ratio of 4:1 by volume to resin mix. Screed, rake or trowel to desired thickness. Smooth and tightly close surface with hand or power trowel. Lightly mist with 7055 Odorless Reducer as a trowel lubricant. Allow to cure 8–12 hours at 75°F/23°C. Lightly sand when cured.
3. Grout Coat: Mix and apply 70734/70735 clear epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack free (12–16 hours at 75°F/23°C).
4. Seal Coats:

   A. Interior, epoxy:

      1. First Interior Seal Coat: Mix and apply 70734/70735 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack free (12–16 hours at 75°F/23°C).
      2. Second Interior Seal Coat: Mix and apply 70734/70735 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure until tack free (12–16 hours at 75°F/23°C).

   B. Exterior, CRU:

      1. First Exterior Seal Coat: Pre-mix 70817 for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Apply mixed 70817/70818 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils.
      2. Second Exterior Seal Coat: Pre-mix 70817 for 3 minutes. Add 70817 to 70818 and immediately mix for 3 minutes. Apply mixed 70817/70818 at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils.
5. Allow system to cure for 24 hours at 75°F/23°C before allowing foot traffic, 48 hours before allowing heavy load, and 7 days before floor is subjected to chemical exposure/spills.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack free (8–32 hrs)
	86364 Silica Quartz Sand	*Natural*	*Broadcast*	*20 lbs/100 sf*		
Mortar	70714/70715	Clear	2:1	Specified Thickness		While tack free (8–32 hrs)
	Color Quartz	*Blend*	*4:1*			
Grout Coat	70734/70735	Clear	2:1	200 sf/gal	8/8	While tack free (12–36 hrs)
1st Interior Seal Coat	70734/70735	Clear	2:1	200 sf/gal	8/8	While tack free (12–36 hrs)
2nd Interior Seal Coat	70734/70735	Clear	2:1	200 sf/gal	8/8	NA
or						
1st Exterior Seal Coat	70817/70818	Clear	1:1	200 sf/gal	8/8	While tack free (8–9 hrs)
2nd Exterior Seal Coat	70817/70818	Clear	1:1	200 sf/gal	8/8	NA

NeoQuartz HD

Materials

- Mortar Aggregate: 86364 (66030) 20/40 mesh silica sand.
- Quartz Broadcast Aggregate: Blended colored quartz.
- Primer: 70714/70715 (45060) clear epoxy.
- Trowel Grade Mortar: 70714/70715 clear or pigmented epoxy.
- Broadcast Coat: 70714/70715 pigmented epoxy.
- Seal Coats: 70734/70735 (45040) low yellowing epoxy.
    - Optional Seal Coat: 70869/70819 (57031) polyaspartic clear.

Recommended Average System Thickness

- 1/4" (approximately 250 dry mils)

Application Instructions

1. Primer: Mix and apply 70714/70715 clear epoxy at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Immediately lightly broadcast 86364 aggregate into wet primer, creating an anchor profile for mortar mix. Allow to cure until tack free (8–9 hours at 75°F/23°C).
2. Trowel Grade Mortar: Mix 70714/70715 clear or pigmented epoxy with 86364 aggregate at a ratio of 1 part mixed epoxy to 4 parts aggregate by volume. Screed, rake or trowel mix to desired thickness. Smooth and tightly close surface by hand or power trowel. Lightly mist surface with mineral spirits or 7055 Odorless Reducer (086JB) as a lubricant to help smooth surface. Allow to cure 6–12 hours at 75°F/23°C. Lightly sand to remove rough spots or trowel marks.
3. Broadcast Coat: Mix 70714/70715 pigmented epoxy at a ratio of 2:1 by volume. Apply at a rate of 80 sf/gal (20 wet mils) to yield 20 dry mils. Backroll to ensure even coverage.
4. Aggregate: Broadcast color quartz aggregate into wet epoxy until refusal at a rate of approximately 50 lbs/100 sf. Allow to cure 8-12 hours at 75°F/23°C Once cured remove excess aggregate and lightly sand to remove rough spots.
5. First Seal Coat: Mix 70734/70735 clear epoxy or 70869/70819 clear polyaspartic. Apply at a rate of 160 sf/gal (10 wet mils) to yield 10 dry mils. Allow to cure until tack free 12-16 hours at 75°F/23°C.
6. Second Seal Coat: Mix 70734/70735 clear epoxy or 70869/70819 clear polyaspartic and apply at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Allow to cure 24 hours before foot traffic and 48 hours before heavy loads.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer ***Aggregate***	70714/70715 *86364 sand*	Clear *Natural*	2:1 *NA*	200 sf/gal *20 lbs/100 sf*	8/8	8–9 hours
Mortar	70714/70715 *86364 sand*	Clear *Natural*	2:1 4:1 w/epoxy	Specified Thickness		6–12 hours
Broadcast	70714/70715 *Color quartz*	Clear *Selected blend*	2:1 NA	80 sf/gal *50lbs/100 sf*	20/20	8–12 hours

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
First Seal	70734/70735 70869/70819	Clear	2:1 Kit	200 sf/gal	8/8	12–16 hours
Second Seal	70734/70735 70869/70819	Clear	2:1 Kit	200 sf/gal	8/8	NA

NeoQuartz Broadcast RTS

Limitations

- Do not apply if relative humdity is above 80%.

Materials

- Aggregate: Colored Quartz Aggregate. Specify desired blend.
- Base Coat: 70869/70819 (57031) clear Polyaspartic.
- Seal Coat: 70869/70819 (57031) clear Polyaspartic.

Recommended Average System Thickness

- 1/8" (approximately 125 dry mils)

Application Instructions

1. Base Coat: Pre-mix 70869 for 3 minutes. Add entire contents of 70819 container to 70869 container and immediately mix for 3 minutes. Apply at a rate of 80 sf/gal (20 wet mils) with a notched squeegee or notched trowel. Backroll with a 1/4" or 3/16" phenolic roller to ensure even coverage.
2. Aggregate: Broadcast color quartz aggregate into wet base coat until refusal at a rate of approximately 50 lbs/100 sq ft. Maintain a one to two foot wet edge without aggregate to allow for a smooth transition to the next pass of neat Polyaspartic. Allow to cure 4–6 hours at 75°F/23°C. Remove excess aggregate and lightly sand to remove rough spots.
3. The above application steps achieve a nominal thickness of 1/16". Repeat Steps 1 and 2 until required thickness is achieved or a minimum of 1/8".
4. Seal Coats:
5. First Seal Coat: Pre-mix 70869 for 3 minutes. Add entire contents of 70819 container to 70869 container and immediately mix for 3 minutes. Apply at a rate of 160 sf/gal (10 wet mils) to yield 10 dry mils and allow to cure (2–4 hours at 75°F/23°C) or until tack free.
6. Second Seal Coat: Pre-mix 70869 for 3 minutes. Add entire contents of 70819 container to 70869 container and immediately mix for 3 minutes. Apply at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack free (8–32 hrs)
Base Coat	70869/70819	Clear	Kit	80 sf/gal	20/20	While tack free (4–6 hrs)
Aggregate	*Quartz Blend*	*Various*	*Broadcast*	*50 lbs/100 sf to refusal*		
1st Seal Coat	70869/70819	Clear	Kit	160 sf/gal	10/10	While tack free (6–8 hrs)
2nd Seal Coat	70869/70819	Clear	Kit	200 sf/gal	8/8	NA

Neoflake RTS

Limitations

- Do not apply if relative humdity is above 80%.

Materials

- Color Chips: Integrally colored, random sized chips (contact Neogard for source of supply).
- Primer: 70714/70715 (45060) clear epoxy (Series #1 only).
- Series #1 Base Coat: 70714/70715 (45060) pigmented epoxy.
- Series #2 Base Coat: 70869/70819 (57031) clear Polyaspartic.
- Seal Coats: 70869/70819 (57031) clear Polyaspartic.
- Optional Texture Coat: 70869/70819 (57031) clear Polyaspartic.
- Optional Texture: 86500 (66XJB) Neogrip Spheres.

Recommended Average System Thickness

- Series #1: 44 dry mils (excluding Optional Texture Coat)
- Series #2: 36 dry mils (excluding Optional Texture Coat)

Application Instructions

Series #1 Random Broadcast (a field mock up is strongly recommended):

1. Primer: Mix and apply 70714/70715 clear epoxy to prepared substrate at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils. Primer should be tack free before application of Base Coat.
2. Base Coat: Mix and apply 70714/70715 pigmented epoxy at a rate of 100 sf/gal (16 wet mils) to yield 16 dry mils. If applied with notched squeegee, backroll applied material with a high quality, short-napped 1/4" or 3/16" phenolic core roller cover to ensure uniform coverage. De-air with a spiked roller.
3. Color Chips: Wearing spiked shoes, broadcast blended color chips into wet base coat until desired pattern is achieved. Allow a 1–2 ft wet working edge without color chips to allow for a smooth transition to continuation of application of the epoxy. Allow to cure 6–8 hours at 75°F, (23°C). Lightly sand with circular floor sander using 50-grit paper to remove rough spots, followed by sweeping and vacuuming.
4. First Seal Coat: Pre-mix 70869 for 3 minutes. Add entire contents of 70819 container to 70869 container and immediately mix for 3 minutes. Apply at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils and allow to cure until tack free (6–8 hours at 75°F/23°C).
5. Second Seal Coat: Pre-mix 70869 for 3 minutes. Add entire contents of 70819 container to 70869 container and immediately mix for 3 minutes. Apply at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils.
6. Optional Texture Coat: To achieve a limited slip-resistant surface, apply a third topcoat of 70869/70819 clear Polyaspartic. Add 14 ounces by volume of Neogrip spheres to 1 mixed kit. Apply at 350-400 sf/gal (4 wet mils) to yield 4 dry mils.
    - Installing the Optional Texture Coat thicker than 4 wet mils will cause the Neogrip spheres to sink into the 70866/70816 coating, thus eliminating the desired slip-resistant texture.
    - To prevent the Neogrip spheres from settling in the bucket, remix the material every 10–15 minutes.

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7. After completion of application, allow system to cure for 12–14 hours at 75°F/23°C before allowing foot traffic; 24 hours before allowing heavy load, and 7 days before floor is subjected to chemical exposure/ spills.

Summary Application Table for Neoflake RTS Series #1

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Time at 75°F/23°C
Primer	70714/70715	Clear	2:1	200 sf/gal	8/8	While tack free (8–32 hrs)
Base Coat	70714/70715	Pigmented	2:1	100 sf/gal	16/16	While tack free (6–8 hrs)
	Color Chips	*Various*	*Broadcast*	*6–16 oz/100 sf*		
1st Seal Coat	70869/70819	Clear	Kit	200 sf/gal	8/8	While tack free (6–8 hrs)
2nd Seal Coat	70869/70819	Clear	Kit	200 sf/gal	8/8	While tack free (6–8 hrs)
Optional Texture Coat	70869/70819	Clear	Kit	350–400 sf/gal	4/4	N/A
	86500 Neogrip Spheres	*Clear*	*14 oz/kit*			

Series #2 Full Rejection Broadcast (a field mock up is strongly recommended):

1. Base Coat: Pre-mix 70869 for 3 minutes. Add entire contents of 70819 container to 70869 container and immediately mix for 3 minutes. Apply at a minimum rate of 100 sf/gal (16 wet mils) to yield 16 dry mils. If applied with notched squeegee, backroll applied material with a high quality, short-napped 1/4" or 3/16" phenolic core roller cover to ensure uniform coverage. De-air with a spiked roller.
2. Color Chips: Wearing spiked shoes, broadcast blended color chips into wet base coat until desired pattern is achieved (approximately 15–20 lbs/100 sf) or total refusal. Allow a 1–2 ft wet working edge without color chips to allow for a smooth transition to continuation of application of the Polyaspartic. Allow to cure 6–8 hours at 75°F, (23°C). Lightly sand with circular floor sander using 50-grit paper to remove rough spots, followed by sweeping and vacuuming.
3. First Seal Coat: Pre-mix 70869 for 3 minutes. Add entire contents of 70819 container to 70869 container and immediately mix for 3 minutes. Apply at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils and allow to cure until tack free (6–8 hours at 75°F/23°C).
4. Second Seal Coat: Pre-mix 70869 for 3 minutes. Add entire contents of 70819 container to 70869 container and immediately mix for 3 minutes. Apply at a rate of 200 sf/gal (8 wet mils) to yield 8 dry mils.
5. Optional Texture Coat: To achieve a limited slip-resistant surface, apply a third topcoat of 70869/70819 clear Polyaspartic. Add 14 ounces by volume of Neogrip spheres to 1 mixed kit. Apply at 350-400 sf/gal (4 wet mils) to yield 4 dry mils.
   - Installing the Optional Texture Coat thicker than 4 wet mils will cause the Neogrip spheres to sink into the 70866/70816 coating, thus eliminating the desired slip-resistant texture.
   - To prevent the Neogrip spheres from settling in the bucket, remix the material every 10–15 minutes.
6. After completion of application, allow system to cure for 12–14 hours at 75°F/23°C before allowing foot traffic; 24 hours before allowing heavy load, and 7 days before floor is subjected to chemical exposure/ spills.

FTS Neoflake SL

Materials

- Initiator: FTS 600 Initiator. (960JB)
- Primer: FTS 100 Concrete MMA primer (883J9) FTS 101 Adhesion promotor (884J9)
- Body Coat: FTS 300 Body Coat MMA coating (887J9).
- Topcoat: 400 RTS Topcoat MMA coating (890J9).
- Filler: FTS 40 SL Filler (390JB).
- Aggregate: UV-stable flakes (contact Neogard for source).

Average Dry Film Thickness

- Nominal 3/16" (approximately 187 dry mils)

Application Instructions

IMPORTANT: All fluid-applied FTS materials must be mixed with Neogard FTS 600 BPO Initiator before applying. Refer to the FTS BPO Initiator Dosage Chart in the Support Information section of this Application Manual for the correct amounts.

1. Primer: Apply FTS 100 Concrete Primer (104 fluid oz.) and FTS 101 Adhesion promotor (24 oz.) at a rate of 90 sf/gal to yield 17 mils to all surfaces. Allow to dry approximately 45 minutes.

2. Body coat: Apply 1.75 gallons of FTS 300 Body coat mixed with 8 oz. of pigment and one bag of FTS 40 SL filler and apply at a rate of 36-40 sf. ft. to yield 125 dry mils. Immediately broadcast flake, evenly distributed, to refusal into wet coating (15 lbs per 100 sf)

3. Topcoats: Mix and apply first FTS 400 Topcoat at a rate of 90 sf/gal to yield 17 dry mils. Apply second FTS 400 Topcoat at a rate of 100 sf/gal to yield 16 dry mils.

4. System may be opened to traffic 1 hour after application.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Dry Film Thickness	Recoat time at 75°F/23°C
Primer Coat	FTS100/FTS 101	Clear	See BPO chart 104 oz. FTS 100 24 oz. FTS 101	90 sf/gal	17 mils	When dry approximately 1 hour
Body Coat	FTS 300 + pigment + FTS 40 SL Filler + UV-Stable flakes	Clear	See BPO chart 1.75 gal of FTS 300 + 8 oz. pigment + one bag FTS 40 SL Filler	36-40 sf per mix	125 mils	When dry approximately 1 hour
1st Topcoat	FTS 400	Clear	See BPO Chart	80 sf/gal	20 mils	When dry approximately 1 hour
2nd Topcoat	FTS 400	Clear	See BPO Chart	100 sf/gal	16 mils	When dry approximately 1 hour

FTS Neoquartz SL

Materials

- Initiator: FTS 600 Initiator. (960JB)
- Primer: FTS 100 Concrete MMA primer (883J9) FTS 101 Adhesion promotor (884J9)
- Body Coat: FTS 300 Body Coat MMA coating (887J9).
- Topcoat: 400 RTS Topcoat MMA coating (890J9).
- Filler: FTS 40 SL Filler (390JB).
- Aggregate: UV-stable 25-A mesh quartz (contact Neogard for source).

Average Dry Film Thickness

- Nominal 3/16” (approximately 187 dry mils)

Application Instructions

IMPORTANT: All fluid-applied FTS materials must be mixed with Neogard FTS 600 BPO Initiator before applying. Refer to the FTS BPO Initiator Dosage Chart in the Support Information section of this Application Manual for the correct amounts.

1. Primer: Apply FTS 100 Concrete Primer (104 fluid oz.) and FTS 101 Adhesion promotor (24 oz.) at a rate of 90 sf/gal to yield 17 mils to all surfaces. Allow to dry approximately 45 minutes.

2. Body coat: Apply 1.75 gallons of FTS 300 Body coat mixed with one can of 700 RTS series pigment and one bag of FTS 40 SL filler and apply at a rate of 36-40 sf. ft. to yield 125 dry mils. Immediately broadcast quartz, evenly distributed, to refusal into wet coating (50 lbs per 100 sf)

Note: If using 40-S mesh quartz, a Roll coat of FTS 300 clear is applied at 90 sf per gallon over the Body coat. Immediately broadcast quartz, evenly distributed, to refusal into wet coating (50 lbs per 100 sf).

3. Topcoats: Mix and apply first FTS 400 Topcoat at a rate of 90 sf/gal to yield 17 dry mils. Apply second FTS 400 Topcoat at a rate of 100 sf/gal to yield 16 dry mils.

4. System may be opened to traffic 1 hour after application.

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FTS Neoquartz SL continued

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Dry Film Thickness	Recoat time at 75°F/23°C
Primer Coat	FTS100/FTS 101	Clear	See BPO chart 104 oz. FTS 100 24 oz. FTS 101	90 sf/gal	17 mils	When dry approximately 1 hour
Body Coat	FTS 300 + RTS 700 pigment + FTS 40 SL Filler 25-A quartz is broadcasted at 75 lbs per 100 sf	Clear	See BPO chart 1.75 gal of FTS 300 + one can RTS 700 pigment + one bag FTS 40 SL Filler	36-40 sf per mix	125 mils	When dry approximately 1 hour
Note: Second body coat if using 40-S mesh quartz -Apply roll coat	FTS 300 clear	Clear	See BPO Chart	90 sf/gal	17 mils	When dry approximately 1 hour
1st Topcoat	FTS 400	Clear	See BPO Chart	80 sf/gal	20 mils	When dry approximately 1 hour
2nd Topcoat	FTS 400	Clear	See BPO Chart	100 sf/gal	16 mils	When dry approximately 1 hour

FTS Neoquartz Trowel

Materials

- Initiator: FTS 600 Initiator. (960JB)
- Primer: FTS 100 Concrete MMA primer (883J9) FTS 101 Adhesion promotor (884J9)
- Body Coat: FTS 300 Body Coat MMA coating (887J9).
- Topcoat: 400 RTS Topcoat MMA coating (890J9).
- Aggregate: UV-stable 25-A mesh quartz (contact Neogard for source).

Average Dry Film Thickness

- Nominal 3/16" (approximately 187 dry mils)

Application Instructions

IMPORTANT: All fluid-applied FTS materials must be mixed with Neogard FTS 600 BPO Initiator before applying. Refer to the FTS BPO Initiator Dosage Chart in the Support Information section of this Application Manual for the correct amounts.

1. Primer: Apply FTS 100 Concrete Primer (104 fluid oz.) and FTS 101 Adhesion promotor (24 oz.) at a rate of 90 sf/gal to yield 17 mils to all surfaces. Allow to dry approximately 45 minutes.

2. Trowel coat: Trowel 2 gallons of FTS 300 + 1 50 lb bag of 25-A mesh quartz =50 sf feet @ 1/8"Note: If using 40-S mesh quartz, a Roll coat of FTS 300 clear is applied at 90 sf per gallon over the Body coat. Immediately broadcast quartz, evenly distributed, to refusal into wet coating (50 lbs per 100 sf).

3. Topcoat: Mix and apply first FTS 400 Topcoat at a rate of 100 sf/gal to yield 16 dry mils.

4. System may be opened to traffic 1 hour after application.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Dry Film Thickness	Recoat time at 75°F/23°C
Primer Coat	FTS100/FTS 101	Clear	See BPO chart 104 oz. FTS 100 24 oz. FTS 101	90 sf/gal	17 mils	When dry approximately 1 hour
Trowel Coat	FTS 300 + 25-A mesh quartz	Clear	See BPO chart 2 gallons of FTS 300 + 50 lb bag of 25-A mesh quartz	50 sf @ 1/8"	125 mils	When dry approximately 1 hour
Topcoat	FTS 400	Clear	See BPO Chart	100 sf/gal	16 mils	When dry approximately 1 hour

FTS Neoflake Cove Base

Materials

- Initiator: FTS 600 Initiator. (960JB)
- Primer: FTS 100 Concrete MMA primer (883J9) FTS 101 Adhesion promotor (884J9)
- Cove Coat: FTS 301 Body Coat MMA coating (888J9)
- Flake Coat: FTS 302 Body Coat MMA coating (889J9)
- Topcoat: 400 FTS Topcoat MMA coating (890J9)
- Aggregate: 7992 16/30 mesh sand

Recommended Average System Thickness

- Nominal 3/16" thick with cove strip

Application Instructions

IMPORTANT: All fluid-applied FTS materials must be mixed with Neogard FTS 600 BPO Initiator before applying. Refer to the FTS BPO Initiator Dosage Chart in the Support Information section of this Application Manual for the correct amounts.

1. Primer: Apply FTS 100 Concrete Primer (104 fluid oz.) and FTS 101 Adhesion promotor (24 oz.) at a rate of 90 sf/gal to yield 17 mils to all surfaces. Allow to dry approximately 45 minutes.
2. Cove Coat: Trowel 2 quarts of FTS 301 mixed with 3 quarts of 7992 16/30 mesh sand =12 lineal feet @ 4” high
3. Flake coat: Apply 1 quart of FTS 302 mixed with 1 oz. pigment =45 lineal feet @ 4” high. Immediately broadcast or blow Neoflake to rejection on base =15 lbs per 200 lf
4. Topcoats: Mix and apply first FTS 400 Topcoat at a rate of 80 sf/gal to yield 20 dry mils. Apply second FTS 400 Topcoat at a rate of 100 sf/gal to yield 16 dry mils.
5. System may be opened to traffic 1 hour after application.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	DFT	Recoat Time at 75°F/23°C
Primer	FTS100/FTS 101	Clear	See BPO chart 104 oz. FTS 100 24 oz. FTS 101	90 sf/gal	17 mils	When dry approximately 1 hour
Cove Coat	FTS 301 + 7992 16/30 mesh sand	Clear	See BPO chart 2 quarts of FTS 301 + 3 quarts 7992 16/30 mesh sand	12 lf per mix @ 4” cove base	3/16” thick with cove strip	When dry approximately 1 hour
Flake Coat	FTS 302 + pigment	Clear	See BPO chart 1 quart 302 + 1 oz. pigment	45 lf for 4” cove base	9 mils	When dry approximately 1 hour
1st Topcoat	FTS 400 pigmented	Clear	See BPO chart	80 sf/gal	20 mils	When dry approximately 1 hour
2nd Topcoat	FTS 400 pigmented	Clear	See BPO chart	100 sf/gal	16 mils	When dry approximately 1 hour

FTS Neoquartz Cove Base

Materials

- Initiator: FTS 600 Initiator. (960JB)
- Primer: FTS 100 Concrete MMA primer (883J9) FTS 101 Adhesion promotor (884J9)
- Cove Coat: FTS 301 Body Coat MMA coating (888J9)
- Topcoat: 400 FTS Topcoat MMA coating (890J9)
- Aggregate: 25-A mesh quartz

Recommended Average System Thickness

- Nominal 3/16" thick with cove strip

Application Instructions

IMPORTANT: All fluid-applied FTS materials must be mixed with Neogard FTS 600 BPO Initiator before applying. Refer to the FTS BPO Initiator Dosage Chart in the Support Information section of this Application Manual for the correct amounts.

1. Primer: Apply FTS 100 Concrete Primer (104 fluid oz.) and FTS 101 Adhesion promotor (24 oz.) at a rate of 90 sf/gal to yield 17 mils to all surfaces. Allow to dry approximately 45 minutes.
2. Cove Coat: Trowel 2 quarts of FTS 301 + 3 quarts of 25-A mesh quartz =12 lineal feet @ 4”
3. Topcoats: Mix and apply first FTS 400 Topcoat at a rate of 80 sf/gal to yield 20 dry mils. Apply second FTS 400 Topcoat at a rate of 100 sf/gal to yield 16 dry mils.
4. System may be opened to traffic 1 hour after application.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	DFT	Recoat Time at 75°F/23°C
Primer	FTS100/FTS 101	Clear	See BPO chart 104 oz. FTS 100 24 oz. FTS 101	90 sf/gal	17 mils	When dry approximately 1 hour
Cove Coat	FTS 300 + 25-A mesh quartz	Clear	See BPO chart 2 quarts of FTS 301 + 3 quarts of 25-A mesh quartz	12 lf per mix @ 4” cove base	3/16” thick with cove strip	When dry approximately 1 hour
1st Topcoat	FTS 400 pigmented	Clear	See BPO chart	80 sf/gal	20 mils	When dry approximately 1 hour
2nd Topcoat	FTS 400 pigmented	Clear	See BPO chart	100 sf/gal	16 mils	When dry approximately 1 hour

Application: Wall-Gard HD

Uses

- Hospitals
- Operating Rooms
- Pharmaceutical Manufacturing Facilities
- Clean Rooms
- Schools
- Food and Beverage Processing Facilities
- Wet Areas

Limitations

- Indoor use only
- Prevent product from freezing

Materials

- Primer: 70714/70715 (45060) clear epoxy.
- Drywall Primer: Polyvinyl Acetate (PVA).
- Base Coat: 70724/70715 (251J1) high build epoxy mastic.
- Topcoat:
  - 70900/70910 (47DJB) series water-based urethane, gloss finish.
  - 70901/70910 (47VJB) series water-based urethane, semi-gloss finish.
  - 70902/70910 (47ZJB) series water-based urethane, satin finish.
- Reinforced Fabric: 63UJB Fiberglass mesh.

Surface Examination

Concrete or Block Wall:

- Wall and ceiling substrates are free of ridges and sharp projections, sound and dry.
- Concrete or block surface pH level must not be higher than 11 prior to coating.
- Damaged areas of the concrete, including bug holes and voids, should be repaired to a smooth finish prior to application of the system.
- Concrete substrate must be free of hydrostatic, capillary or mosture vapor pressure.
- Concrete shall be cured for a minimum of 28 days and have a minimum compressive strength of 3,500 psi. Concrete curing agents shall be of a sodium silicate base only; others require written approval from Neogard.

Drywall:

- Surfaces consist of 1/2”–5/8” tapered-edge drywall.

Existing Painted Surfaces:

- Ensure that existing paint is fully adhered and sound.

Surface Preparation

Concrete or Block Wall:

- Remove any loose concrete or mortar.
- Cleaning: Surfaces must be free of dust, dirt, oil, grease or other contaminants. Areas where oil or other contaminants have penetrated deep into the concrete may require removal by mechanical methods.
- High-Pressure Water Blast: Required method for remedial construction; preferred method for new construction. Surface must match medium grit sandpaper texture (ICRI CSP 3). Note: Use abrasive blast on hard, dense surfaces.
- Repair any holes, spalled or damaged concrete with appropriate Neogard repair materials. Smooth out any irregularities on concrete surfaces before application.

Drywall, New Construction:

- Drywall must be finished to Level 4 or 5 (ASTM C840).

Existing Painted Surfaces:

- Abrade surface using 100-grit screen or sandpaper.
- Thoroughly remove all dust and debris.

Application Instructions

Prior to the application of material, refer to the Product Mixing Instructions section in this Application Manual.

Caution: Improper mixing and improper mix ratios can result in curing problems. Always pre-mix pigmented side before adding hardener.

Concrete or Block Wall

Series 1: Standard

1. Primer: Mix 70714/70715 clear epoxy at a ratio of 2:1 for three minutes. Apply at a minimum rate of 320 sf/gal (6 mils WFT to yield 6 DFT) to prepared substrate and allow to cure 8-12 hours at 70°F (21°C) or until tack-free.
2. Base Coat: Mix 70724/70715 epoxy mastic at a ratio of 3:1 for three minutes. Apply at a minimum rate of 100sf/gal (16 mils WFT to yield 16 DFT) and allow to cure 8-12 hours at 70°F (21°C) or until tack free.
3. First Topcoat: Mix 70900/70910 series water based urethane at a ratio of 3:1 (70900 or 70901/70910) or 2:1 (70902/70910) for three minutes. Apply at a rate of 200–267 sf/gal (6–8 mils WFT to yield 3–6 mils DFT) and allow to cure for 4–6 hours at 70°F (21°C) or until tack free.
4. Second Topcoat: Mix 70900/70910 series water based urethane at a ratio of 3:1 (70900 or 70901/70910) or 2:1 (70902/70910) for three minutes. Apply at a rate of 200–267 sf/gal (6–8 mils WFT to yield 3–6 mils DFT) and allow to cure 4-6 hours at 70°F (21°C).

Note: Do not exceed 24 hours between Topcoat applications. If this recoat window is missed, surface will need to be lightly abraded.

(continued on next page)

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	320 sf/gal	6/6	While tack-free (8–12 hrs)
Base Coat	70724/70715	Gray, Light Gray	3:1	100 sf/gal	16/16	While tack-free (8–12 hrs)
FIrst Topcoat	70900/70910 series	White, Pigmented	3:1	200–267 sf/gal	3.2/3.2	While tack-free (4–6 hrs)
Second Topcoat	70900/70910 series	White, Pigmented	3:1	200–267 sf/gal	3.2/3.2	While tack-free (4–6 hrs)

Series 2: Fabric Reinforced

5. Primer: Mix 70714/70715 clear epoxy at a ratio of 2:1 for three minutes. Apply at a minimum rate of 320 sf/gal (6 mils WFT to yield 6 DFT) to prepared substrate and allow to cure 8-12 hours at 70°F (21°C) or until tack-free.
6. Base Coat: Mix 70724/70715 epoxy mastic at a ratio of 3:1 for three minutes. Apply at a minimum rate of 100 sf/gal (16 mils WFT to yield 16 DFT). Embed 63UJB Fiberglass mesh into wet base coat material. Allow to cure 8-12 hours at 70°F (21°C) or until tack-free. Apply a second coat of 70724/70715 epoxy mastic over mesh at a rate of 100 sf/gal (16 mils WFT to yield 16 mils DFT) and allow to cure for 8-12 hours at 70°F (21°C) or until tack free. Note: Prior to application of the Topcoat, surface may need to be sanded to ensure a smooth surface appearance.
7. First Topcoat: Mix Mix 70900/70910 series water based urethane at a ratio of 3:1 (70900 or 70901/70910) or 2:1 (70902/70910) for three minutes. Apply at a rate of 200–267 sf/gal (6–8 mils WFT to yield 3–6 mils DFT) and allow to cure for 4–6 hours at 70°F (21°C) or until tack free.
8. Second Topcoat: Mix Mix 70900/70910 series water based urethane at a ratio of 3:1 (70900 or 70901/70910) or 2:1 (70902/70910) for three minutes. Apply at a rate of 200–267 sf/gal (6–8 mils WFT to yield 3–6 mils DFT) and allow to cure 4-6 hours at 70°F (21°C).

Note: Do not exceed 24 hours between Topcoat applications. If this recoat window is missed, surface will need to be lightly abraded.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	70714/70715	Clear	2:1	320 sf/gal	6/6	While tack-free (8–12 hrs)
First Base Coat	70724/70715	Gray, Light Gray	3:1	100 sf/gal	16/16	While tack-free (8–12 hrs)
Fiberglass Mesh	63UJB	NA				
Second Base Coat	70724/70715	Gray, Light Gray	3:1	100 sf/gal	16/16	While tack-free (8–12 hrs)
FIrst Topcoat	70900/70910 series	White, Pigmented	3:1	200–267 sf/gal	6–8/6–8	While tack-free (4–6 hrs)
Second Topcoat	70900/70910 series	White, Pigmented	3:1	200–267 sf/gal	6–8/6–8	While tack-free (4–6 hrs)

Drywall

Series 1: Standard

1. Primer: Prime drywall with a Polyvinyl Acetate (PVA) primer. Follow manufacturer's recommendations for coverage rates.
2. First Topcoat: Mix 70900/70910 series water based urethane at a ratio of 3:1 (70900 or 70901/70910) or 2:1 (70902/70910) for three minutes. Apply at a rate of 200–267 sf/gal (6–8 mils WFT to yield 3–6 mils DFT) and allow to cure for 4–6 hours at 70°F (21°C) or until tack free.
3. Second Topcoat: Mix 70900/70910 series water based urethane at a ratio of 3:1 (70900 or 70901/70910) or 2:1 (70902/70910) for three minutes. Apply at a rate of 200–267 sf/gal (6–8 mils WFT to yield 3–6 mils DFT) and allow to cure 4-6 hours at 70°F (21°C).

Note: Do not exceed 24 hours between Topcoat applications. If this recoat window is missed, surface will need to be lightly abraded.

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	PVA Primer	NA				
FIrst Topcoat	70900/70910 series	White, Pigmented	3:1	200–267 sf/gal	6–8/6–8	While tack-free (4–6 hrs)
Second Topcoat	70900/70910 series	White, Pigmented	3:1	200–267 sf/gal	6–8/6–8	While tack-free (4–6 hrs)

Series 2: Fabric Reinforced

1. Primer: Prime drywall with a Polyvinyl Acetate (PVA) primer. Follow manufacturer's recommendations for coverage rates.
2. Base Coat: For anticipated mechanical abuse (or if requested): Mix 70724/70715 epoxy mastic at a ratio of 3:1 for three minutes. Apply at a minimum rate of 100 sf/gal (16 mils WFT to yield 16 DFT). Embed 63UJB Fiberglass mesh into wet base coat material. Allow to cure 8-12 hours at 70°F (21°C) or until tack-free. Apply a second coat of 70724/70715 epoxy mastic over mesh at a rate of 100 sf/gal (16 mils WFT to yield 16 mils DFT) and allow to cure for 8-12 hours at 70°F (21°C) or until tack free. Note: Prior to application of the Topcoat, surface may need to be sanded to ensure a smooth surface appearance.
3. First Topcoat: Mix 70900/70910 series water based urethane at a ratio of 3:1 (70900 or 70901/70910) or 2:1 (70902/70910) for three minutes. Apply at a rate of 200–267 sf/gal (6–8 mils WFT to yield 3–6 mils DFT) and allow to cure for 4–6 hours at 70°F (21°C) or until tack free.
4. Second Topcoat: Mix 70900/70910 series water based urethane at a ratio of 3:1 (70900 or 70901/70910) or 2:1 (70902/70910) for three minutes. Apply at a rate of 200–267 sf/gal (6–8 mils WFT to yield 3–6 mils DFT) and allow to cure 4-6 hours at 70°F (21°C).

Note: Do not exceed 24 hours between Topcoat applications. If this recoat window is missed, surface will need to be lightly abraded.

(continued on next page)

Summary Application Table

Coat	Product	Color	Mix Ratio	Coverage Rate	Mils WFT/DFT	Recoat Window at 75°F/23°C
Primer	PVA Primer	NA				
First Base Coat	70724/70715	Gray, Light Gray	3:1	100 sf/gal	16/16	While tack-free (8–12 hrs)
Fiberglass Mesh	63UJB	NA				
Second Base Coat	70724/70715	Gray, Light Gray	3:1	100 sf/gal	16/16	While tack-free (8–12 hrs)
FIrst Topcoat	70900/70910 series	White, Pigmented	3:1	200–267 sf/gal	6–8/6–8	While tack-free (4–6 hrs)
Second Topcoat	70900/70910 series	White, Pigmented	3:1	200–267 sf/gal	6–8/6–8	While tack-free (4–6 hrs)

Chemical Resistant and Ultraviolet Protective Topcoats

For flooring systems where the finish coat is epoxy—notably the CG systems—but a chemical resistant topcoat is needed, apply the following topcoats as a final finish coat after all other coats have been applied. These topcoats are designed for areas that experience chemical splash and spills only, not constant chemical exposure or immersion. Clean up of chemicals should be done immediately. These coatings should be allowed to cure for a minimum of 7 days before floor is subjected to chemical exposure/spills.

Chemical resistance charts for each product are available at www.neogard.com.

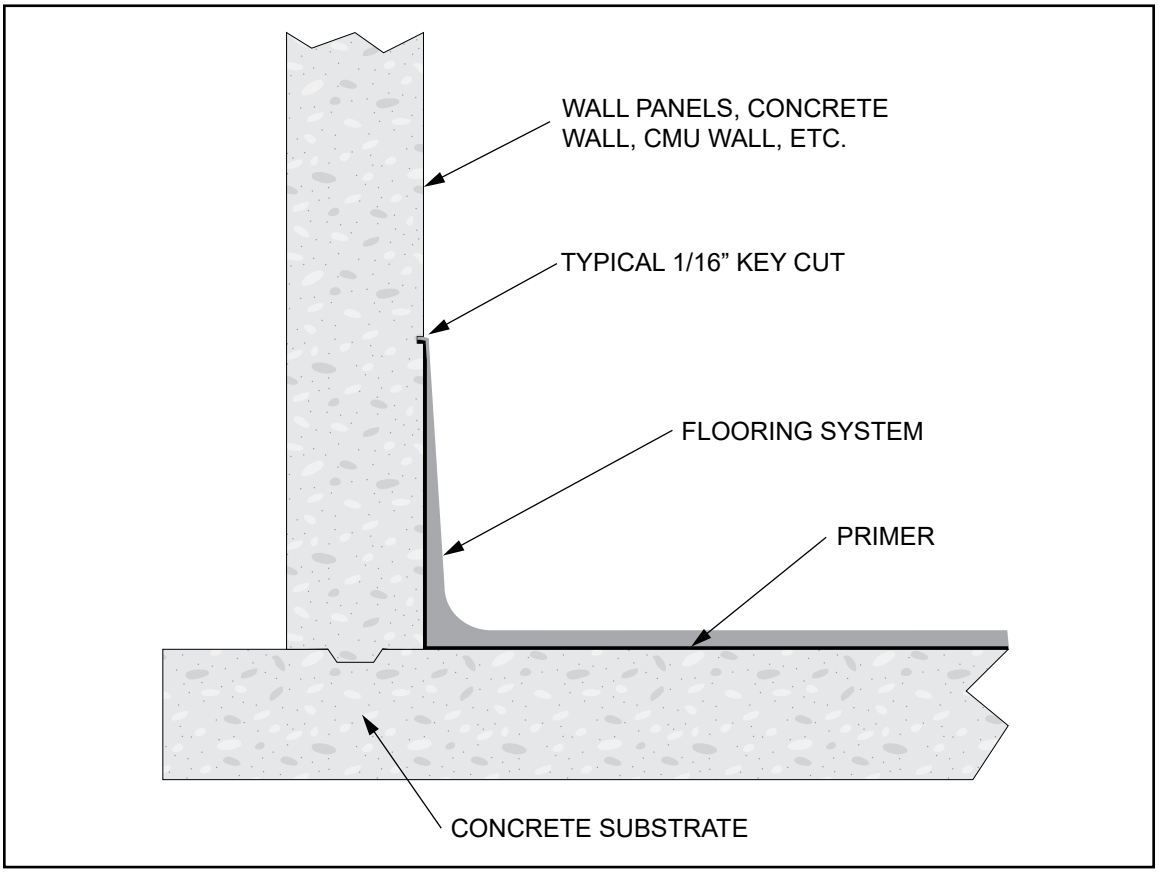
Summary Table: Chemical Resistant and UV Protective Topcoats

Topcoat Product	Uses	Coverage Rate	Mix Ratio	Pot Life	Cure Time	Notes
70805/7952 CRU	Chemical Resistance UV Stability	240 sf/gal 6 WFT/4 DFT	2:1	50 min at 75°F	8–9 hrs at 75°F	Use pigmented for UV stability
70817/70818 CRU	Chemical Resistance UV Stability	200 sf/gal 8 WFT/8 DFT	1:1	20–25 min at 75°F	8 hrs at 75°F	Low odor; VOC < 100g/l. Clear or pigmented.
70704/70705 novolac epoxy	Chemical Resistance	200 sf/gal 8 WFT/8 DFT	3:2	30 min at 70°F	24 hrs at 75°F	Pigmented; not UV resistant
70869/70819 polyaspartic	Chemical Resistance UV Stability	200 sf/gal 8 WFT/8 DFT	Kit	20 min at 75°F	8 hrs at 75°F	Low odor; UV stable
Acrylithane HS2	Chemical Resistance Corrosion Resistance UV Stability	250 sf/gal 6 WFT/4 DFT	3:1	3 hours at 75°F	24 hrs at 75°F	Excellent gloss and color retention
Acrylithane HS4	Chemical Resistance Corrosion Resistance UV Stability	250 sf/gal 6 WFT/4 DFT	4:1	1.5 hours at 75°F	24 hrs at 75°F	Excellent gloss and color retention

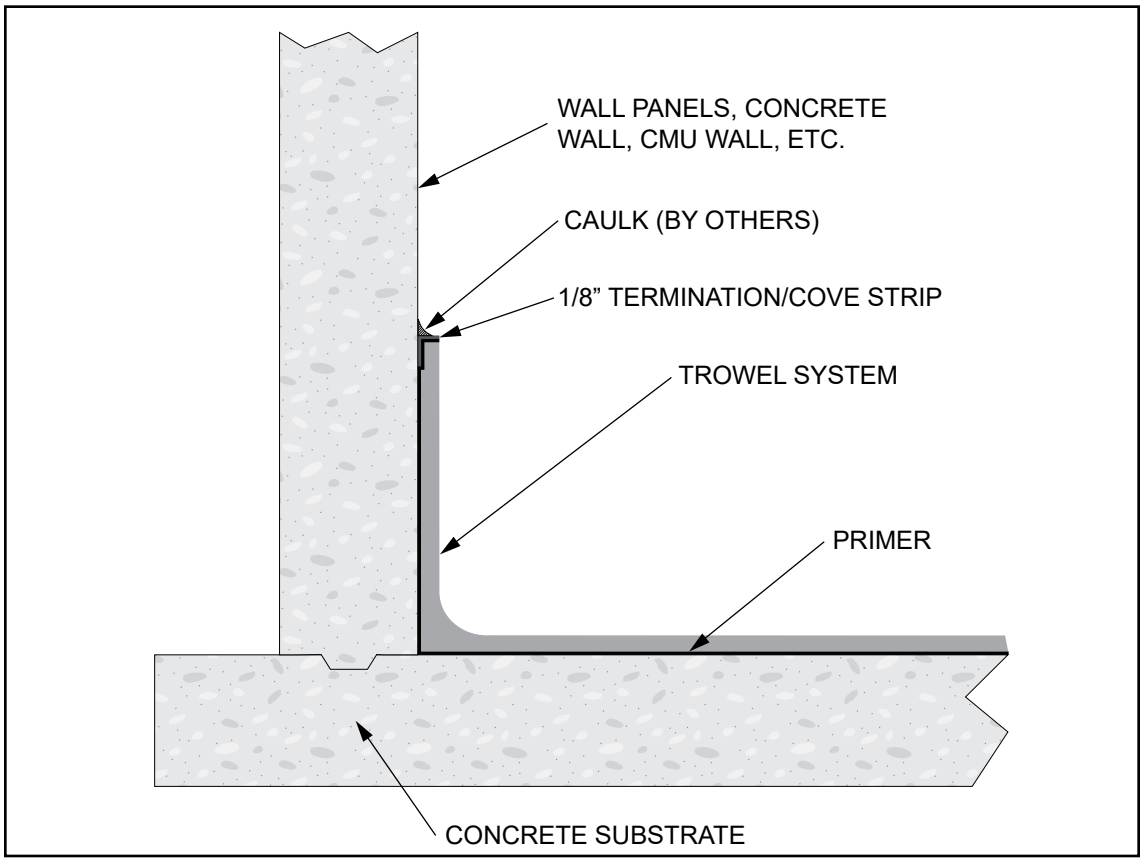
Detail Drawings

The following details are utilized in the specification and design of Neogard flooring systems in both new and retrofit applications. They are provided to show a generally recommended procedure for dealing with the condition shown. They will not and can not provide a specific solution for every condition likely to be encountered in field application. Where field conditions differ, the use of applicable portions of the details shown on their adaptation by an experienced and conscientious applicator should result in a quality project. If you have specific project related questions, contact Neogard Technical Services at www.Neogard.com.

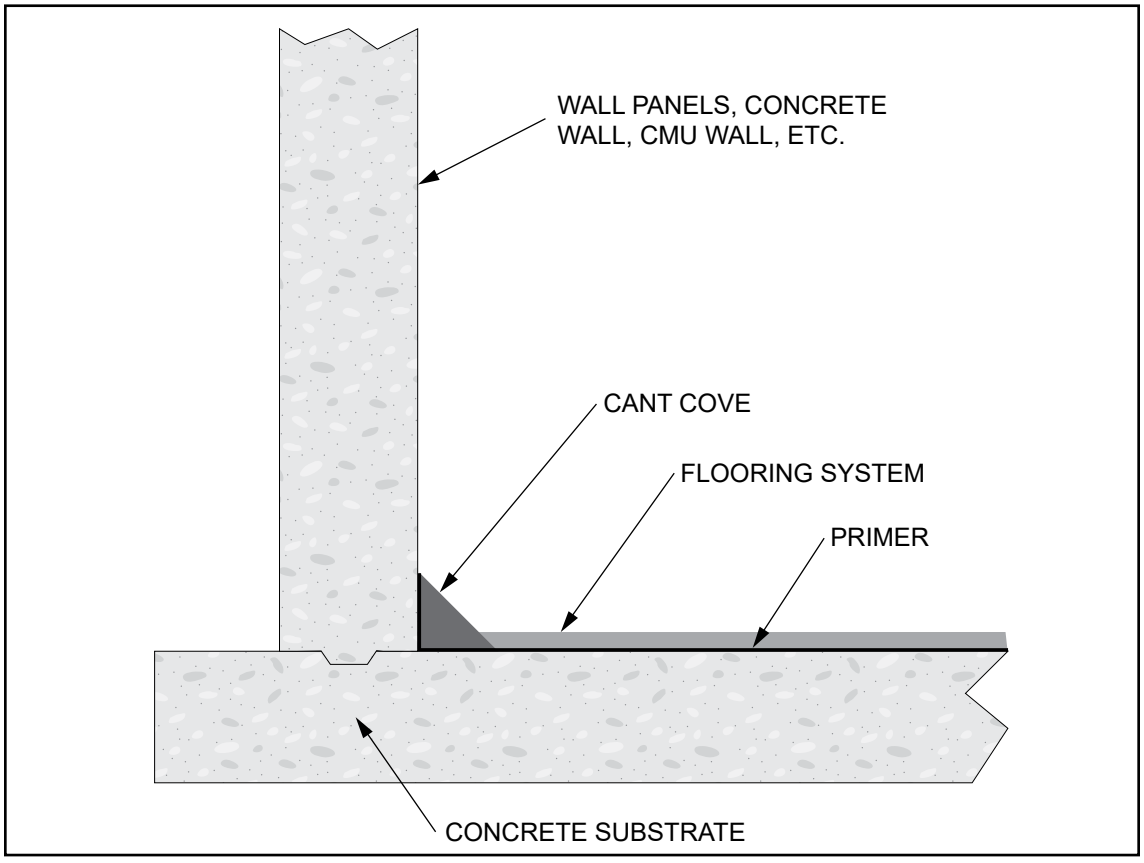
Horizontal/Vertical Termination Without Cove Strip



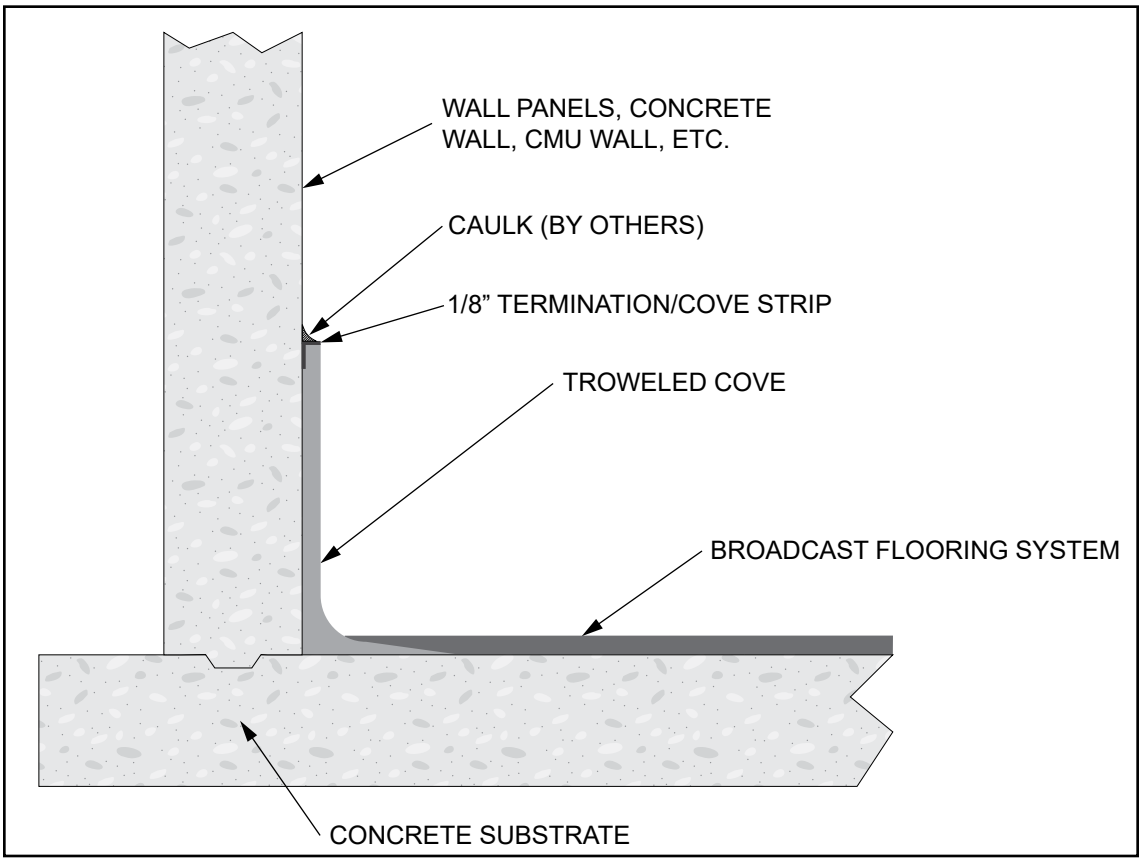
Standard Trowel Cove Base



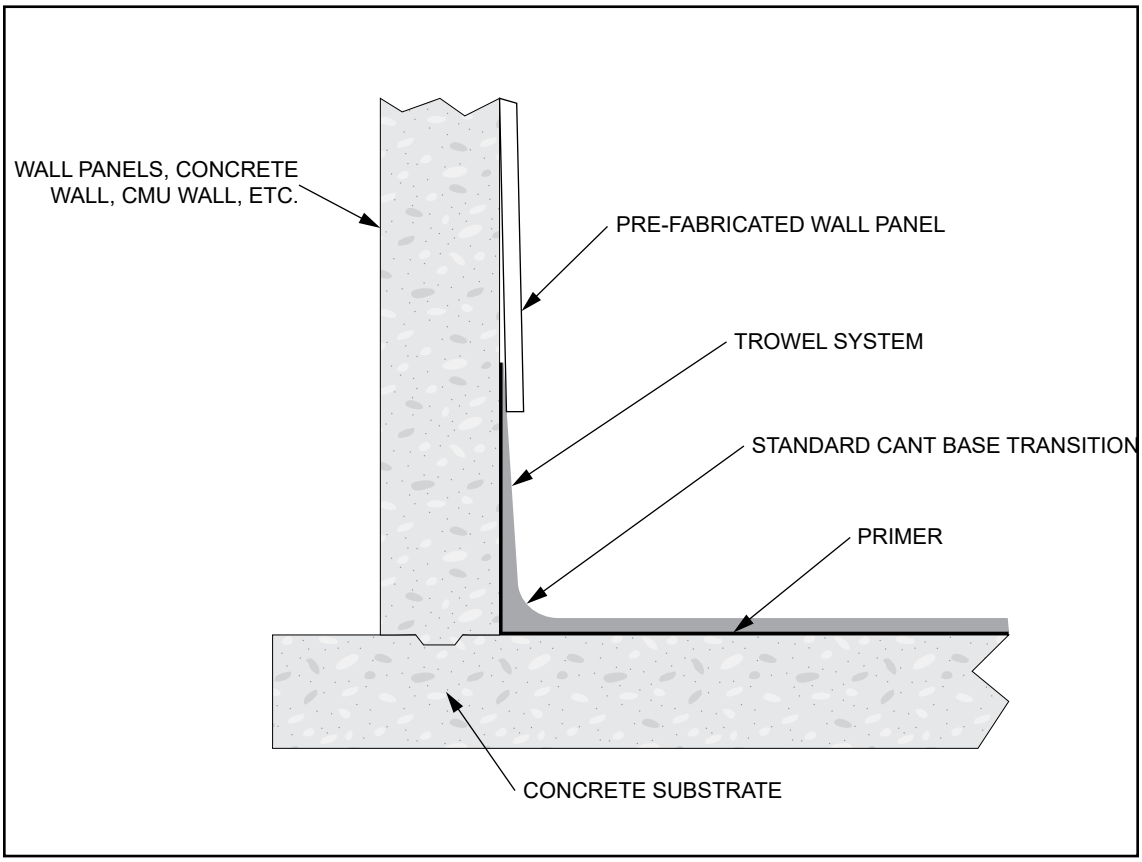
Horizontal/Vertical Termination Cant Cove



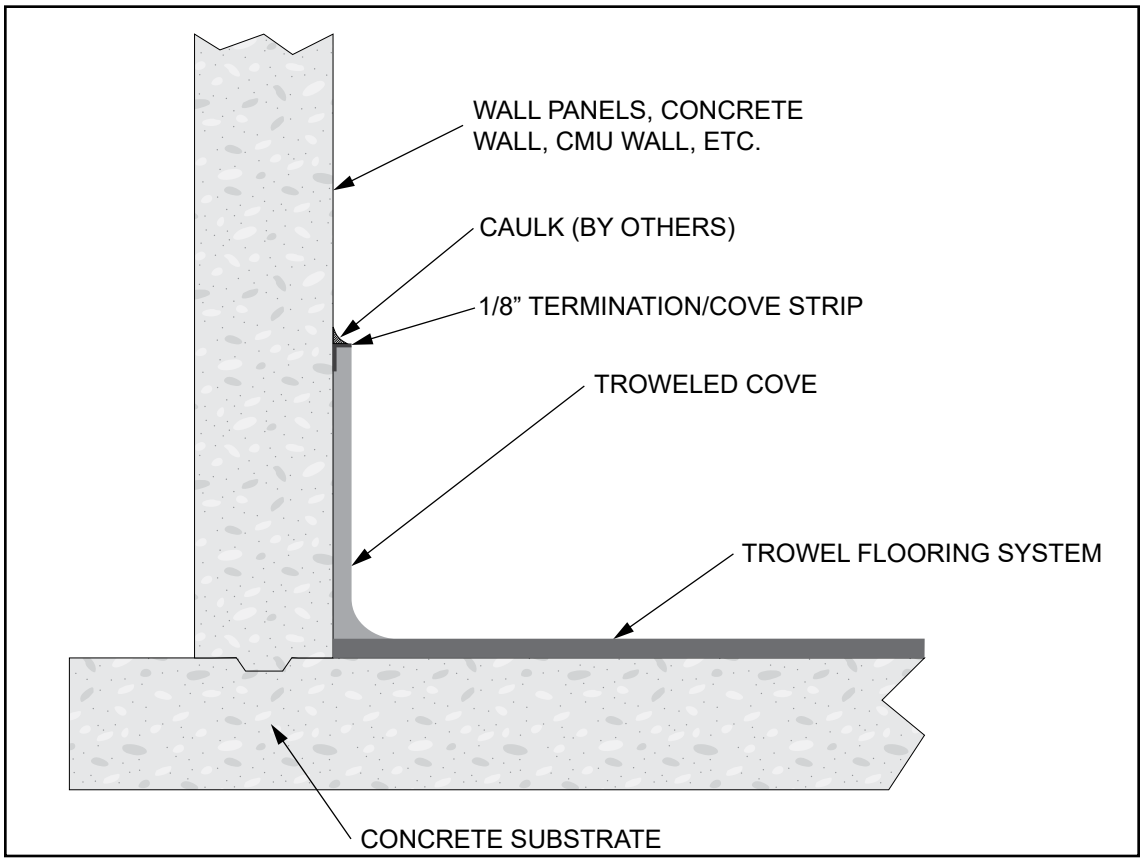
Standard Broadcast Flooring Cove Base



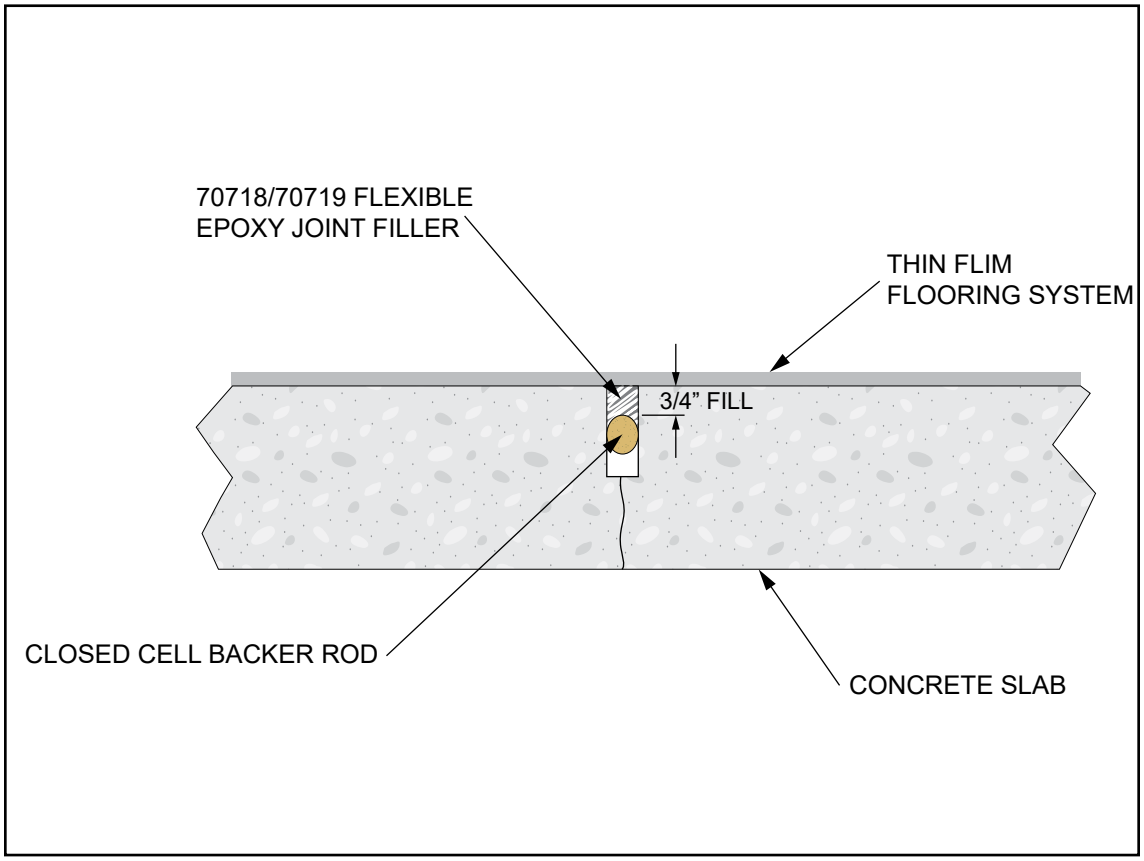
Standard Cove Base Transition to Pre-Fabricated Wall System



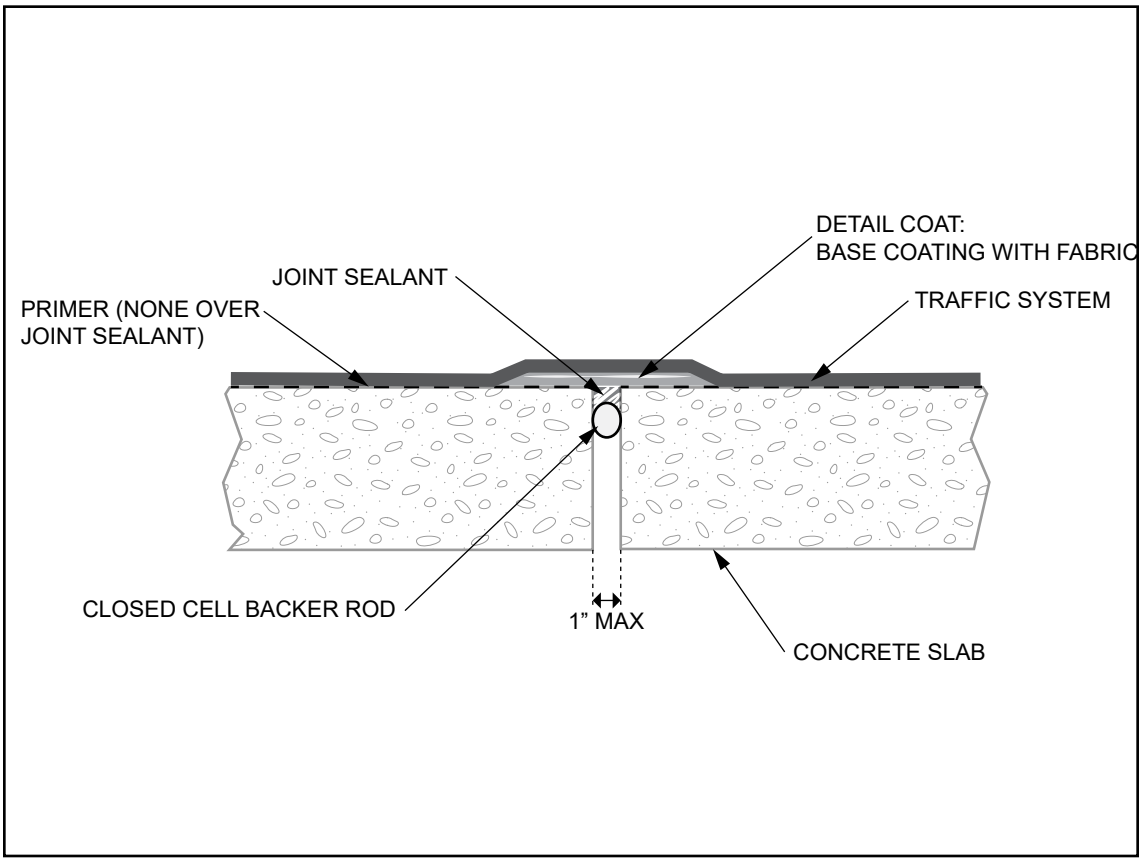
Standard Smooth Troweled Flooring Cove Base



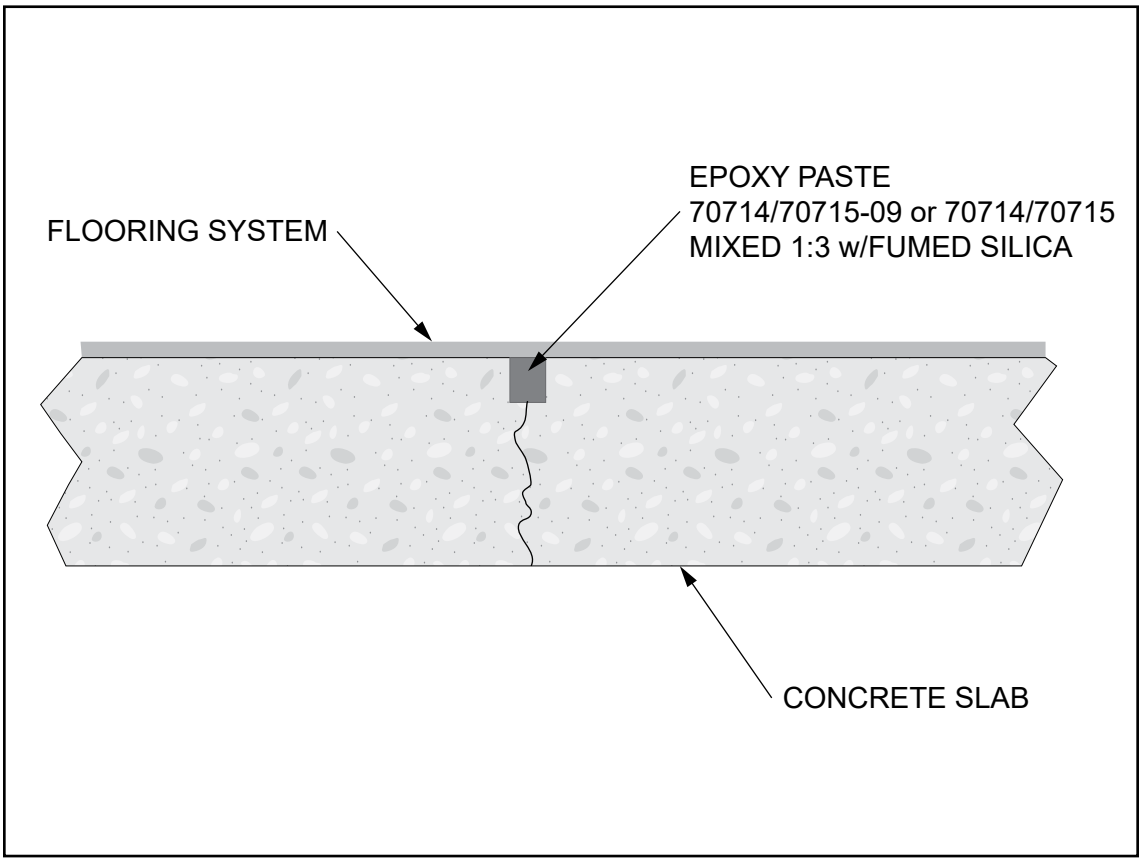
Thin Film Flooring Control Joint



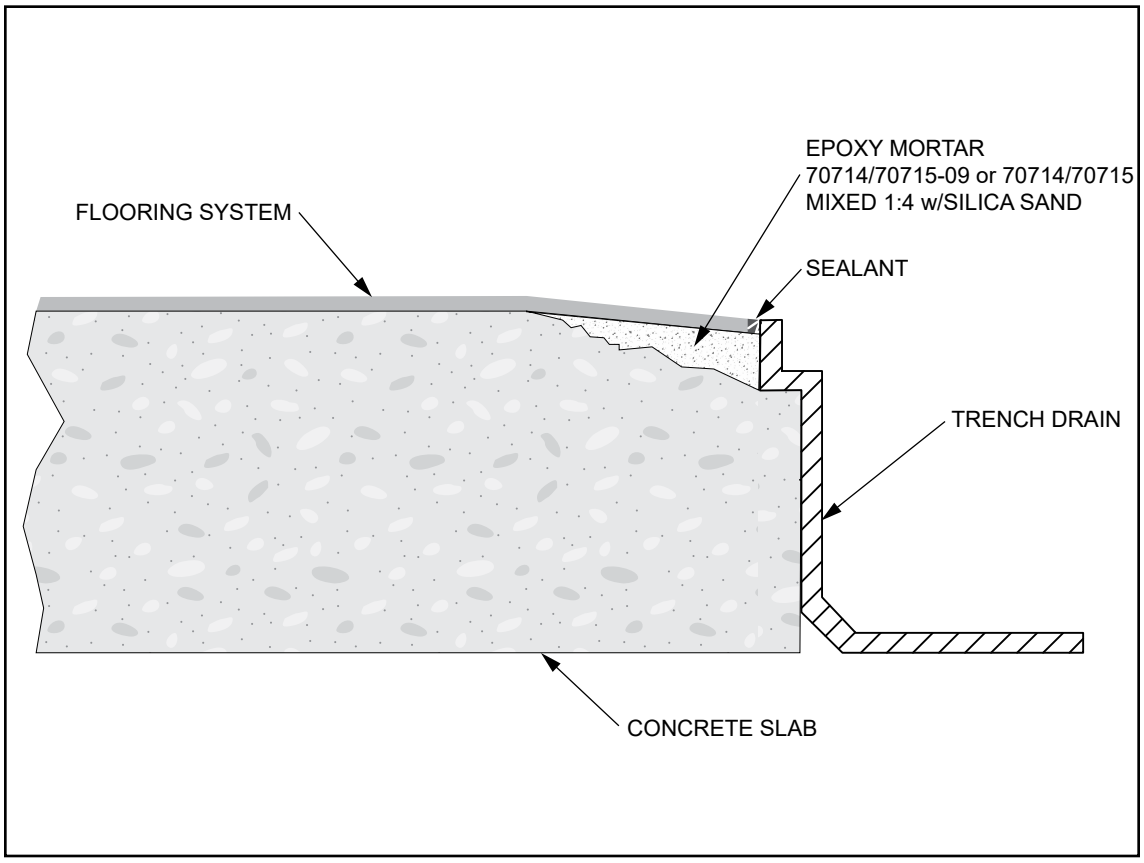
Expansion/Isolation Joint



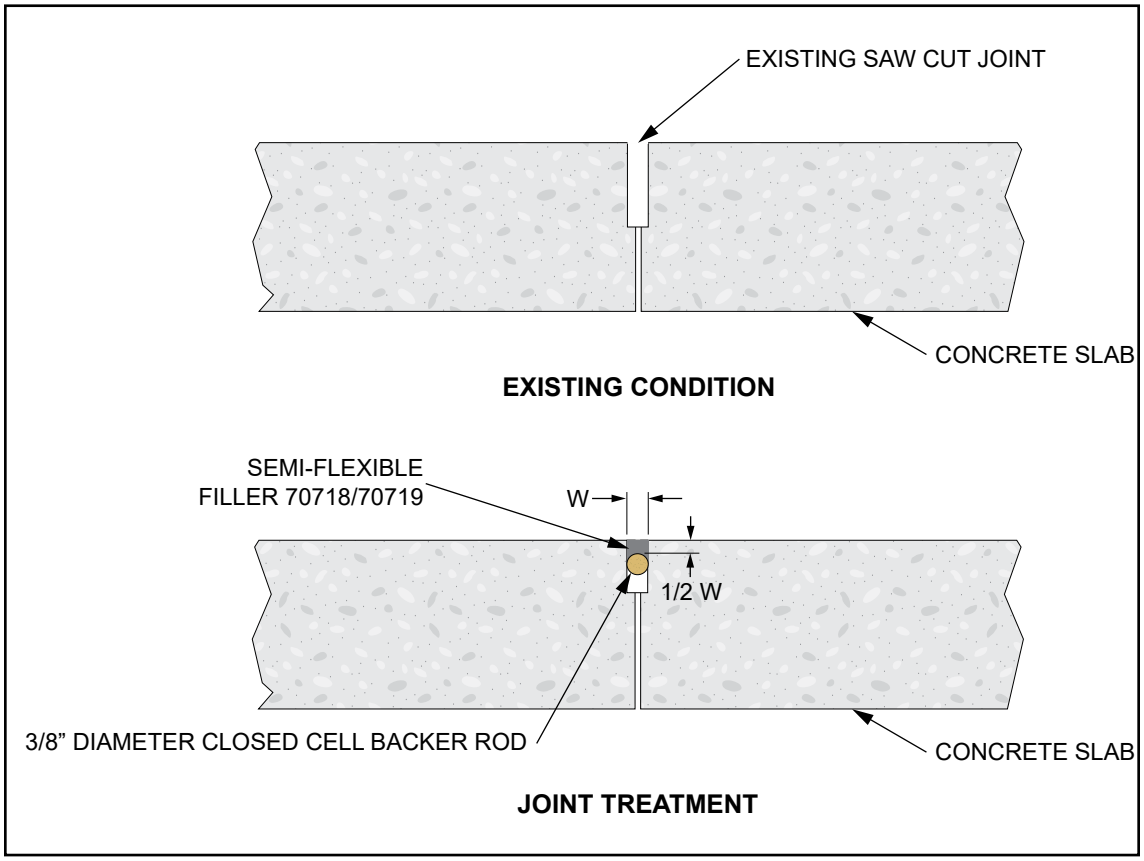
Random Crack Detail Without Movement



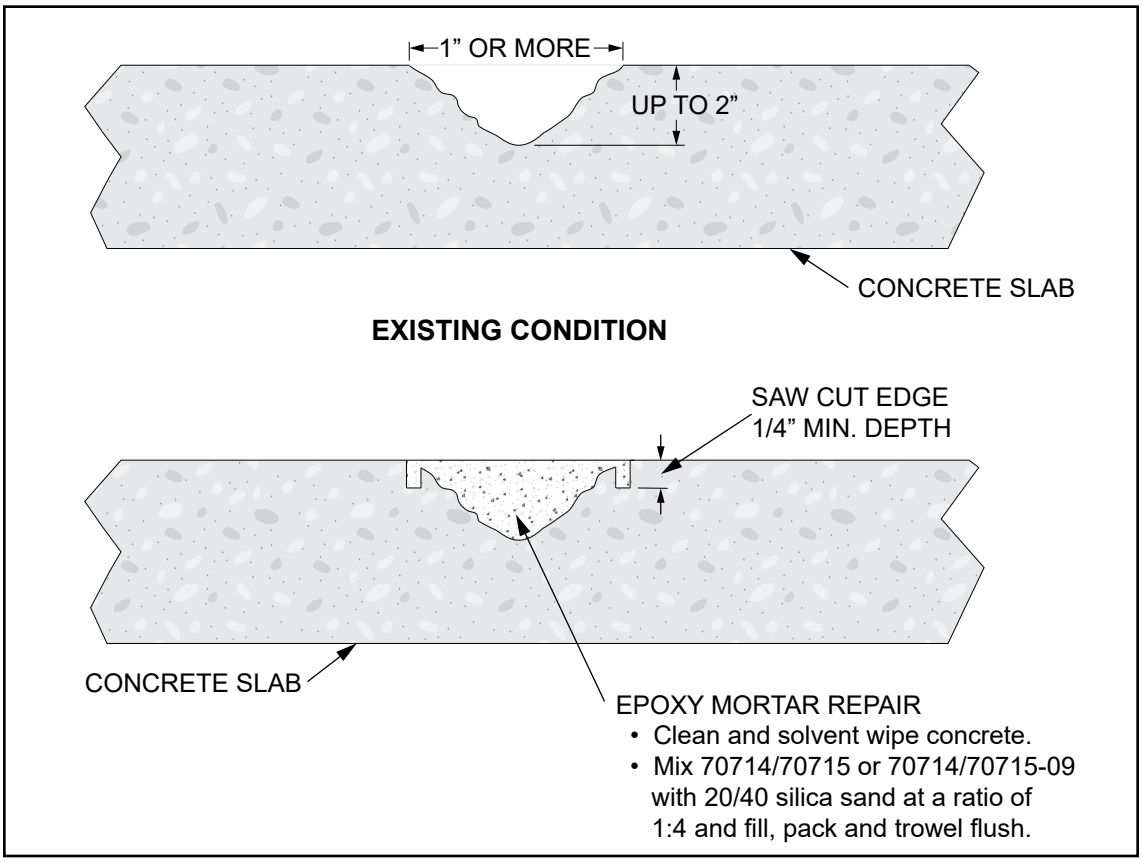
Prefabricated Trench Drain



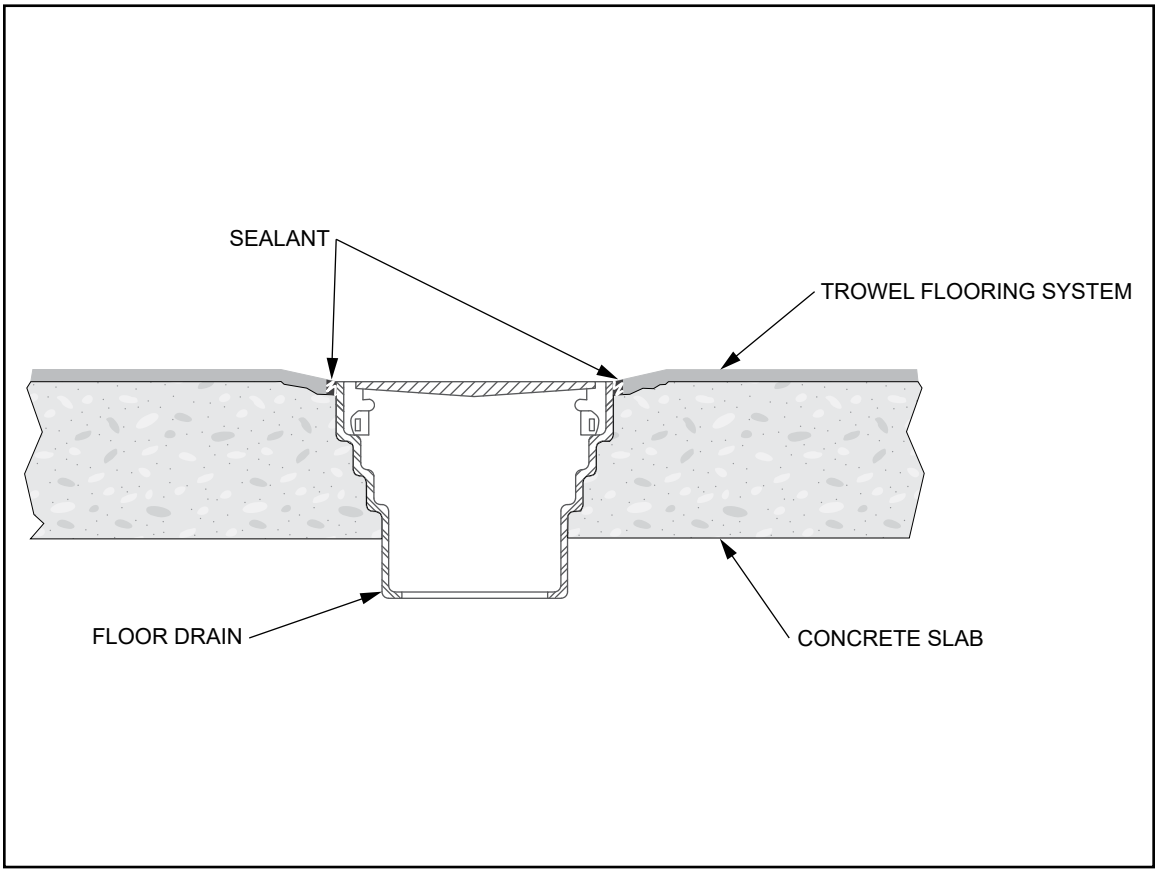
Existing Saw Cut Joint Treatment



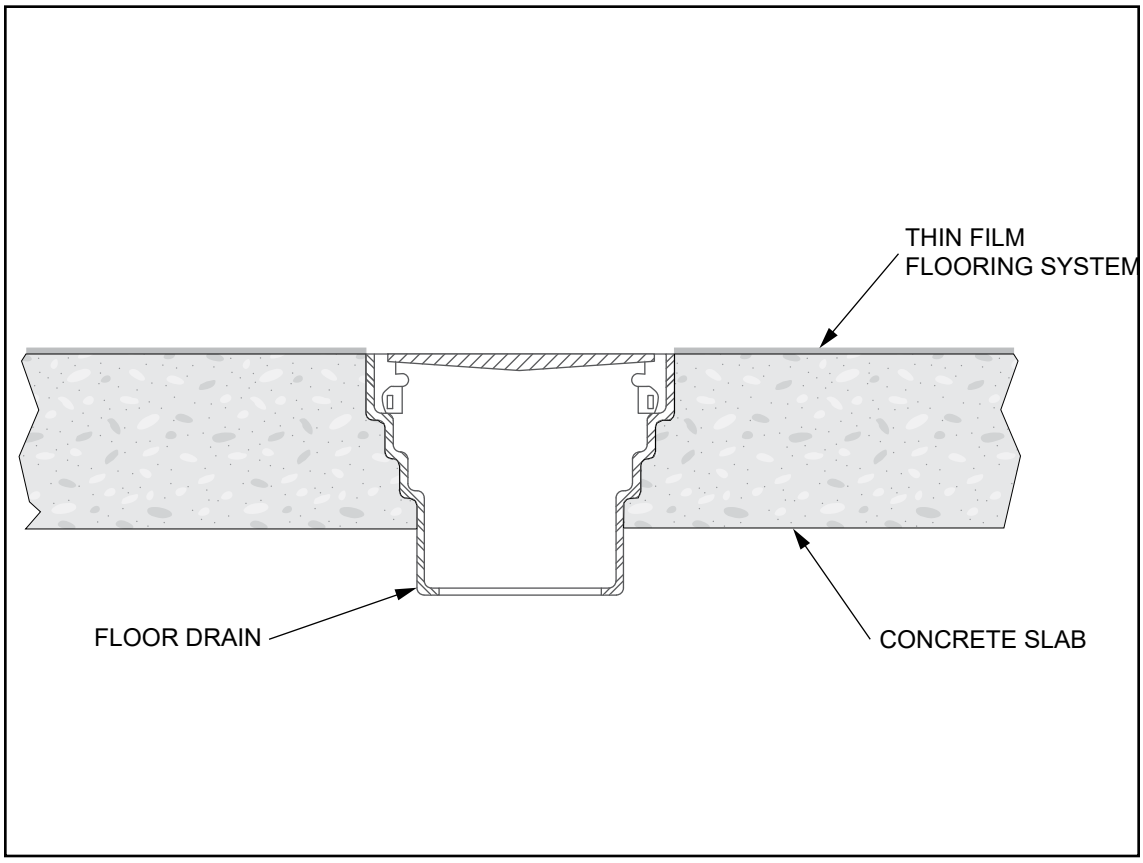
Major Concrete Repair



Area Drain Detail



Thin Film Flooring Area Drain Detail



Recoat Guidelines

Choosing an appropriate solution for recoating an existing flooring system depends on its current condition, accessibility, job conditions, and the desired finish. Applicators should consult a Neogard representative to determine an appropriate solution. Once a solution has been chosen, take the following steps:

1. **Clean Existing Flooring System**
    - Grease, oil or other contaminants should be cleaned by using a floor scrubbing machine and degreaser or pressure washing (600-800 psi) with Neogard 8500 BioDegradable cleaner or similar type detergent.
    - It may be necessary to use a stiff bristle broom in heavily contaminated areas.
    - Rinse floor thoroughly with clean water and allow to completely dry.
    - Visually inspect the floor to make sure there are no residual contaminants after initial cleaning. It may be necessary to utilize Xylene or Neogard 7055 Odorless Reducer, to remove residual contaminants.
2. **Prepare Surface**
    - Remove any loose or de-bonded material.
    - Repair any patches, spalls, cracks or other defects to bring the floor back to a smooth surface before applying the floor coating.

      Note: Refer to Epoxy Patching and Mortar Blends in the Support Information section of this Application Manual for this procedure.
    - Lightly sand entire floor with a circular floor buffing machine using a 60 grit sanding disc. This will help increase the bond of the new flooring system to the old one. Thoroughly vacuum to remove dust and then solvent wipe entire surface with 08080 Xylene Thinner or 7055 Odorless Reducer.
3. **Apply System**
    - Apply flooring system in accordance with recommendations from a Neogard representative and instructions contained in this Application Manual or the system Guide Specification.

Field Adhesion Testing

Conduct field adhesion tests to confirm the proper procedure for recoating an existing coating system and for system compatibility. Neogard recommends performing one of the following adhesion tests. Conduct adhesion testing in the field instead of a lab; field testing represents the actual job conditions. For further information, please refer to the full ASTM standards.

ASTM D903

Standard Test Method for Peel or Stripping of Adhesive Bonds. This test is also known as the “Adhesion in Peel” or “Peel Adhesion” test and results in a quantitative value stated in lbs./linear inch or PLI.

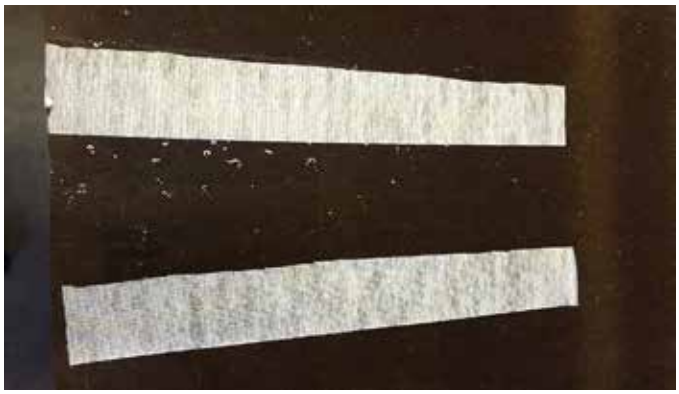
Items Needed

- Solvent/Cleaner
- Clean Rags
- Primer (if applicable)
- Coating Material
- 4” Roller/Cover or 3” Brush
- Fabric test strips cut to 1” x 18”-24”
- Painter’s Tape
- Utility Knife
- Spring Scale/Fish Scale (calibrated to pounds and ounces)

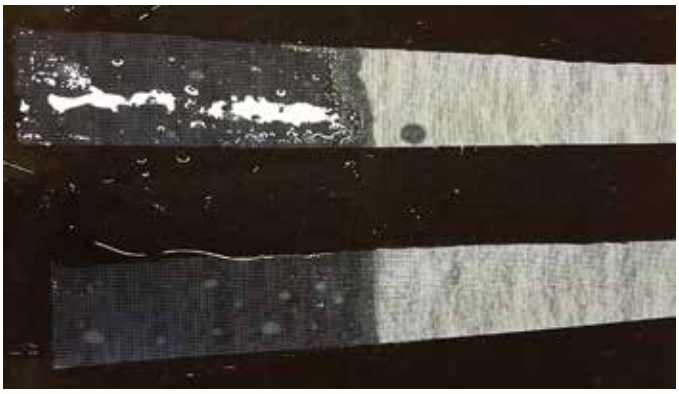
Procedure

1. Clean and prepare substrate as required by relevant specification.
2. If applicable, apply primer and allow to cure.
3. Apply coating at 16 wet mils. Coating is applied to an area 4” x 14” minimum.
4. Work fabric strips into wet coating, allowing 6” of fabric to remain free of coating. Adhere the loose end of fabric to the substrate utilizing painter’s tape.

Fabric strips laid on top of substrate



Fabric strips worked into wet coating



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5. Allow coating to cure 7–10 days.
6. Remove painter's tape and tie a knot in the dry end of the fabric.
7. With the knife, score coating along the perimeter of the fabric.
8. Using a calibrated spring scale, hook the knot and pull back 180 degrees, parallel to the fabric.
9. Record the pounds per inch that separation occurrred, making sure to divide the pounds of the pull by the width of fabric. Test values of 4–5 pounds/inch for epoxies are acceptable for recoat situations.

ASTM D7234 (Concrete Substrates)

This is a standard test method for determining pull-off strength of coatings using portable pull-off adhesion testers and was developed for concrete substrates. The following is a summary of the test procedure. For further instruction, please see the ASTM standard as well as directions provided by manufacturer of the portable pull-off adhesion tester.

Items Needed

- Solvent/Cleaner
- Clean Rags
- Utility Knife
- Adhesive
- Portable pull-off adhesion tester
- Puck or Dolly (loading apparatus)

Procedure

1. Score through coating down to concrete substrate at a diameter equal to diameter of the puck (dolly). Secure the puck (dolly) to the face of the coating with an adhesive.

2. Once the adhesive has cured, the portable pull-off adhesion tester is attached to the puck (dolly) and aligned to apply tension normal to the test surface.
3. The force applied to the puck (dolly) is then increased and monitored until a plug of material is detached.
    - When a plug of material is detached, the exposed surface represents the plane of limiting strength within the system.
    - The nature of the failure is qualified in accordance with the percent of adhesive and cohesive failures and the actual interfaces and layer involved.
    - The pull-off adhesion strength is computed based on the maximum indicated load, the instrument calibration data and the surface area stressed. Strength results using different portable pull-off adhesion testers may vary based on instrumental parameters.
    - Test values above 250 psi are considered acceptable for recoat applications.

Support Information

Product Descriptions

Product	Type	Description	Colors	Uses	Comments
7779/7781	Epoxy	30% water based epoxy	Clear	Floor Sealer, Pre-Primer to minimize out-gassing or over-porous conditions	Fast curing, great alternative for chemical hardeners.
70702/70703	Epoxy	100% solids epoxy resin	Std Gray	Resurfacing Conditioner, Patching Resin	Economical & general use epoxy. **Must be topcoated.**
70714/70715	Epoxy	100% solids epoxy resin	00 Clear 01 White 02 Gray 03 Tan 04 Dk Gray 05 Tile Red 06 Green 11 Lt Gray 16 Black	Primer Base Coat Seal Coat Topcoat Matrix Resin Patching Resin	High performance epoxy, most frequently used resin in Neogard's flooring line, high chemical resistance.
70714/70715-01	Epoxy	100% solids epoxy resin	00 Clear 02 Gray 03 Tan 04 Dk Gray 05 Red 06 Green 11 Lt Gray 16 Black	Primer Base Coat Seal Coat Topcoat Matrix Resin Patching Resin	Fast cure, low viscosity, high performance epoxy, Excellent chemical resistance.
70704/70705	Novolac epoxy	100% solids novolac epoxy resin	02 Gray 05 Tile Red	Base Coat Seal Coat Topcoat Matrix Resin	Outstanding chemical resistance, excellent for thermal shock conditions.
70734/70735	Epoxy	100% solids epoxy resin	Clear	Base Coat Seal Coat Topcoat	Crystal clear, low UV sensitive epoxy, good chemical resistance.
70718/70719	Epoxy-Urethane	99% solids hybrid epoxy-urethane resin	02 Gray	Joint Filler Base Coat Topcoat	Flexible epoxy resin for saw cut joints or as a flexible coating.
70805/7952	Aliphatic Polyurethane	62.5% solids polyurethane resin	Tintable	Topcoat	Superior chemical resistance (Skydrol resistant), UV stable, high abrasion resistance.

Product	Type	Description	Colors	Uses	Comments
70817/70818	Aliphatic Polyurethane	89% solids polyurethane resin	Clear	Topcoat	Ultra high solids & superior chemical resistance (Skydrol resistant), UV stable, high abrasion resistance. VOC compliant.
Acrylithane HS2 **Acrylithane HS4**	Aliphatic Acrylic-Polyurethane	62.5% solids acrylic-polyurethane resin	Tintable	Topcoat	Good chemical resistance, UV stable, high abrasion resistance.
70800 or 70850 + **70801 +** **70802 Trowel** **70703 V** **70704 SL** **70806 RT**	Polyurethane	Water dispersed, cement base polyurethane resin	02 Gray 05 Tile Red 31 Desert	Matrix Resin	Fast cure, high thermal shock and chemical resistance. Excellent for food preparation area applications.
70869/70819	Polyaspartic	96% solids aliphatic polyurea	Clear	Base Coat Topcoat	Fast cure, high solids, low odor, UV stable.

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:

- Shot-blasted 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 should not be used in this formula.

Example:

- 50% solids by volume = 16 (wet mils) x 0.5 (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:

1. System = 32 dry mils total
2. Material (50% solids by volume) = 8 dry mils per gallon
3. 32 divided by 8 = 4 gallons per 100 square feet
4. % 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).

Epoxy Mortar Coverage Rates

Epoxy Mortar Yield per Gallon of Epoxy Resin Binder

Epoxy Binder Gallons	Aggregate Gallons*	Mortar Gallons
1	1	1.6
1	2	2.2
1	3	2.8
1	4	3.4
1	5	4.0

*Silica quartz aggregate weighs approximately 12-14 lbs per gallon depending on mesh size and amount of air void space. These estimates are based on 20/40 mesh aggregate.

Coverage per Gallon of Epoxy Mortar (Epoxy Resin Binder Plus Aggregate)

Thickness in Inches	Coverage, Square Feet
1/16	25.7
1/8	12.8
3/16	8.6
1/4	6.4
3/8	4.3
1/2	3.2

(continued on next page)

Coverage for Coating or Membranes

Applied Coating Thickness (1000 mils = 1 inch)	Coverage per U.S. Gallon 100% Solids Material
1/4 in. = 250 mils	6 sq ft
3/16 in. = 187.5 mils	8 sq ft
1/8 in. = 125 mils	12 sq ft
100 mils	16 sq ft
1/16 in. = 62.5 mils	25 sq ft
50 mils	32 sq ft
1/32 in. = 31.25 mils	51 sq ft
20 mils	80 sq ft
1/64 in. = 15.625 mils	102 sq ft
10 mils	160 sq ft
5 mils	320 sq ft
1 mil	1600 sq ft

If coating contains a solvent which will evaporate, thickness of coating will be reduced by sample percentage as solvent loss.

Thinning and Cleaning Solvents

General Practices

Neogard products are formulated to be installed as manufactured, without thinning. However, if thinning is required, follow these practices:

- Always consult the Neogard Product Data Sheet prior to thinning the material.
- Use only Neogard manufactured or other commercial grade solvents with Neogard products.
- Be sure there is no moisture contamination in solvents, as it can produce adverse reactions.
- When thinning materials, always be aware of local VOC restrictions for coating applications before thinning.
- When thinning CA-formulated coatings, Acetone is the recommended solvent.
- Never exceed recommended thinning rates (typically no greater than 10%). Excessive thinning may affect physical properties of coating.
- Never use solvents that contain alcohol in Neogard urethane products. Alcohols react with polyurethane hardeners creating a permanent liquid state, or under-cured membrane.
- Thin and clean only with recommended products. Consult Neogard for questions regarding solvents.
- Any thinning of materials should occur after materials are mixed.

Recommended Solvents

Product Number	Material Thinning	Equipment Cleaning
70702/70703	7055 Odorless Reducer, 08080 Xylene	7055 Odorless Reducer, 08080 Xylene
70704/70705	7055 Odorless Reducer, 08080 Xylene	7055 Odorless Reducer, 08080 Xylene
70714/70715	7055 Odorless Reducer, 08080 Xylene	7055 Odorless Reducer, 08080 Xylene
70714/70715-01	7055 Odorless Reducer, 08080 Xylene	7055 Odorless Reducer, 08080 Xylene

Product Number	Material Thinning	Equipment Cleaning
70718/70719	7055 Odorless Reducer, 08080 Xylene	7055 Odorless Reducer, 08080 Xylene
70724/70715	7055 Odorless Reducer, 08080 Xylene	7055 Odorless Reducer, 08080 Xylene
70734/70735	7055 Odorless Reducer, 08080 Xylene	7055 Odorless Reducer, 08080 Xylene
70805/7952	7055 Odorless Reducer, 08080 Xylene	7055 Odorless Reducer, 08080 Xylene
70817/70818	7055 Odorless Reducer, 08080 Xylene	7055 Odorless Reducer, 08080 Xylene
70869/70819	Do Not Thin	7055 Odorless Reducer, 08080 Xylene

Primers

70714/70715 (Mix Ratio 2:1)

- This high performance, 100% solids epoxy can be used as a primer for any of the Neogard traffic bearing waterproofing systems and as a concrete overlay or re-surfacer. This product is low odor, moisture tolerant, low VOC, and may be applied in high humidity environments.
- 3- or 15-gallon kit.
- Pot life is approximately 30 minutes.
- Cure Time: 8–9 hrs at 75°F/23°C.

70714/70715-01 (Mix Ratio 2:1)

- This high performance, fast-set version of 70714/70715 100% solids epoxy, can be used as a primer for any of the Neogard traffic bearing waterproofing systems and as a concrete overlay or re-surfacer. This product is low odor, moisture tolerant, low VOC, and may be applied in high humidity environments.
- 3- or 15-gallon kit.
- Pot life is approximately 15 minutes.
- Cure Time: 2–3 hrs at 75°F/23°C.

Additives

The following additives may be used during the application of Neogard flooring systems. For additional information contact Neogard Technical Services.

7986 Vanilla Scented Odor Mask, 7987 Orange Scented Odor Mask

- Odor is always a major concern with coating applications, particularly with interior applications. Odor is always a concern when applying solvent-based urethanes. Ensure work areas are properly ventilated and that workers are wearing appropriate respirators, if needed.
- Odor Mask can be added to help minimize odor problems, but will not eliminate them. Add 3 oz of 7986 or 7987 per 5 gallons of mixed material.
- Note: Masking odor does not lessen hazards associated with fire, solvent toxicity, and chemical toxicity. Refer to the Safety and Storage section of this Flooring Application Manual for more information.

7055 Odorless Reducer

- This odorless solvent is used for cleaning and thinning epoxies and urethanes. Do not thin flooring materials more than 5% by volume.

Weather Impact

Cold Ambient Temperatures

- Ideal application temperatures are between 70°F– 90°F (21°C–32°C).
- When two-component materials are stored or applied when cold, the viscosity increases, affecting how the product flows and levels. This may require thinning of the materials. Do not thin more than 5% by volume with Neogard 7055 Odorless Reducer or Xylene. Keep materials stored between 70°F–80°F (21°C-27°C).
- Cold material will also increase the cure time. What would normally cure in 8 hours at 70°F (21°C) may take 14 hours or longer at 50°F (10°C).
- Two component materials may become harder to mix together when cold. This could affect the mix ratio and cause improper curing.
- In solvent based urethanes, cold temperatures will slow down the solvent evaporation and cause slower cure times.
- Cold temperatures can also affect the gloss on epoxies and urethanes once cured, causing it to be dull.

Cold Substrate Temperatures

- Substrate temperatures less than 60°F (16°C) will cause slower curing.
- Do not apply when substrate temperatures are less than 50°F (10°C).
- It is recommended to maintain a minimum substrate temperature of 50°F (10°C) for a minimum of 48 hours before, during and after installation, or until cured.
- May affect flow and leveling of the material. If thinning is needed, see Thinning and Cleaning Solvents and Product Mixing Instructions sections in this Application Manual.

Hot Temperatures

- High substrate, ambient, and material temperatures can affect material viscosity and accelerate the curing process. This becomes an issue using the solvent-based urethane topcoats such as Neogard 70805/7952. Solvent-based products cure from the top down. If the upper surface of the coating cures too quickly and forms a skin, the solvents that are released during the curing process become trapped, resulting in blisters and/or bubbles in the coating.
- Pot life and working time is also shortened when materials are hot. See Product Mixing Instructions in this Application Manual.
- Store materials in a cool, dry place. Never store materials in direct sunlight or in areas with high temperatures. Do not have the mixing station in direct sunlight.

Epoxy Patching and Mortar Blends

Patching

Neogard’s 70714/70715 series epoxy patching materials are two component 100% solids epoxy resins, specially formulated to use in dry or humid environments and have excellent chemical resistance.

Surface Preparation

- Remove dust, laitance, grease, curing compounds, waxes and other foreign materials.
- Prepare concrete by shot-blasting, acid etching or diamond grinding.
- Surface must be clean and sound before patching.

Mixing

- Always read labels for mix ratios.
- Improper mix ratios can result in soft or uncured material.
- Always use clear 70714/70715 or 70714/70715-01. Use a slow speed drill (600 rpm) with a Jiffy mixing paddle. Mix only what can be used within the pot life of the material. Refer to the product data sheet for pot life information.

Application

- For minor patches and cracks up to ¾" wide and ½" deep, use P1934 fumed silica mixed with clear 70714/70715 or 70714/70715-01 epoxy at a ratio of 3 parts of silica to 1 part of mixed epoxy by volume.
- Place the patching material onto cracks, holes or pop outs and then strike flush with a putty knife or trowel. Let cure before installing the flooring system.
- For major patches and cracks greater than ¾" wide and ½" deep, use 86364 (20/40) aggregate mixed with clear 70714/70715 or 70714/70715-01 epoxy mixed at a ratio of 4 parts of 86364 to 1 part of mixed epoxy, by volume. Note: 1 gallon of mixed epoxy and 4 parts of 86364 aggregate will cover 21.7 square feet at 1/4" depth.
- Apply with a trowel and finish off level with surrounding surfaces.
- For larger area resurface patching, mix clear 70714/70715 epoxy with 86468 silica flour at a ratio of 1:1 by volume to make a slurry.
- Apply with a notched trowel or squeegee to desired thickness and then broadcast 86364 (20/40) or 7992 (16/30) silica sand to refusal.

Epoxy Mortar Blends

There are two kinds of mortar blends for Neogard troweled flooring systems:

Flooring Systems

- For the WG, CG and NeoQuartz systems, the mortar blend is four parts of 86364 (20/40) aggregate or colored quartz to 1 part of mixed epoxy by volume. Check Systems Application section in this Application Manual to see which epoxy goes in each system.

Cove Base

- For making cove base mortar, mix four parts of 86364 or colored quartz to one part of mixed epoxy to one part of P1934 (Cab-O-Sil) by volume.

Surface Conditioners

Use

Surface conditioners are used to fill voids, areas of aggregate loss and excessively rough, damaged or exposed aggregate surfaces prior to the application of Neogard flooring systems in order to assure effective installation and long term performance.

(continued on next page)

Description

Neogard offers two variations of surface conditioners for patching or resurfacing concrete substrates:

- 70702/70703 two component, 100% solids epoxy slurry that is specially formulated to resurface deteriorated concrete leaving a smooth, durable finish.
- 70714/70715 and 70714/70715-01 two-component, 100% solids epoxy resins are designed as high strength binders. Adding #200 silica flour into the mixed epoxy makes an excellent concrete surface conditioner. The following mix will yield approximately 4.8 gallons of mixed material. Spread at approximately 40 square feet per gallon:
    - 3 parts by volume mixed epoxy
    - 3 parts by volume #200 silica flour

Application Methods

- For a smooth surface, apply epoxy slurry mix to effected areas with a notched squeegee and backroll. Allow to cure. Do not exceed 1/4” in depth per application.
- For filling in depressed, scaled or exposed aggregate areas of the concrete slab, spread epoxy slurry mix to affected areas with a notched squeegee and immediately broadcast 20/40 or 16/30 mesh aggregate into wet mix to rejection. Do not exceed 1/2” in depth per application. Allow to cure and remove excess aggregate.

Note: The surface profile obtained by broadcasting 20/40 or 16/30 mesh aggregate into the epoxy slurry will leave a rough surface and will require a grout coat of neat epoxy applied at the rate of 1/2 gallon per 100 square feet prior to the application of the flooring system.

Application Equipment

The following are examples of tools/equipment used when applying Neogard flooring systems.

Surface Preparation Equipment

Floor grinder w/diamond grinding discs

Shot-blast machine

Mixing Equipment

Slow-speed drill with Jiffy Mixer paddles

Measuring cans

Small mixer for epoxy mortars

Application Tools

1/4” or 3/16" roller covers

Flat squeegee

(continued on next page)

Notched squeegee or trowel

Gauge rake for Neocrete SL & epoxy slurries

Coving trowels

Floor sander

Miscellaneous Tools

Spike roller (used for bubbles)

Spike shoes

Safety and Storage

This section covers safety and storage of Neogard coating materials. Failure to follow these instructions may result in bodily injury or property damage.

General Guidelines

SDS must be on jobsite at all times.

Neogard produces three basic material types: 100% solids epoxies; cement-based, water-dispersed urethanes; and solvent borne urethanes. Each type has specific hazard potentials and storage requirements. Urethane coatings have hazards associated with fire, solvent toxicity, and chemical toxicity. 100% solids epoxies have low fire risk but may require special care because of chemical toxicity. Everyone on the jobsite must know how to protect against fire, explosion, and toxicity. Refer to SDS, product labels, product data sheets and application specifications which describe specific hazards content, proper use, and storage procedures.

Provide ventilation at all times, especially when working indoors or in confined areas. When natural air movement is insufficient, forced air ventilation is required. Use equipment which exhausts the air from near floor level, since solvent vapors are heavier than air and collect in low areas. A competent, properly equipped person must be stationed outside confined areas during work to assist in case of emergency.

Fire and Explosion Prevention

Neogard lists flash points for products containing solvents on the product's Product Data Sheet (PDS). 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, and others.

Open flame, welding, smoking or other ignition sources shall not be allowed in a building, overhead, or near a building where coating is being applied or was recently applied. Keep ignition sources downwind of a coating operation. No smoking, welding or open flame shall be allowed near areas where air with solvent vapor is being discharged.

All electrical equipment and outlets must be grounded, including 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. Contractor and applicator personnel are responsible for these precautions; a contractor or applicator employee must be appointed this duty.

Any equipment—such as spray guns and compressed air nozzles—that can produce a static charge must be grounded. All hand tools used in solvent vapor areas must not produce sparks. When non-complying tools must be used, move equipment to an area free of solvent vapor or thoroughly exhaust solvent-laden air before beginning work.

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

Have fire extinguishers as prescribed by the Occupational Safety and Health Administration (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 application to assure complete evaporation of solvents.

Toxicity and 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 death. The maximum allowable concentration of solvent vapors on a weighted eight hour working day is limited to 100 parts per million as published by 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. Applicators must measure solvent content in the air when people are working in an enclosed area.

Approved respirator masks (chemical cartridge vapor 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. Replace mask cartridges on a regular basis.

Note: 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). Use of fresh air supplied respirators does not reduce the necessity for good ventilation to reduce fire hazards and ensure 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 Pharmacopeia 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, Subpart C). 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 to 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 ensure 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 non respirable gases or oxygen.

Any time a worker feels 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. Anyone affected must go to an area with fresh air.

Effective 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, pits or ponded areas, and 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 people find no lasting effects. Special hand creams can be used to protect people 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 people 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 of 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

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

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 damage to the eyes.

Property Precautions

Consider possible damage to property. Overspray can ruin finishes on vehicles and other surfaces (brick, paint, plastic, and others). Solvent vapors in confined areas can damage plants and pets, including tropical fish and birds. Food, even stored in freezers, can pick up a solvent taste and should be protected.

Storage

Avoid storing material in direct sunlight. All material should be stored in a cool shaded place, preferably at a temperature of 75°F/23°C. Higher storage temperature for extended periods can cause thickening or 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. Contractors are responsible for the safety and proper handling of material.

Do not keep open containers in confined places.

Protect emulsion (water borne) coatings from freezing.

Volatile Organic Compounds (VOCs) and Health

Worker Safety and Public Health

VOCs as solvents in paint coatings are regulated by EPA because of their public health hazard. 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 VOCs, but are 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 coatings that may be regulated by OSHA. These ingredients include heavy metals in pigments, isocyanates in urethane binders, and several other chemical ingredients.

Zero VOC versus VOC Compliant

Under the EPA's Clean Air Act regulations, use of low-VOC coatings—typically where VOCs are less than 2.1 pounds per gallon (lbs/gal) of paint—is 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 and they can still contain chemical ingredients that may be hazardous to workers and are regulated by OSHA.

VOCs and Odor

Most, if not all, VOCs have some odor. Some VOC-exempt solvents have odor. Certain binders and pigments can also have odor. 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.

The best way to measure the toxicity of a chemical is by laboratory testing. The best way to measure a person's exposure to a chemical is by using air sampling and laboratory analysis. When this air sampling is for a worker in an occupational setting, it is 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 the toxicity. 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.

Air Testing 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. An example of where OHSA sampling is required is when coatings contain 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 SDS. 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).

Conclusion

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 require 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 OSHA, U.S. Department of Labor, where applicable, should be consulted for further detail and compliance.

Glossary

1K & 2K: 1K is a term used to describe a coating that has only one component and does not require a hardener, catalyst or activator. 2K describes a coating that has two components in that the resin side needs to be mixed with a hardener, catalyst or activator.

Accelerator: A chemical typically mixed in small quantities with coating that increases the speed of the chemical reaction thereby hastening the curing of the coating system.

Additive: Product added to coating during mixing that enhances physical or chemical properties.

Activator: The curing agent/hardener of a two component coating system.

Adhesion: The degree of attachment between a coating film and the underlying substrate. There are several test methods to measure the amount of adhesion.

Aggregate: Hard material typically comprised of stone, sand, glass or synthetic material that is added to a coating system to provide build and skid resistance to the final system.

Aliphatic Coating: Type of hydrocarbon that displays aliphatic straight chains or branches as part of its chemistry. Aliphatic polyurethanes have certain improvements in characteristics over aromatics, such as less chalking effect and better color retention, but typically require longer cure times.

Ambient Temperature: Room temperature or the existing temperature of the surrounding air.

Aromatic Coating: Type of hydrocarbon that displays an aromatic (benzene) ring as part of its chemistry. Aromatic polyurethanes are commonly used in moisture cured coating systems.

Base Coat: The first layer of coating applied to the primed surface of a coating system. The Base Coat typically provides the waterproofing capability of a liquid applied coating system.

Below Grade: Part of the structure below ground level. Usually these areas have to be designed to resist the passage of water under hydrostatic head pressure.

Bird Bath: The National Roofing Contractors Association (NRCA) defines a bird bath as random, inconsequential amounts of residual water on a roof membrane.

Blast Cleaning: The cleaning and roughing of a surface by the use of sand, artificial grit, or fine metal shot which is projected at a surface by compressed air or mechanical means.

Boxing: The process of combining all the coating you will be using as the topcoat into one large container. This is especially important when coating a large surface area or if there is insufficient coating from a single batch, where a color variation from one batch to another is likely.

Broadcasting: Evenly distributing over an area (ie. to evenly broadcast aggregate).

Broom Finish: A finishing profile of concrete in which concrete surface is given a final textured finish by dragging a stiff bristled broom over it as it starts to cure.

CA Formulated Coating: Coatings that Neogard has formulated to meet the VOC content requirements for coatings established by South Coast Air Quality Management District (SCAQMD), the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside and San Bernadino counties.

Catalyst: An accelerator, activator, or curing agent which chemically increases the rate of reaction in a coating.

CSP (Concrete Surface Profile): CSP is a measurement of roughness of the surface of concrete as determined by set guidelines provided by ICRI (International Concrete Repair Institute). CSP's measure from smooth/flat (CSP 1) to very rough (CSP 9).

Cure: Is the process of development of fluid applied coatings through the stages of polymerisation. In the application of Neogard coating systems we describe four phases: initial cure, tack-free, traffic cured and fully cured.

Degreaser: A chemical solution or compound designed to remove grease, oil, and similar contaminants.

Dew Point: The temperature of air at which condensation of moisture will occur.

DFT (Dry Film Thickness): Thickness of coating measured in Mils after coating has fully cured and thus taken its solid form. DFT is always equal to or less than WFT depending on the percent of solids contained within the coating.

Direct Bond: Neogard roof coating systems designed to be applied directly to existing non-ballasted single-ply membranes, granulated cap sheet, modified bitumen, concrete, metal and smooth surface BUR roof substrates.

Elastomeric: Products that are "elastic" in nature and are capable of withstanding significant movement as seen in some building structures.

Etching: The treatment of the surface of concrete with an acid in order to dissolve loose particles and laitance and/or provide a profile.

Film: A monolithic layer of coating.

Film Build: The dry film thickness of a coat.

Flash Point: The flash point of a material is the lowest temperature at which it can vaporize to form an ignitable mixture in the air.

Fully Cured: Describes the fluid applied coatings cure phase at which materials have reached the physical properties required to withstand the traffic, use, and exposures for which they are designed.

Granule: A mineral which may be granite or sand used on the top of some coatings for ultraviolet protection, and fire protection.

Grout Coat: The first coat of epoxy over a trowelled flooring system, designed to lock in or seal the epoxy mortar.

Hardener: A chemical co-reactant that activates and/or accelerates the curing of a product to produce a coating film.

High Build : A term referring to a coating that can produce a thick film in a single coat.

Initial Cure: Describes the fluid applied coating cure phase during which the material is progressing from a liquid or gel to tack-free.

Jiffy Mixer: A cylindrical mixing tool used for mixing coatings that does an excellent job of preventing air entrapment. It is manufactured exclusively by the Jiffy Mixer Company.

Laitance: An accumulation of fine particles, loosely bonded, on the surface of fresh concrete, caused by upward migration of moisture through the concrete.

Liquid Applied Membrane: A seamless coating system applied to a substrate that protects the substrate from the environment and/or traffic.

MEK (Methyl Ethyl Ketone): A commonly used solvent which has good solubility for most urethanes and some other coatings.

Mesh (Sieve Size): The size of a particle or aggregate reported in fraction of inch. A number 12 sieve is 1/12th of an inch; a number 60 sieve is 1/60th of an inch.

Mil: A Mil is one thousand of an inch (0.001”). It is a unit typically used in the measurement of coating thickness with the help of a Mil Gauge.

Mil Gauge: A device used to measure the thickness of coating while in a liquid state.

Mortar: A heavy application of coating (50 to 250 Mils thick) typically involving use of aggregate either mixed or broadcast. Mortars can be of three types:

- **Broadcast:** Neat resin over the substrate and where the aggregate is broadcast into the resin while it is still wet.
- **Slurry:** Very fine aggregate (consistency of flour) is mixed into the resin to create a self leveling consistency.
- **Trowel:** A blend of medium to fine aggregates is mixed into the resin to create a paste consistency that can be troweled.

MSDS (Material Safety Data Sheet): Document available for each product that is intended to provide workers and emergency personnel with procedures for working with and handling that substance in a safe manner.

Muriatic Acid: Hydrochloric acid often diluted with water and used for etching concrete.

NRCA: National Roofing Contractors Association.

Odor Mask: Chemical with pleasant/non offensive odor which is mixed into coating to mask the coating’s odor.

On-Grade: Part of the structure at ground level.

pH: A measure of acidity and alkalinity; pH 1-7 is acid and pH 7-14 is alkali.

Ponding Water: Neogard defines roofing ponding as “water that remains on a roof surface longer than 48 hours after the termination of the most recent rain event.

Porcupine Roller: Spine quill appearing roller that releases bubbles trapped in the more viscous coatings.

Pot Life: The length of time a coating material is useful after its original package is opened or a catalyst or other curing agent is added. At the end of the pot life the product’s viscosity increases so much to make it difficult/impractical to apply.

Primer: The first coat applied to a surface, formulated to have good bonding, wetting and inhibiting properties. Primers act as a bond between the substrate and coating system.

Relative Humidity: The ratio, expressed as a percent, of the quantity of water vapor actually present in the air to the greatest amount possible at a given temperature.

Resin: A class of organic substances used in the making of coating products. Resins are often mixed with smaller quantities of a hardener/activator/catalyst to initiate or speed up the curing process.

Respirator: An apparatus worn over the mouth and nose or the entire face to prevent the inhalation of dust, smoke, or other noxious substances. For coatings products, the Material Safety Data Sheet will outline the need for using a respirator when applying the product.

Seal Coat: The first coating application over a broadcasted flooring system or the final coats over a trowelled flooring system.

Seed and Backroll: A type of coating application method where aggregate is dispersed onto the coating surface and then worked in using a roller. System is then allowed to dry.

Seed and Lock: A type of coating application method where aggregate is dispersed onto the coating surface and allowed to dry. At this point, excess aggregate is blown off the surface and the remaining aggregate is “locked” into the system using additional coating.

Shelf Life: The maximum time interval in which a material may be kept in a usable condition during ideal storage.

Shot-blasting: Abrasive blasting with round iron shot, or any material which retains its spherical shape, for substrate roughening purposes.

Solids By Volume: The percentage of the total volume of substance occupied by nonvolatile compounds.

Solids by Weight: The percentage of the total weight of substance occupied by nonvolatile compounds.

Solvent: A liquid in which another substance may be dissolved, forming a solution.

Spalling: Type of concrete surface erosion in which inverted cones of concrete break away from main body and thereby reveal exposed aggregate.

SPF: Spray Polyurethane Foam, defined by the Spray Polyurethane Foam Alliance is a spray-applied insulating foam plastic that is installed as a liquid and then expands many times its original size.

Spray: A common application method in which a person pressurizes the liquid and releases the liquid through an orifice onto the substrate. Alternate application methods are by using a roller or trowel.

Square: A measurement used frequently in roofing, equal to 100 square feet.

Squeegee: A flat rubber blade typically used to distribute coating evenly on the substrate surface. Squeegees may be flat or notched depending on the type of work being done.

SRI: Solar Reflectivity Index is defined by the U.S. Green Building Council as “a measure of the constructed surface’s ability to stay cool in the sun by reflecting solar radiation and emitting thermal radiation.”

Tack-free: Describes the fluid applied coating cure phase during which the material is progressed beyond initial cure but has not yet reached the cured phase. Tack-free material will not displace, print, track, or damage when touched or walked on while continuing the system application, while remaining soft enough to coat without requiring additional surface preparation or priming.

Thinning Agent: A liquid (solvent) added to a coating to improve its viscosity and thus make it easier to apply. Common thinning agents include MEK (Methyl Ethyl Ketone), Xylene and Mineral Spirits.

Topcoat: The final layer/layers of coating applied to a liquid applied coating system. Topcoats typically seal in the system and may provide resistance to wear, UV, chemicals, and traffic.

Traffic Cured: Describes the fluid applied coatings cured phase at which the material has progressed beyond tack-free but not yet reached fully cured. The cured material has reached the physical properties required to withstand the various traffic loads progressing from durable to: foot traffic first, light vehicular traffic next, and finally, heavy load traffic.

UV (Ultraviolet) Light: Type of radiation present in sunlight that may have a detrimental effect on some types of coatings causing discoloration/fading and in some cases, premature wearing of the coating system.

Vapor Barrier: A layer which retards the passage of water vapor into a material.

Vapor Drive: The pressure exerted on the underside of a coating system from moisture/water vapor which has migrated through the substrate.

Vapor Transmission Rate: The rate at which moisture passes through a material like concrete or coating system.

Viscosity: A measure of fluidity of a liquid. Easily flowing liquids are low in viscosity and slow flowing liquids are high in viscosity.

VOC (Volatile Organic Compounds): Organic compounds that evaporate from the coating as it cures.

Waterproofing: The use of coating systems for the resistance of the passage of water.

Wear/Intermediate Coat: A layer of coating applied in between the Base Coat and Topcoat of a liquid applied coatings system. Wear/Intermediate coats typically provide build and wear resistance for the coating system.

WFT (Wet Film Thickness): Thickness of coating measured in Mils typically right after the application of the coating product while coating is still in its liquid form.

Xylene Thinner: A common solvent used to dilute certain epoxies and urethanes and also to clean equipment.