

# NEOGARD Flooring Systems

## Application Manual

English Version



**NEOGARD**<sup>®</sup>  
CONSTRUCTION COATINGS

# NEOGARD FLOORING, OUR APPROACH...

- ✓ Make the right choice
- ✓ Do more with less
- ✓ Simplicity and high performance flooring protection

Those are our standards...

NEOGARD has developed friendly to use flooring systems with proven performance.

These are some of the conditions a floor is exposed.

- Traffic
- Abrasion
- Impact
- Load
- Lack of Reflectivity
- Liquid exposure
- Chemical Attack
- Low Maintenance Window
- Slip Considerations
- Aesthetics requirements
- Static dissipation
- Clean ability

A Flooring System **is considered a sacrificial but sustainable element**, so when you put together all high properties in a few number of products and process, you can extend the working life of your floor and reduce inventory and application to a more effective level.

NEOGARD HAS COST EFFECTIVE AND SUSTAINABLE ALTERNATIVES COMPARE TO COMPLEX, TRADITIONAL FLOORING SOLUTIONS.

A lot of our systems are “**Only One Product Systems**” where you can prime, patch, base coat, matrix resin and top coat with only one product...easy!

Proper system selection with proper care process will maintain and extend your Flooring System, **let us show you how...**

**REMINDER: This Manual is for you... FOR YOU TO USE IT ALL THE TIME!**

## DISCLAIMER

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## I. DEFINITIONS

### Terminology

- Mil One thousand of an inch (0.001")
- WFT Wet film thickness; is the measured thickness of a system while resin is wet.
- DFT Dry film thickness; is the measured thickness of a system when resin is dry.

DFT	TYPE
3-8 mils	Sealer
12-40 mils	Thin Application
50-250 mils and up	Mortar

### Mortar

It does involve the use of an aggregate, mixed and or broadcasted.

- Broadcast: Neat resin over the substrate and the aggregate is broadcast into it while it still wet.
- Slurry: Very fine aggregate (the size of flour) is mixed with the resin to a self-level consistency, typically a 1:1 mixing ratio.
- Trowel: A blend of medium to fine aggregate mixed with the resin to create a paste consistency that can be trowel, typically a 4 or 5 : 1 mixing ratio.

### Why Protect a Concrete Floor?

There are many conditions affecting the life and integrity of a concrete floor, some are:

- Wear: Uncoated concrete wears out 75% faster than coated ones.
- Brittle: Concrete is not resilient and tends to break easily with impacts. Specific Flooring Systems can take better mechanical abuse than unprotected floors.
- Porous: Concrete can absorb liquids (chemicals) causing severe effects to a point of total removal of the existing concrete. Protected floors with designed systems will extend the life of it.

## II. GENERAL CONSIDERATIONS

### ***Construction Practices***

- Concrete must have minimum compression strength of 3,500 psi (250kg/cm<sup>2</sup>)
- Concrete must be clean and dry
- Concrete must have a minimum cure time of 28 days prior to flooring system application, otherwise call NEOGARD
- Concrete must be free of contaminants
- Floor temperature must be above 60°F (15°C) and rising
- Current conditions must be evaluated
- Moisture drive of concrete not to exceed 4 lbs. per 1,000 square feet per 24 hours. Run Calcium chloride test.

### ***Finish Requirements***

- Slabs must be steel power or hand trowel. Rough surfaces may require additional surface prep and/or more material. Consult Neogard.
- Water curing is the preferred method. Curing compounds will require additional surface prep procedures. Report to Neogard.
- Surface must be clean, sound and dry prior the installation of a Neogard Flooring System.
- Surfaces contaminated with oil or grease shall be vigorously scrubbed with a power scrubber and a strong, non-sudsing detergent. Thoroughly wash, clean and dry area to receive flooring system. Areas where oil or other contaminants have penetrated deeply into the concrete substrate may require removal by mechanical methods.

### ***Patching***

- For minor patches and cracks (up to  $\frac{3}{4}$ " width and  $\frac{1}{2}$ " depth) use P1934 fumed silica and 100% clear epoxy (70714/70715-09 or 707014/70715) mixed at a ratio of 3:1 by volume.
- For major patches and cracks (greater than  $\frac{3}{4}$ " width and  $\frac{1}{2}$ " depth) use 86364 (40/95) aggregate and 100% clear epoxy (70714/70715-09 or 707014/70715) mixed at a ratio of 4:1 by volume.
- For resurface patching mix 100% clear epoxy (70714/70715-09 or 707014/70715) with silica flour at 1 to 1 ratio by volume to a slurry consistency and broadcast, till refusal, silica sand 86364 (40/95) or 7992 (16/30). You can also use direct 70702/70703 100% solids epoxy resurface.
- Fill to adjacent level. Always patch after surface preparation.

## SURFACE PREPARATION

**Surface preparation is the single most important aspect of insuring the chosen floor system will perform as it is designed.**

- Removes weak laitance layer
- Removes contaminants
- **Provides proper profile for mechanical bond**

### Concrete (new or existing)

**Regardless any concrete surface profile, a flooring system bond relies in a mechanical anchor on which the concrete surface laitance must be removed and a minimum 50 grid sandpaper texture/ profile should achieved over sound substrate.**

#### **Shot Blast**

- Preferred method for providing a proper surface profile and cleaning, to remove laitance from concrete surfaces.
- Shot-Blasting does not remove deep contamination of oils, grease, tar, asphalt stains, etc.
- Be careful that you do not over blast the substrate. Improper or an aggressive Shot-Blasting can create an over-porous concrete surface, which can result in blisters or bubbles problems during the application of the Neogard Flooring System.
- A minimum of 24 mils will be required to smooth back the surface. Thin film systems will need to lightly smooth the surface by diamond grinding.

#### **Acid Etching**

- This is an alternative method for the removal of the laitance from concrete surface. Good method for thin applications.
- The workers should use protective eyewear, respirators, rubber boots and rubber gloves. If acid solution contacts skin, rinse affected area immediately with large amounts of clean water.
- Use hydrochloric acid 20° baume with water. Acid-Water mix ratio of 1:2 parts by volume is the recommended solution strength. **Always pour the acid into the water; never pour water into the acid.**
- If the acid solution does not foam there maybe a curing compound or other contaminate present.
- Do not allow acid solution to dry on the concrete substrate.
- Acid will not remove oil, grease, curing or sealing compounds, paints, and heavy dust or dirt accumulation. These contaminants must be removed before etching. See page 5 for procedure at Finish Requirements.

## **Scarification**

- Scarifying is a recommended preparation 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 coating to the concrete substrate.
- The correct depth setting to achieve the proper profile of the concrete substrate is indicated by relatively little vibration of the scarifier. If this is set too deep and over etch the concrete, it can result in blistering problems during the application of the floor coat system.

## **Grinding**

- Diamond pads @ 24 – 36 grid can be use in combination with **slow speed** grinders.
- This is an alternative method for the removal of the laitance from concrete surface. Good method for thin applications.
- After the floor is grinded, broom and vacuum the floor.
- Be sure to remove all dust and concrete residue after grinding.
- **Must provide a 50 grid sandpaper texture!**

# **III. BASIC COMPONENTS OF A FLOORING SYSTEM**

## **FIVE BASIC COMPONENTS AND ONE ACCESORY**

### **1. PATCHING COMPOUND**

- Non-Shrink 100% solids Resin
- In accordance with the system (Chemical, Mechanical)
- Wetting Capability
- Smaller Patch = Finer Aggregate
- Larger Patch = Bigger Aggregate

### **2. PRIMER**

- Surface Penetration
- All our Clear Epoxies
- Wetting Capability
- Reduce out-gassing

### **3. BASE COAT**

- Support of the system
- Thin or thick
- Clear or Colored resin
- Wetting Capability

### **4. MATRIX RESIN**

- Binding Resin to hold aggregate

- Wetting Capability
- In accordance with the system (Chemical, Mechanical)
- Silica Flour
- Silica Sand
- Metals...Aluminum Oxide

#### 5. **TOP COAT**

- Related with Texture
- In accordance with the system
- Clean-Ability
- Wetting Capability

### **Accessory**

#### 6. **JOINT FILLER**

- Hybrid Epoxy-Urethane
- Remain Flexible
- Wetting Capability
- Supported by a rod
- ¾" depth...

#### IV. FLOORING PRODUCTS (PRODUCT DESCRIPTION)

Product	Type	Description	Colors	Uses	Comments
7779/7781	Epoxy	30% water base epoxy	Clear	Floor Sealer, Pre-Primer for out-gassing or over-porous conditions	Fast Curing, great alternative for chemical hardeners
70702/70703	Epoxy	100% solids epoxy resin	Std Gray	Resurface Conditioner, Patching Resin	Economical & General Use Epoxy <b>(MUST BE TOP COATED)</b>
70714/70715-09	Epoxy	100% solids epoxy resin	01 White 02 Gray 03 Tan 04 Dk. Gray 05 Tile Red 06 Green 11 Lt Gray 16 Black Clear	Primer, Base Coat, Intermediate coat, Top Coat, Matrix Resin, Patching Resin	Medium Chemical Resistance, General Use, Economical
70714/70715	Epoxy	100% solids epoxy resin	01 White 02 Gray 03 Tan 04 Dk. Gray 05 Tile Red 06 Green 11 Lt Gray 16 Black Clear	Primer, Base Coat, Intermediate coat, Top Coat, Matrix Resin, Patching Resin	High Performance Epoxy, Most used resin in Neogard Flooring Line, High Chemical Resistance
70724/70715	Epoxy	100% solids epoxy resin	02 Gray 11 Lt Gray	Base Coat, Intermediate coat	High Performance Epoxy, a Non-Sag version (vertical) for 70714/70715, High Chemical Resistance
70744/70715	Epoxy	81% solids epoxy and conductive elements, static dissipation, high resistance to impact and chemicals	02 Gray	Top Coat	Static Dissipation, High Chemical Resistance. Electronics manufacturing, data processing areas, aerospace and military facilities, static sensitive equipment, operations rooms
70704/70705	Novolac-Epoxy	100% solids novolac-epoxy resin	-02 Gray -05 Tile Red	Base Coat, Intermediate coat, Top Coat, Matrix Resin	Outstanding Chemical Resistance, excellent on Thermal Shock conditions
70734/70735	Epoxy	100% solids epoxy resin	Clear	Primer, Base Coat, Intermediate coat, Top Coat,	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, Top Coat	Flexible Epoxy Resin for saw cut joints or as a flexible coating
Deco-Glaze	Acrylic-Epoxy	45% solids emulsion, high gloss coating	Tintable	Top Coat	As top coat for vertical applications at no high chemical exposure conditions
70805/7952	Aliphatic Polyurethane	62.5% Solids Polyurethane resin	Tintable	Top Coat	Superior Chemical Resistance (Skydrol Resistant), UV stable, high abrasion resistant.
70815/70816	Aliphatic Polyurethane	89% Solids Polyurethane resin	Clear	Top Coat	Ultra High Solids & Superior Chemical Resistance (Skydrol Resistant), UV stable, high abrasion resistant. SWC VOC Compliant
Acrylithane HS2	Aliphatic Acrylic-Polyurethane	62.5% Solids Acrylic-Polyurethane resin	Tintable	Top Coat	Good Chemical Resistance, UV stable, high abrasion resistant.
70800 70802 HD 70703 V 70704 SL	Polyurethane	Water disperse, cement base polyurethane resin	-02 Gray -05 Tile Red	Matrix Resin	Fast Curing, High Thermal Shock and Chemical Resistance. Food applications
70860/70865 HG 70761/70865 SG	Polyurea-Polyurethane	83% solids polyurea resin	Clear High Gloss or Semi Gloss	Top Coat	UV Stable, Crystal clear, high abrasion and scratch resistance, high chemical resistance environments. Fast Curing

## PRODUCT USE (Refer to pg. 9 for characteristics and properties)

<b>PRIMER</b>		
7779/7781	Clear Water base, epoxy pre-primer	(E)
70714/70715-09	Clear Version, 100% solids general use epoxy.	(E)
70714/70715	Clear Version, 100% solids epoxy.	(E)
70734/70735	Clear Version, 100% solids epoxy. (Expensive as primer)	(E)
<b>PATCHING COMPOUND</b>		
70702/70703	Grey, 100% solids epoxy as resurface for ware substrates.	(E)
70714/70715-09	Clear Version, 100% solids general use epoxy	(E)
70714/70715	Clear Version, 100% solids epoxy.	(E)
PF1934	Very fine silica aggregate for minor patching and for cracks up to 3/4" width and 1/2" depth. Mixed at a ratio 3:1 aggregate and 100 % epoxy resin	(S)
86364 40/95 Aggregate	Mid-Fine silica aggregate for major patching and for cracks greater than 3/4" width and 1/2" depth. Mixed at a ratio 4:1 with 100% solids epoxy	(S)
<b>BASE COAT, INTERMEDIATE COAT</b>		
70714/70715-09	Clear & Color Version, 100% solids general use epoxy.	(E)
70714/70715	Clear & Color Version, 100% solids epoxy.	(E)
70734/70735	Clear Version, 100% solids epoxy.	(E)
70744/70715	Electrostatic Dissipative, 81% solids epoxy.	(E)
70724/70715	Non-Sag, 100% solids epoxy	(E)
70704/70705	100% Solids Novolac	(N)
70800/70801 70802/70803/70804	High Chemical Resistance, Fast Setting, water disperse cement base Neocrete	(P)
<b>MATRIX RESIN (to make mortars)</b>		
70714/70715-09	Clear & Color Version, 100% solids general use epoxy.	(E)
70714/70715	Clear & Color Version, 100% solids epoxy.	(E)
70734/70735	Clear Version, 100% solids epoxy.	(E)
70704/70705	100% Solids Novolac	(N)
70800/70801 70802/70803/70804	High Chemical Resistance, Fast Setting, water disperse cement base Neocrete	(P)
<b>TOP COATS</b>		
70714/70715-09	Clear & Color Version, 100% solids general use epoxy.	(E)
70714/70715	Clear & Color Version, 100% solids epoxy.	(E)
70744/70715	Electrostatic Dissipative, 81% solids epoxy.	(E)
70734/70735	Clear Version, 100% solids epoxy.	(E)
70704/70705	100% Solids Novolac	(N)
Deco-Glaze	Water base, Color Stable, acrylic-epoxy coating	(A-E)
70805/7952	Color or Clear Version, UV Stable, 62.5% solids aliphatic urethane	(P)
70815/70816	Clear Version, UV Stable, 89% Ultra High Solids aliphatic urethane	(P)
Acrylithane HS2	Color or Clear Version, UV Stable, 62.5% solids aliphatic urethane	(P)
70860/70865 70861/70865	Clear Version, UV Stable, 83% solids polyurea. High Gloss and Semi-Gloss	(PU)
<b>JOINT FILLER</b>		
70718/70719	Flexible/Semi-Rigid 99% solids urethane-epoxy filler.	(E)

**(E)= Epoxy**  
**(A-E)= Acrylic-Epoxy**

**(N)= Novolac**  
**(P)= Polyurethane**

**(S)= Silica**  
**(PU)= Polyurea**

## V. NEOGARD SYSTEMS BY APPLICATION

### FLOOR SELECTION CRITERIA

- Flooring systems are considered SACRIFICIAL AND SUSTAINABLE elements. This means that the system will take the abuse instead of the floor but it can be maintained.
- Therefore, a proper system selection is essential to fulfill expectations and minimize maintenance and operation costs.

### SELECTION CRITERIA

#### OPERATION CONDITIONS

- Design Life/Current Conditions & Repair/Maintenance
- Structural Loading
- Traffic & Mechanical Requirements
- Chemical Resistance
- Slip Resistance (Wet / Dry Conditions)
- Hygiene Requirements
- Operating Temperatures
- Aesthetic Requirements / Color Selection
- Electro-Static Requirements
- Regulations / Safety / Odor concern

#### WEARING ISSUES

- Traffic / Abrasion (Type of wheels & how clean the floor is)
- Impact / Mechanical Abuse (dragging)
- Load
- Chemical Attack / Liquid exposure (Cleaning practices)
- Low Maintenance
- Spinning
- Static dissipation
- Etc.

## FLOOR SELECTION CRITERIA (Cont)

- **Sealers (3 to 8 mils DFT)**

- ✓ Related Dust proof

- **Thin Applications (12 to 40 mils DFT)**

- ✓ Light to heavy traffic
- ✓ High Chemical exposure
- ✓ Related with Hygiene/Aesthetic needs
- ✓ Related with reflectivity
- ✓ Related with thermal shock
- ✓ Very specific, ESD
- ✓ Related with Re-Coating
- ✓ Related with Sufficient/Available Maintenance Time

- **Mortars (50 to 250 mils DFT)**

- ✓ Related with higher Mechanical Properties/Requirement
- ✓ Related with “Last Longer”
- ✓ Related with Resurfacing
- ✓ Related with Thermal Shock
- ✓ Related with Very Aggressive Chemical attack

- **& Waterproofing**

- ✓ All our Flooring Mortar Systems are suitable to be waterproofed
- ✓ FC7500 / FC7960
- ✓ Urethane 7430
- ✓ Waterproofing Rider
- ✓ Don't forget

## NEOGARD FLOORING SYSTEMS BY MARKET SEGMENT

- |                                       |                    |
|---------------------------------------|--------------------|
| 1. INSTITUTIONAL & MANUFACTURING (IM) | 4. AVIATION (AV)   |
| 2. FOOD & ANIMAL RESEARCH (FA)        | 5. DECORATIVE (DE) |
| 3. MAINTENANCE (M)                    |                    |

System	Description	Principal Programs	Thickness mils DFT	Typical Application	Material
DustTuff	Water Base clear epoxy	M IM	3	As a Dust Sealer and or a pre-primer for over porous surfaces. Light traffic warehouses.	7779/7781
WearTuff	General Use, 100% solids epoxy resin for thin applications or for re-coating	M IM	16	A thin application for coating or re-coating warehouses, assembly areas, manufacturing facilities, garages, etc	70714/70715-09
FloorTuff	High performance, 100% solids epoxy resin for thin applications or for re-coating	M IM	16	A thin application for coating or re-coating clean rooms, chemical rooms, manufacturing facilities, etc, with more demanding conditions than WearTuff	70714/70715
TrafficTuff	100% Solids Epoxy Vehicular/Pedestrian Traffic Flooring System for slabs-on-grade or for substrates with no waterproofing requirements.	IN	32	A two coat, textured flooring system for slabs-on-grade parking garages or all other levels with no waterproofing requirements.	70714/70715-09
WG - ###	Cost - effective, 100% solids epoxy resin, General Purpose flooring system	IM	32 to 250	Ideally suited for warehouse and manufacturing facilities with heavy operation.	70714/70715-09
CG - ###	100% solids epoxy resin, Superior Mechanical and Chemical resistance system	IM FA	32 to 250	Food processing, resurfacing, heavy mechanical industry	Primer 70714/70715 Base 70714/70715 Optional Acrylithane-HS2
Novolac - ###	Novolac 100% solids epoxy resin system, superior chemical resistance. Good for thermal shock.	FA IM	32 to 250	Animal research, food processing, chemical rooms, freezers.	Primer 70714/70715 Base 70704/70705

## NEOGARD FLOORING SYSTEMS BY MARKET SEGMENT (Cont)

- |                                       |                    |
|---------------------------------------|--------------------|
| 1. INSTITUTIONAL & MANUFACTURING (IM) | 4. AVIATION (AV)   |
| 2. FOOD & ANIMAL RESEARCH (FA)        | 5. DECORATIVE (DE) |
| 3. MAINTENANCE (M)                    |                    |

System	Description	Principal Programs	Thickness mils DFT	Typical Application	Material
ESD - ##	81% solids epoxy and conductive elements, static dissipation, high resistance to impact and chemicals	IM	28	Electronics manufacturing, data processing areas, aerospace and military facilities, static sensitive equipment, operations rooms	Primer 70714/70715 Base 70744/70715
Neothane - ##	High solids chemical resistant, polyester aliphatic polyurethane system, resistant to UV degradation (exteriors)	IM FA	16-35	Typically used as a top coating over Neogard flooring and wall coatings systems	Primer 70714/70715 Base 70805/7952, 70815/70816 or Acrylthane HS2
SkyGard - ##	High solids chemical resistant, polyester aliphatic polyurethane system, resistant to UV degradation (exteriors)	AV	16-80 and up	Thickness and final coat suitable for heavy aircrafts loads and skydrol resistance	Primer and Base 70714/70715 Top 70805/7952 or 70815/70816
Neocrete - ##	Cement based, water dispersed polyurethane mortar	FA IM	125-250	Freezers, fast turnaround, food processing.	70800/70801 Aggregates 70802HD, 70703V, 70704SL
WallGard	Vertical or above head system for walls and ceilings. Epoxy base, 100% solids and several options as top coat. NO ODOR Concern and excellent chemical resistance	IM FA	24-40	Laboratories, Kitchens, Lobbies, Shower areas, Airports, Office Buildings, Penitentiaries	Primer 70714/70715 Base 70724/70715 Optional Reinforced Base Coat 70724/70715 Top DecoGlaze Top 70805/7952 Top 70815/70816
NeoQuartz - ##	Slip resistance, colored quartz, 100% solids epoxy mortar.	DE IM FA	65 to 250	Laboratories, Kitchens, Lobbies, Museums, Lockers, Schools	Base 70714/70715 Top 70734/70735 Optional 70805/7952 Optional 70815/70816 Optional 70865/70860
NeoFlake - BC	Thin film, Broadcast PVC flakes, 100% solids epoxy system.	DE IM	45	Laboratories, Clean Rooms, Lobbies, Museums, Play Grounds, Kinder Class Rooms	Primer 70714/70715 Base 70714/70715 Top 70734/70735 Optional 70805/7952 Optional 70815/70816 Optional 70865/70860
NeoMarble	Natural Stone, Broadcast Marble Chips, 100% solids Epoxy Mortar	DE IM FA	125 to 190	Laboratories, Kitchens, Lobbies, Museums, Play Grounds, Kinder Class Rooms, Airports, Office Buildings	Primer 70714/70715 Base 70714/70715 Grout & Seal 70734/70735 Top 70805/7952 Top 70815/70816 Top 70860/70865 Top 70861/70865

## VI. NEOGARD SYSTEMS

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### ***DustTuff*** (One product System)

**Segments [IM – M]**

- Waterborne epoxy system used as dust proof or as a pre-primer for porous concrete.

After proper surface prep, patching and proper application conditions, proceed to apply

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
1 <sup>st</sup>	7779/7781	Clear	4:1	3 min	200-300	2.2-1.5	1.5 hrs or until tack free
2 <sup>nd</sup>	7779/7781	Clear	4:1	3 min	300	1.5	1.5 hrs or until tack free

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### ***WearTuff*** (One product System)

**Segments [IM – M]**

- Two component, 100% solids, general use epoxy system

After proper surface prep, patching and proper application conditions, proceed to apply

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
Primer	70714/70715-09	Clear	2:1	3 min	260	6	8-12 hrs or until tack free
Top	70714/70715-09	Clear / Color	2:1	3 min	160	10	8-12 hrs or until tack free

Optional Finish: For exterior application (UV stability) or color availability use CRU 70805/7952 or Acrylithane HS-2 at 250 sf/gal.

## VI. NEOGARD SYSTEMS (Cont)

### ***FloorTuff*** (One product System)

**Segments [IM – M]**

- Two component, 100% solids, high performance epoxy system.

After proper surface prep, patching and proper application conditions, proceed to apply

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	260	6	8-12 hrs or until tack free
Top	70714/70715	Clear / Color	2:1	3 min	160	10	8-12 hrs or until tack free

Optional Finish: For exterior application (UV stability) or color availability use CRU 70805/7952 or Acrylithane HS-2 at 250 sf/gal.

### ***TrafficTuff*** (One product System)

**Segments [IM – M]**

- Vehicular/Pedestrian Traffic Flooring System.
- Two component, 100% solids epoxy system.
- For Slabs-On-Grade or Substrates with No Waterproofing Requirements

After proper surface prep, patching and proper application conditions, proceed to apply

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
1st Base	70714/70715-09	Clear	2:1	3 min	100	16	8-12 hrs or until tack free
	7992 sand	Natural	Broadcast		0.4 lbs		
Top	70714/70715-09	Clear / Color	2:1	3 min	100	16	8-12 hrs or until tack free

Optional Finish: For exterior application (UV stability) or color availability use CRU 70805/7952 or Acrylithane HS2 at 250 sf/gal.

## VI. NEOGARD SYSTEMS (Cont)

### WG-## (One product System)

Segments [ IM ]

- Cost-Effective, 100% solids general purpose epoxy system

After proper surface prep, patching and proper application conditions, proceed to apply

32 mils

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
Primer	70714/70715-09	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
Base	70714/70715-09	Clear / Color	2:1	3 min	130	12	8-12 hrs or until tack free
Top	70714/70715-09	Clear / Color	2:1	3 min	130	12	8-12 hrs or until tack free

### BROADCAST

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
1 <sup>st</sup> Base	70714/70715-09	Clear	2:1	3 min	80	20	8-12 hrs or until tack free
	40-95 sand	Natural	Broadcast		0.5 lbs	30	
2 <sup>nd</sup> Base	70714/70715-09	Color	2:1	3 min	80	20	8-12 hrs or until tack free
	40-95 sand	Natural	Broadcast		0.5 lbs	30	
1 <sup>st</sup> Seal	70714/70715-09	Color	2:1	3 min	160	10	8-12 hrs or until tack free
2 <sup>nd</sup> Seal	70714/70715-09	Color	2:1	3 min	200	8	8-12 hrs or until tack free

Each Base Coat provides 1/16" of thickness. Repeat Base Coats until specified thickness.

### TROWEL

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
Primer	70714/70715-09	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
	40-95 sand	Natural	Broadcast		0.2 lbs		
Matrix	70714/70715-09	Color	2:1	3 min	Specified		8-12 hrs or until tack free
	40-95 sand	Natural	4:1		Thickness		
Grout Coat	70714/70715-09	Color	2:1	3 min	200	8	8-12 hrs or until tack free
1 <sup>st</sup> Seal Coat	70714/70715-09	Color	2:1	3 min	200	8	8-12 hrs or until tack free
2 <sup>nd</sup> Seal Coat	70708/70715-09	Color	2:1	3 min	200	8	8-12 hrs or until tack free

For Matrix Coverage rates, refer to System Analysis Spreadsheet.

## NEOGARD SYSTEMS (Cont)

### CG-### (One product System)

Segments [FA-IM]

- High Performance 100% solids epoxy system. Superior Mechanical and High Chemical Properties.

After proper surface prep, patching and proper application conditions, proceed to apply

32 mils

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
Base	70714/70715	Clear / Color	2:1	3 min	130	12	8-12 hrs or until tack free
Top	70714/70715	Clear / Color	2:1	3 min	130	12	8-12 hrs or until tack free

### BROADCAST

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
1st Base	70714/70715	Clear	2:1	3 min	80	20	8-12 hrs or until tack free
	40-95 sand	Natural	Broadcast		0.5 lbs	30	
2nd Base	70714/70715	Color	2:1	3 min	80	20	8-12 hrs or until tack free
	40-95 sand	Natural	Broadcast		0.5 lbs	30	
1st Seal	70714/70715	Color	2:1	3 min	160	10	8-12 hrs or until tack free
2 <sup>nd</sup> Seal	70714/70715	Color	2:1	3 min	200	8	8-12 hrs or until tack free

Each Base Coat provides 1/16" of thickness. Repeat Base Coats until specified thickness.

### TROWEL

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
	40-95 sand	Natural	Broadcast		0.2 lbs		
Matrix	70714/70715	Color	2:1	3 min	Specified		8-12 hrs or until tack free
	40-95 sand	Natural	4:1		Thickness		
Grout Coat	70714/70715	Color	2:1	3 min	200	8	8-12 hrs or until tack free
1st Seal	70714/70715	Color	2:1	3 min	200	8	8-12 hrs or until tack free
2nd Seal	70714/70715	Color	2:1	3 min	200	8	8-12 hrs or until tack free

For Matrix Coverage rates, refer to System Analysis Spreadsheet.

## NEOGARD SYSTEMS (Cont)

### **ESD-28**

**Segments [IM]**

- High Performance 81% solids epoxy with conductive components for static dissipation, high resistance to impact and chemicals.

After proper surface prep, patching and proper application conditions, proceed to apply

28 mils

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
Base	70744/70715	Color	3:1	3 min	130	10	8-12 hrs or until tack free
Top	70744/70715	Color	3:1	3 min	130	10	8-12 hrs or until tack free

### **Kitchengard 190**

**Segments [FA-IM]**

- 100% solids High Performance Epoxy & 100% solids Novolac system, with outstanding impact/chemical resistance. Good for thermal shock.

After proper surface prep, patching and proper application conditions, proceed to apply

### SLURRY / BROADCAST

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
1st Base	70714/70715	Color/Clear	2:1	3 min	72	22	8-12 hrs or until tack free
	Silica Flour #200	Natural	Mixed		0.22 lbs	19	
	40-95 sand	Natural	Broadcast		1.0 lbs	41	
2nd Base	70714/70715	Color/Clear	2:1	3 min	72	22	8-12 hrs or until tack free
	Silica Flour #200	Natural	Mixed		0.22 lbs	19	
	40-95 sand	Natural	Broadcast		1.0 lbs	41	
1st Seal	70704/70705	Color	3:2	3 min	200	8	8-12 hrs or until tack free
2nd Seal	70704/70705	Color	3:2	3 min	200	8	8-12 hrs or until tack free

Each Slurry Base Coat provides approximately 80 mils.

## NEOGARD SYSTEMS (Cont)

### **Novolac-##**

**Segments [FA-IM]**

- High Performance 100% solids epoxy-novolac system. Superior Mechanical and High Chemical Properties.

After proper surface prep, patching and proper application conditions, proceed to apply

32 mils

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
Base	70704/70705	Color	3:2	3 min	130	12	8-12 hrs or until tack free
Top	70704/70705	Color	3:2	3 min	130	12	8-12 hrs or until tack free

### BROADCAST

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
1 <sup>st</sup> Base	70714/70715	Clear	2:1	3 min	80	20	8-12 hrs or until tack free
	40-95 sand	Natural	Broadcast		0.5 lbs	30	
2 <sup>nd</sup> Base	70704/70705	Color	3:2	3 min	80	20	8-12 hrs or until tack free
	40-95 sand	Natural	Broadcast		0.5 lbs	30	
1 <sup>st</sup> Seal	70704/70705	Color	3:2	3 min	160	10	8-12 hrs or until tack free
2 <sup>nd</sup> Seal	70704/70705	Color	3:2	3 min	200	8	8-12 hrs or until tack free

Each Base Coat provides 1/16" of thickness. Repeat Base Coats until specified thickness.

### TROWEL

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
	40-95 sand	Natural	Broadcast		0.2 lbs		
Matrix	70704/70705	Color	3:2	3 min	Specified		8-12 hrs or until tack free
	40-95 sand	Natural	4:1		Thickness		
Grout Coat	70704/70705	Color	3:2	3 min	200	8	8-12 hrs or until tack free
1st Seal Coat	70704/70705	Color	3:2	3 min	200	8	8-12 hrs or until tack free
2nd Seal Coat	70704/70705	Color	3:2	3 min	200	8	8-12 hrs or until tack free

For Matrix Coverage rates, refer to System Analysis Spreadsheet.

## NEOGARD SYSTEMS (Cont)

### Neocrete HD (One Product System)

Segments [FA-IM]

- Cement based, water dispersed polyurethane mortar.

After proper surface prep, patching and proper application conditions, proceed to apply

(1/4" - 250 mils)

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate	Mils DFT	Cure Time @ 75°F
Base Coat per Bag	70800 Resin 70801 Catalyst 70802 Aggregate	Color 70800-02Gray 70800-05 Red	90oz 63oz 50 lb/bag	3 min	21	250	4-6 hrs or until tack free

### Neocrete V (One Product System)

Segments [FA-IM]

- Cement based, water dispersed polyurethane mortar.

After proper surface prep, patching and proper application conditions, proceed to apply

(1/4" - 250 mils)

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate	Mils DFT	Cure Time @ 75°F
Base Coat per Bag	70800 Resin 70801 Catalyst 70803 Aggregate	Color 70800-02Gray 70800-05 Red	90oz 63oz 50 lb/bag	3 min	21	250	4-6 hrs or until tack free

### Neocrete SL (One Product System)

Segments [FA-IM]

- Cement based, water dispersed polyurethane mortar.

After proper surface prep, patching and proper application conditions, proceed to apply

(1/8" - 125 mils)

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate	Mils DFT	Cure Time @ 75°F
Base Coat per Bag	70800 Resin 70801 Catalyst 70804 Aggregate	Color 70800-02Gray 70800-05 Red	90oz 63oz 26.5 lb/bag	3 min	30	125	4-6 hrs or until tack free

#### **NEOCRETE Packaging / Kit Size:**

One (1) 70800-xx 90 oz in 1 gallon can  
Two (2) 70801 31.5 oz cans (total of 63 oz)  
One bag of any powder

## NEOGARD SYSTEMS (Cont)

### **Neothane-##**

**Segments**

**[IM-FA-AV]**

- High solids chemical resistant, polyester aliphatic polyurethane system, resistant to UV degradation (exteriors).

After proper surface prep, patching and proper application conditions, proceed to apply

### Standard 16 mils

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
1st Seal	70805/7952	Color	2:1	3 min	250	4	8-12 hrs or until tack free
2nd Seal	70805/7952	Color	2:1	3 min	250	4	8-12 hrs or until tack free

### Heavy Conditions 35 mils

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
Optional Base Coat	70714/70715	Color	2:1	3 min	80	20	8-12 hrs or until tack free
1st Seal	70805/7952	Color	2:1	3 min	250	4	8-12 hrs or until tack free
2nd Seal	70805/7952	Color	2:1	3 min	250	4	8-12 hrs or until tack free

Take this option when resurfacing conditions and / or heavier mechanical operation.

## NEOGARD SYSTEMS (Cont)

### SkyGard-##

Segments [AV]

- High solids chemical resistant, polyester aliphatic polyurethane system, resistant to UV degradation (exteriors). This system is suitable for Hangar applications for its true chemical resistance to Skydrol.

After proper surface prep, patching and proper application conditions, proceed to apply

#### SkyGard LD 16 mils

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
Base Coat	70714/70715	Color	2:1	3 min	80	20	8-12 hrs or until tack free
1st Seal	70805/7952 or 70815/70816	Color/Clear	2:1 or 1: 1	3 min	250 or 360	4	8-12 hrs or until tack free
2nd Seal	70805/7952 or 70815/70816	Color/Clear	2:1 or 1: 1	3 min	250 or 360	4	8-12 hrs or until tack free

#### SkyGard MD 36 mils

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
Base	70714/70715	Color	2:1	3 min	80	20	8-12 hrs or until tack free
1st Seal	70805/7952 or 70815/70816	Color/Clear	2:1 or 1: 1	3 min	250 or 360	4	8-12 hrs or until tack free
2nd Seal	70805/7952 or 70815/70816	Color/Clear	2:1 or 1: 1	3 min	250 or 360	4	8-12 hrs or until tack free

**(Continuation)**

**SkyGard HD  
56 mils**

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until
Base /Slurry	70714/70715	Color/Clear	2:1	3 min	72	22	8-12 hrs or until tack free
	Silica Flour #200	Natural	Mixed		0.2 lbs	19	
1st Seal	70805/7952 or 70815/70816	Color/Clear	2:1 or 1: 1	3 min	250 or 360	4	8-12 hrs or until tack free
2nd Seal	70805/7952 or 70815/70816	Color/Clear	2:1 or 1: 1	3 min	250 or 360	4	8-12 hrs or until tack free

**SkyGard MRO  
80 mils and up**

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
Base/Slurry	70714/70715	Clear	2:1	3 min	72	22	8-12 hrs or until tack free
	Silica Flour #200	Natural	Mixed		0.22 lbs	18	
	40-95 sand or Aluminum Oxide #20-40	Natural	Broadcast		1.0 lbs	35	
Seal	70714/70715	Color	2:1	3 min	200	8	8-12 hrs or until tack free
Std Finish	70714/70715	Color	2:1	3 min	200	8	8-12 hrs or until tack free
High Chemical Resistance Finish	70805/7952 or 70815/70816	Color/Clear	2:1 or 1: 1	3 min	200 or 285	5	8-12 hrs or until tack free

## NEOGARD SYSTEMS (Cont)

### NeoQuartz

### Segments

[DE-IM-FA]

- Colored quartz, 100% solids epoxy mortar. Broadcast (Slip-Resistance) or Trowel.

After proper surface prep, patching and proper application conditions, proceed to apply

### BROADCAST

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
1st Base	70714/70715	Clear	2:1	3 min	80	20	8-12 hrs or until tack free
	#40 Size	Color Quartz	Broadcast		0.5 lbs	30	
2nd Base	70714/70715	Clear	2:1	3 min	80	20	8-12 hrs or until tack free
	#40 Size	Color Quartz	Broadcast		0.5 lbs	30	
1st Seal	70734/70735	Crystal Clear	2:1	3 min	160	10	8-12 hrs or until tack free
2nd Seal	70734/70735	Crystal Clear	2:1	3 min	200	8	8-12 hrs or until tack free

Each Base Coat provides 1/16" of thickness.

### TROWEL

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
	40-95 sand	Natural	Broadcast		0.2 lbs		
Matrix	70734/70735	Crystal Clear	2:1	3 min	Specified		8-12 hrs or until tack free
	#40 Size	Color Quartz	4:1		Thickness		
Grout Coat	70734/70735	Crystal Clear	2:1	3 min	200	8	8-12 hrs or until tack free
1st Seal Coat	70734/70735	Crystal Clear	2:1	3 min	200	8	8-12 hrs or until tack free
2nd Seal Coat	70734/70735	Crystal Clear	2:1	3 min	200	8	8-12 hrs or until tack free

For Matrix Coverage rates, refer to System Analysis Spreadsheet.

Note: For Exterior applications, use UV stable colored quartz and CRU 70805/7952 as Final Coat

## NEOGARD SYSTEMS (Cont)

### Neoflake

Segments

[DE-IM-FA]

- Thin film, Broadcast PVC flakes, 100% solids epoxy system. Low UV sensitive.

After proper surface prep, patching and proper application conditions, proceed to apply

40 mils

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate (sf/gal)	Mils DFT	Cure Time @ 75°F
Primer	70714/70715-09	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
Base	70714/70715-09	Color	2:1	3 min	100	16	8-12 hrs or until tack free
	PVC Flakes	Colors			6 oz/100sf		
1st Seal	70734/70735	Clear	2:1	3 min	200	8	8-12 hrs or until tack free
Top	70734/70735	Clear	2:1	3 min	200	8	8-12 hrs or until tack free

Important Note:

If you choose to use a white base background, then use 70734-01/70735

### WallGard

Segments

[IM-FA]

- Vertical and over head 100% solids epoxy system for walls and ceilings. No Odor concern and Optional High Chemical resistant finish

After proper surface prep, patching and proper application conditions, proceed to apply

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	320	5	8-12 hrs or until
Base Coat	70724/70715	Color	3:1	3 min	100	16	8-12 hrs or until tack free
Reinforced Base Coat (Optional)	70724/70715	Color	3:1	3 min	100	16	8-12 hrs
	Fiberglass Mesh #4	Natural					or until tack free
Std Seal	DecoGlaze	Color	4:1	3 min	400	2	2-4 hrs or until tack free
Std Top	DecoGlaze	Color	4:1	3 min	400	2	2-4 hrs or until tack free
High Chemical Resistance Finish	70805/7952 or 70815/70816	Clear	2:1 or 1:1	3 min	320 or 400	3 to 4	8-12 hrs or until tack free

## NEOGARD SYSTEMS (Cont)

### NeoMarble

### Segments

[DE-IM-FA]

- Mortar, Broadcast Marble Chips, 100% solids epoxy system. Low UV sensitive.

After proper surface prep, patching and proper application conditions, proceed to apply

#### 120 Mils – 1/8"

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until
1st Base	70714/70715	Color	2:1	3 min	40	40	8-12 hrs or until tack free
	Silica Flour #200	Natural	Mixed		0.4 lbs	34	
	Marble Chips	Colors	Broadcast		1 lbs	63	
Grout Coat	70734/70735	Clear	2:1	3 min	300	5	8-12 hrs or until tack free
Seal Coat	70734/70735	Clear	2:1	3 min	100	16	8-12 hrs or until tack free
Final Coat	70860/70865	Clear	1:1	3 min	200	6	4-6 hrs or until tack free

#### 190 Mils – 3/16"

COAT	PRODUCT	Color	Mix Ratio	Mixing time	Coverage Rate/ Sf	Mils DFT	Cure Time @ 75°F
Primer	70714/70715	Clear	2:1	3 min	200	8	8-12 hrs or until
1st Base	70714/70715	Color	2:1	3 min	30	53	8-12 hrs or until tack free
	Silica Flour #200	Natural	Mixed		0.53 lbs	45	
	Marble Chips	Colors	Broadcast		1.5 lbs	83	
Grout Coat	70734/70735	Clear	2:1	3 min	300	5	8-12 hrs or until tack free
Seal Coat	70734/70735	Clear	2:1	3 min	100	16	8-12 hrs or until tack free
Final Coat	70860/70865	Clear	1:1	3 min	200	6	4-6 hrs or until tack free

Note: CRU 70805/7952 and CRU 70815/70816 can also be used as Final Coats.

Neo Grip Spheres (glass beads) can be use to provide a light texture for a slip-resistance finish.

## VII. TECHNICAL INFORMATION

### Coverage Rate: Theoretical vs. Actual

Theoretical coverage is calculated for glass-smooth surfaces with no allowance made for loss. 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. Surface texture, temperature, container residue, 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:

- Surface Prep - Even though the surface texture appears to be fairly smooth, this surface can require 5% to 15% additional material to the theoretical coverage rate.
- Application Loss - A factor must be added to the theoretical coverage rate to cover losses due to material left in containers, equipment problems, environmental problems, etc. Use a percentage factor of between 3% to 10%, depending on the contractor's experience and efficiency

#### 1. Calculating Theoretical Coverage (thickness)

Any liquid, when applied at a thickness of one mil (1/1000 inch) will cover 1,601 sq. ft. of area per gallon. Please use 1600 sf per gallon to simplify the estimating process.

<b>CR = Coverage Rate</b>	<b>DFT = WFT * %S</b>
<b>DFT = Dry Film Thickness (dry mils)</b>	<b>WFT = DFT / %S</b>
<b>WFT = Wet Film Thickness (wet mils)</b>	<b>CR = 1600 / WFT</b>
<b>%S = % Solids by Volume</b>	

A material that has a 100% solid content produces the same film thickness when it is in wet mils or dry mils.

#### 2. Calculating Actual Coverage

To determine total material requirements for a job, add estimated losses.

## Mixing Instructions

### Considerations

1. Read labels and application manual prior to mixing materials.
2. All thinning of materials should be done after mixing.
3. On two component products, always pre-mix the color side thoroughly (3 to 5 minutes) prior to the addition of the catalyst.
4. Mix product for a minimum of 3 minutes
5. Watch mixing ratios on two components products. An improper mixing ratio may result in curing problems,
6. Use a low speed (450 rpm) drill and a Jiffy® mixer.

**Note: Use a low-medium speed drill and a Jiffy® Mixer to mix all materials thoroughly. Mixing at too high rate of speed or with the wrong mixer can introduce air bubbles into the coating. These bubbles may develop into blisters during application.**

### General

- A vapor barrier of 10 to 15 mils should be included in the design of the concrete substrate.
- Substrate temperature should always be above 60°F (17°C) to apply the 100% solids epoxy and urethanes and at least 40°F (4°C) for the Neocrete and fast-set epoxies.
- The substrate should not contain more than 4% moisture content. **Always run a Moisture Drive Calcium Chloride Test.**
- Any thinning of material reduces physical properties and subsequently dry film thickness. If thinning is required, increase material consume accordingly.
- Never coat wet or moist surfaces.
- Solvent-based products are incompatible with asphalt compounds.
- Do not mix combinations of Neogard materials without consulting an authorized representative.
- It is much easier to keep coating off an adjacent surface during application than to remove it after cure.
- Completely solvent wash all hand tools power equipment and mixing equipment before breaks and at the end of each working day.
- In systems requiring the use of primers, coating materials must be applied in a limited time period, otherwise lightly sand, clean and re-prime.
- The 70714/70715 epoxy is moisture insensitive.
- All material quantities given are theoretical coverage rates.

## Trouble Shooting

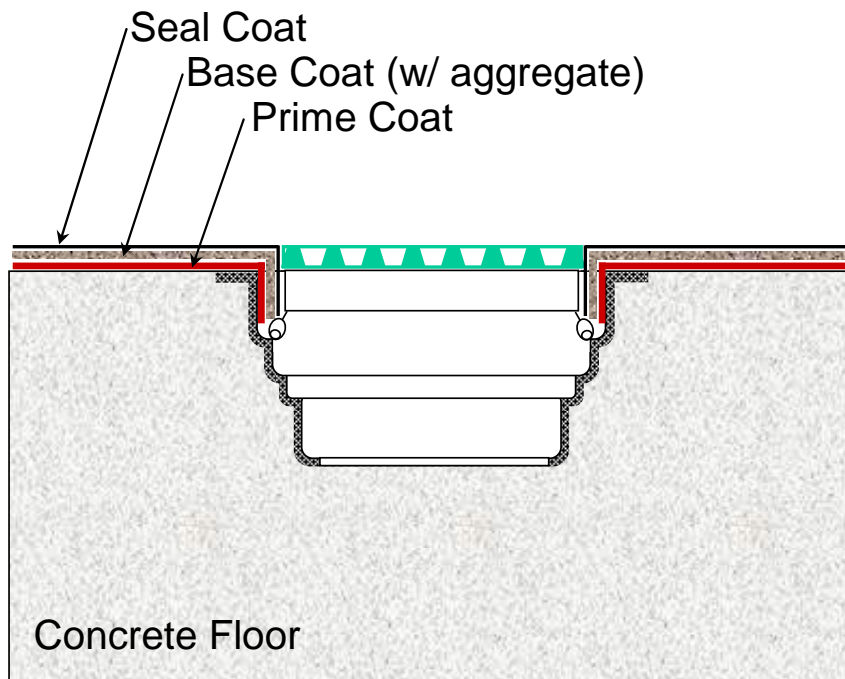
1. Blisters at the Primer Coat; half to one inch size diameter.
  - a. This is caused by Concrete Out-Gassing
  - b. A Pin Hole at the center of the blister
  - c. To Correct Existing Blisters,
    - a. Sand the surface to a flat finish,
    - b. Re-apply primer 70714/70715-09 or 70714/70715 diluted 5% with Xylene @ 360 sf/gal
  - d. To Reduce Out-Gassing blisters:
    - a. Pre-Prime the surface with 7779/7781 water base epoxy @ 300 sf/gal
    - b. Pre-Prime the surface with 70714/70715-09 or 70714/70715 clear and dilute 5% with Xylene. Apply @ 360 sf/gal
2. Very Small Blisters (1/16" to 1/8") all over the Coating.
  - a. This is caused by introducing air to the coating
  - b. To Correct Existing Blisters,
    - a. Lightly Sand the surface to a flat finish,
    - b. Re-apply COATING @ 250 sf/gal minimum
  - c. To Reduce this problem
    - a. Use a Slow speed drill
    - b. Watch the vortex created by the drill and mixer
    - c. Allow the product to de-air a couple of minutes before start applying it
    - d. Use a short nap (1/4") lint free roller.
3. The product is not curing
  - a. This can be caused by an improper mixing or an improper mix ratio
    - a. Remove all uncured material
    - b. Re-Apply.
  - b. This can be caused by low temperatures
    - a. Increase the room temperature
    - b. Wait until temperature reaches 60°F and rising
    - c. Allow more time to cure

## Conversion Measurement Tables

Inches	Mils	Millimeters	Microns	US Sieve
	1	0.025	25	
	2	0.049	49	#270
	3	0.074	74	#200
	4	0.098	98	#140
	5	0.123	123	
	6	0.147	147	#100
	7	0.172	172	#80
	8	0.196	196	#60
	9	0.221	221	#50
	10	0.245	245	#40
1/64"	15	0.368	368	
	20	0.490	490	
	25	0.613	613	#30
1/32"	31	0.760	760	
	35	0.858	858	#20
	40	0.980	980	
	45	1.103	1103	#16
	55	1.348	1348	
1/16"	62	1.519	1519	
	65	1.593	1593	
	70	1.715	1715	
	75	1.838	1838	
	80	1.960	1960	#10
	90	2.205	2205	
	95	2.328	2328	#8
	100	2.450	2450	
1/8"	125	3.063		
3/16"	187	4.582		#4
1/4"	250	6.125		
5/16"	321	7.865		
3/8"	384	9.408		
7/16"	446	10.927		
1/2"	500	12.250		

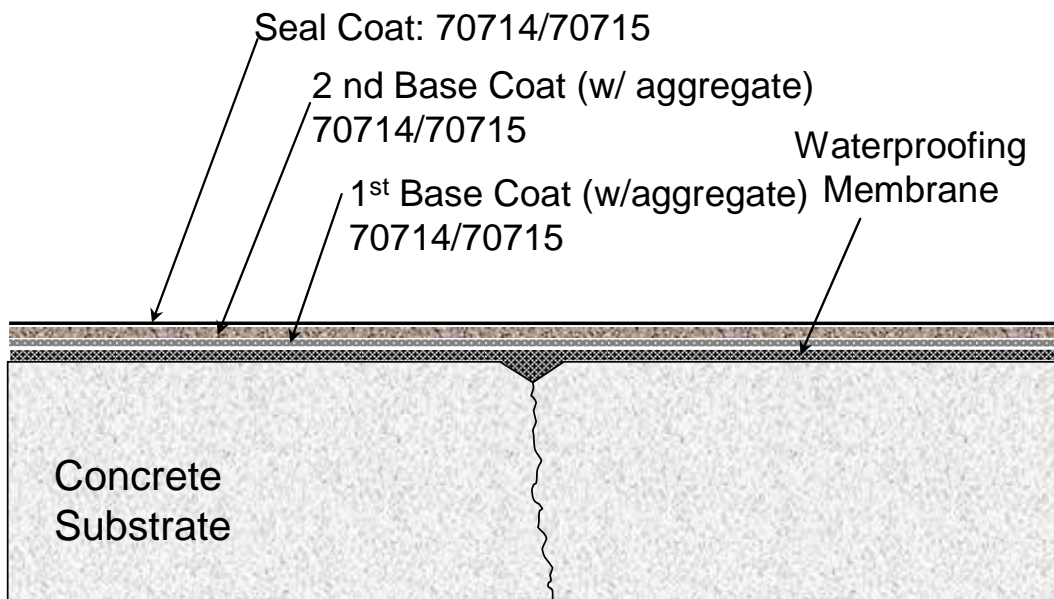
From	To	Do
inch	mils	inch x 1000
Mm	cm	mm / 10
Meter	cm	meter / 100
Mm	mils	mm / 25.4 * 1000

# DETAILS



<p align="center"><b>NEOGARD</b> <i>Division Of Jones-Blair</i></p>	<p><i>JOB NAME:</i> Area Drain Cross Section</p>		
	<p>Neogard is a manufacturer of materials and not a designer, architect, or engineer. Details prepared by Neogard are schematic only, to be used as a guide for the convenience of Neogard's customers.</p>	<p><i>SCALE:</i> N.T.S.</p>	<p><i>DRW. NO.:</i> NEO-FL-1</p>

# CG Broadcast WP



**NEOGARD**  
*Division Of Jones-Blair*

JOB NAME:

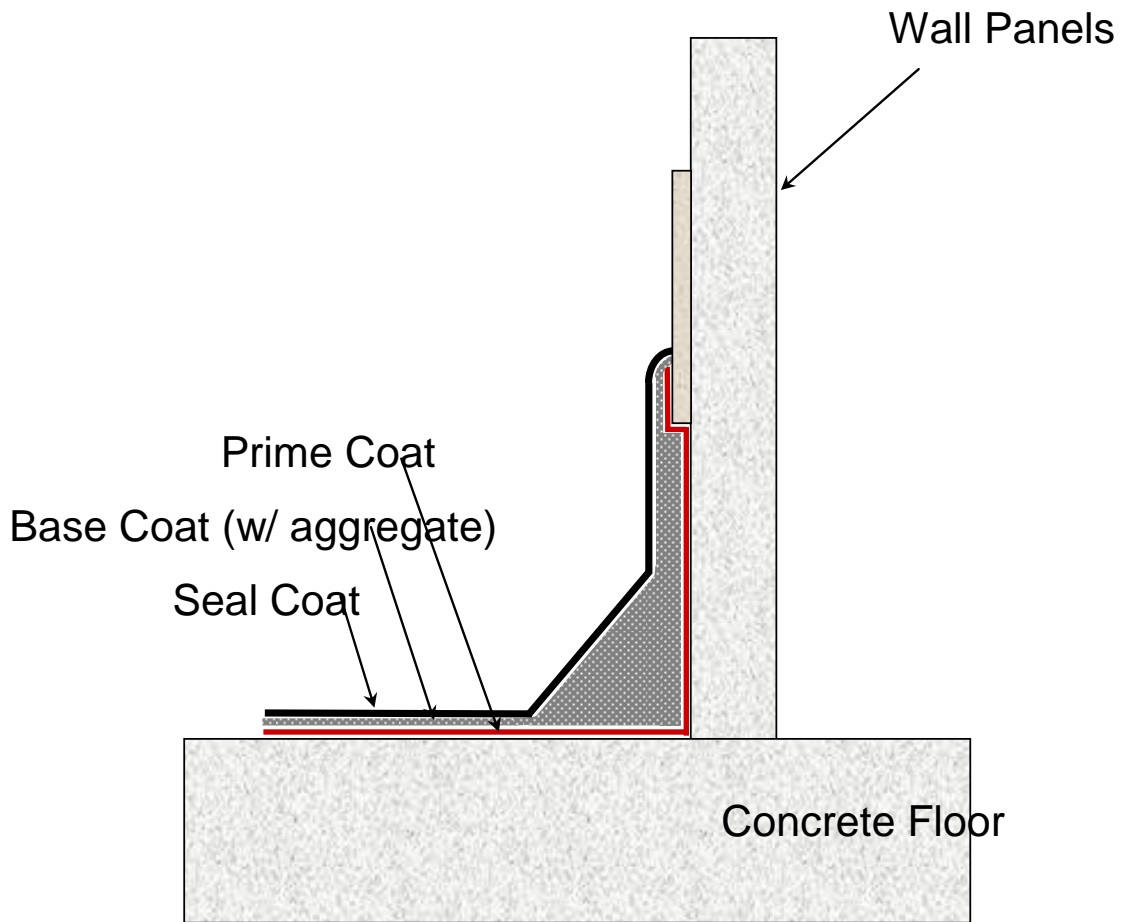
Reinforced Crack Detail

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SCALE:  
N.T.S.

DRW. NO.:  
NEO-FL-2

DATE:  
12/1/2006



**NEOGARD**  
*Division Of Jones-Blair*

JOB NAME:

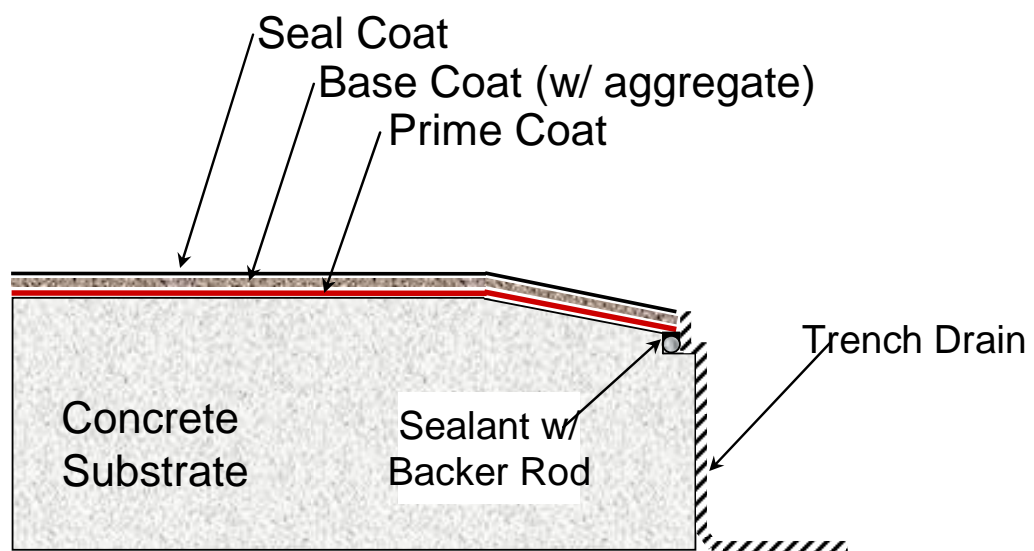
Standard Cant Base Transition  
to a Prefabricated Wall Panel

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SCALE:  
N.T.S.

DRW. NO.:  
NEO-FL-3

DATE:  
12/1/2006



**NEOGARD**  
*Division Of Jones-Blair*

JOB NAME:

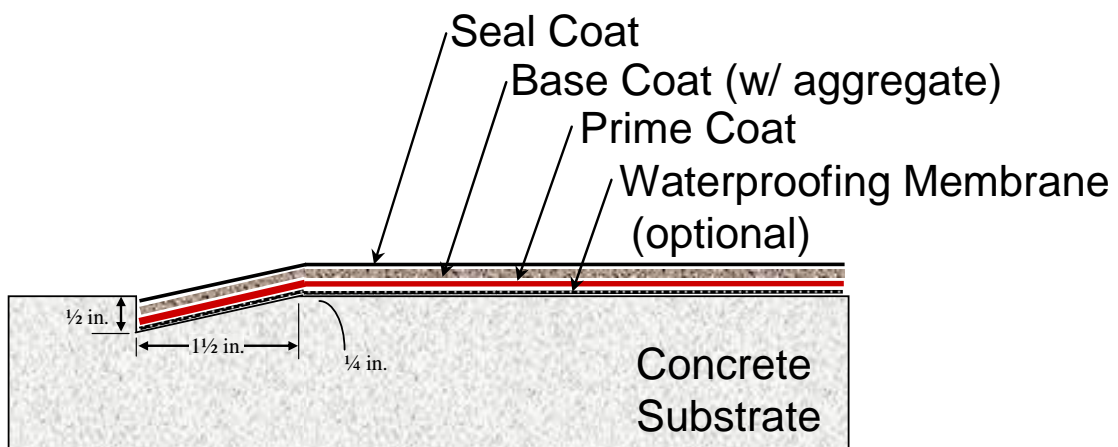
**Prefabricated Trench Drain**

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SCALE:  
 N.T.S.

DRW. NO.:  
 NEO-FL-4

DATE:  
 12/1/2006



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*Division Of Jones-Blair*

JOB NAME:

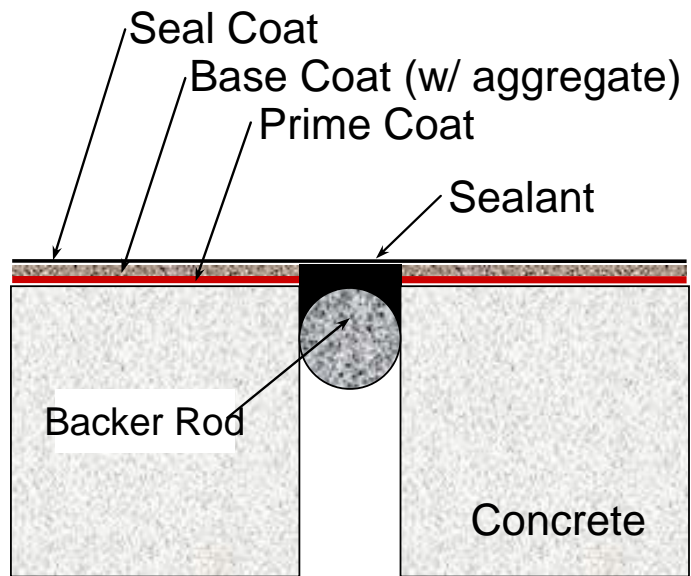
**Overlayment Transition**

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SCALE:  
**N.T.S.**

DRW. NO.:  
**NEO-FL-5**

DATE:  
**12/1/2006**



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JOB NAME:  
**Expansion/Isolation Joint**

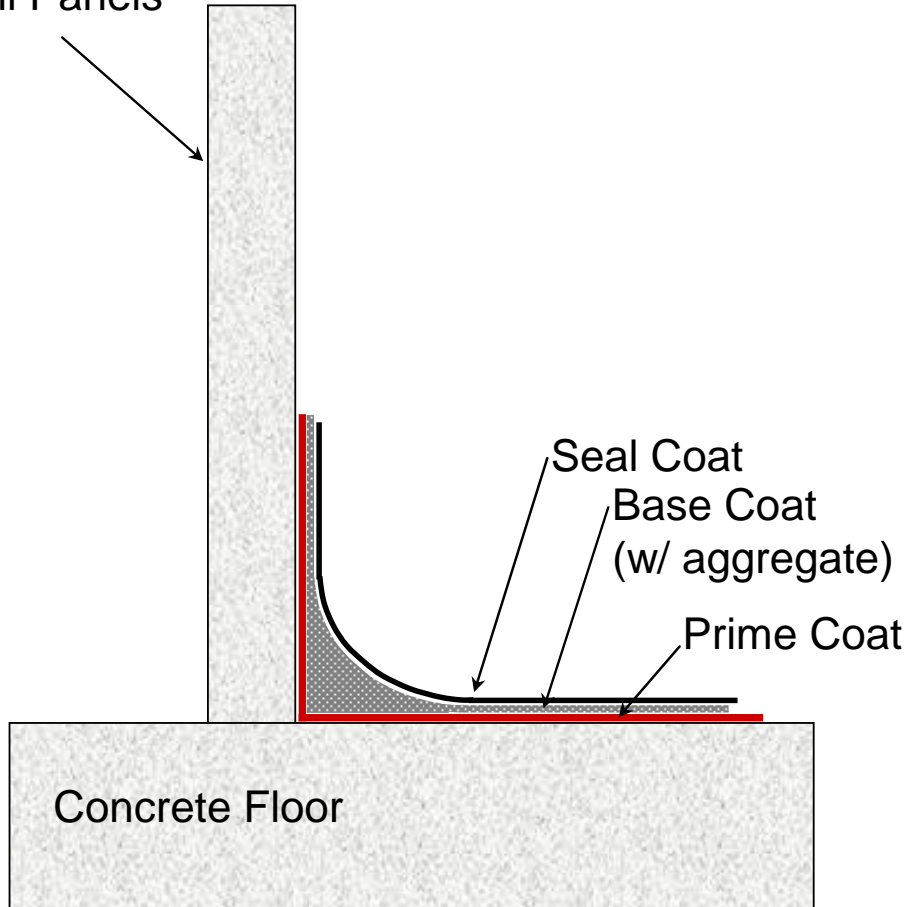
Neogard is a manufacturer of materials and not a designer, architect, or engineer. Details prepared by Neogard are schematic only, to be used as a guide for the convenience of Neogard's customers.

SCALE:  
**N.T.S.**

DRW. NO.:  
**NEO-FL-6**

DATE:  
**12/1/2006**

Wall Panels



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JOB NAME:

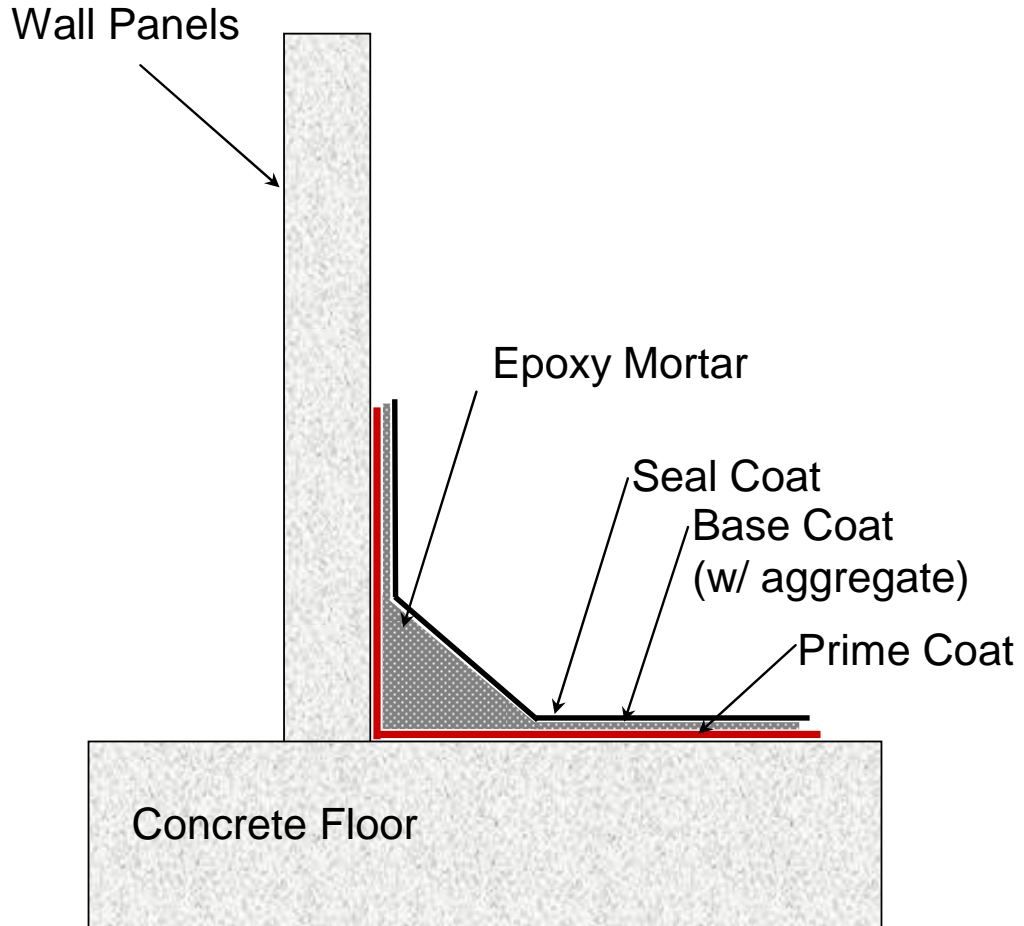
Standard Cove Base

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SCALE:  
N.T.S.

DRW. NO.:  
NEO-FL-7

DATE:  
12/1/2006



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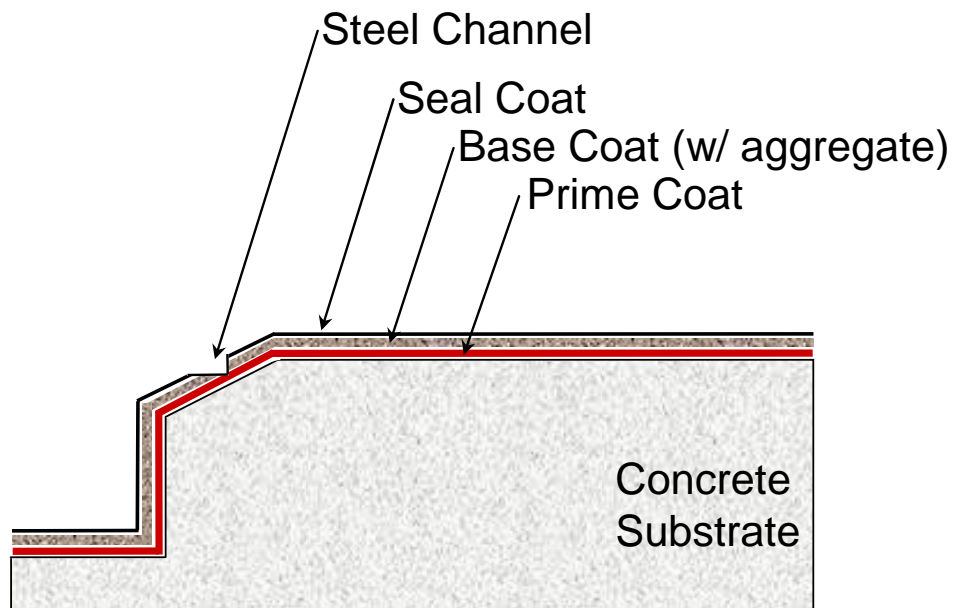
JOB NAME:  
**Standard Cant Base**

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SCALE:  
**N.T.S.**

DRW. NO.:  
**NEO-FL-8**

DATE:  
**12/1/2006**



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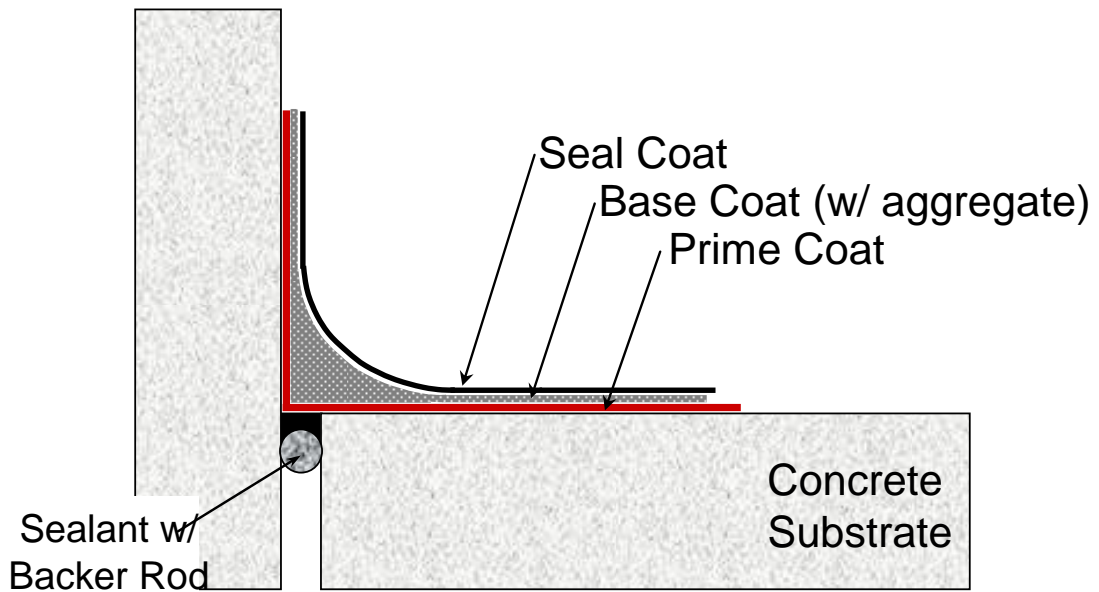
*JOB NAME:*  
**Poured Trench Drain  
 Transition**

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*SCALE:*  
**N.T.S.**

*DRW. NO.:*  
**NEO-FL-9**

*DATE:*  
**12/1/2006**



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JOB NAME:

**Standard Cove Base on  
Isolated Slab**

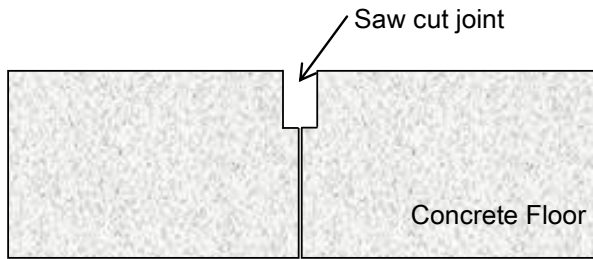
Neogard is a manufacturer of materials and not a designer, architect, or engineer. Details prepared by Neogard are schematic only, to be used as a guide for the convenience of Neogard's customers.

SCALE:  
N.T.S.

DRW. NO.:  
NEO-FL-10

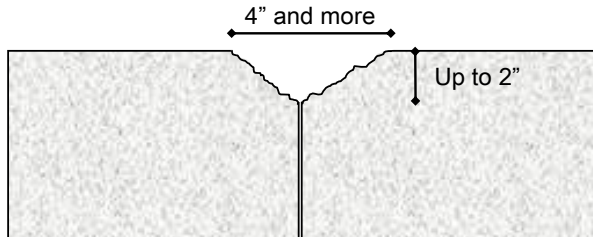
DATE:  
12/1/2006

Step ①



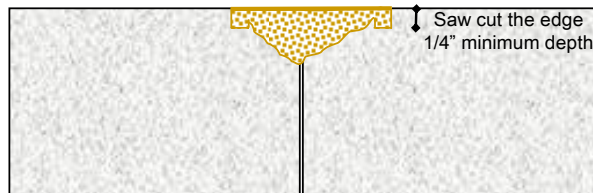
Original Condition

Step ②



Actual Condition

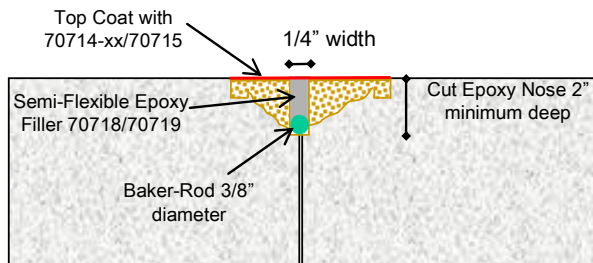
Step ③



Epoxy Nose

-Clean and solvent wipe concrete.  
-Mix 70714/70715 or 70714/70715-09 with 40-95 silica sand at a ratio of 1:4 and fill, pack and trowel the crack.

Step ④



Re-Build Joint

Fill joint with Flexible Epoxy filler 70718/70719 minimum 1.5" deep

- a.- After it cures (overnight), cut the epoxy nose at the joint minimum 2" deep & 1/4" wide.
- b.- Insert Baker-Rod at the bottom of the new joint.
- c.- Fill the joint with Semi-Flexible Epoxy 70718/70719 and wait until it cures.
- d.- Top coat with 70714-xx/70715 or 70714-xx/70715-09 at 100 sf/gal.
- e.- You are done...

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JOB NAME:

Deteriorated joints

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SCALE:  
N.T.S.

DRW. NO.:  
NEO-FL-11

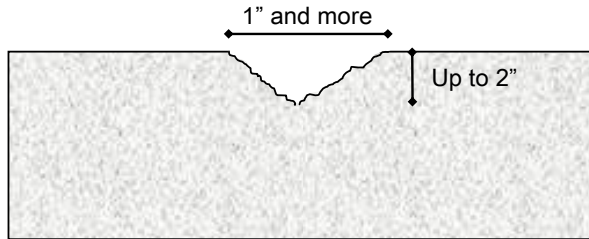
DATE:  
11/16/2008

Step ①



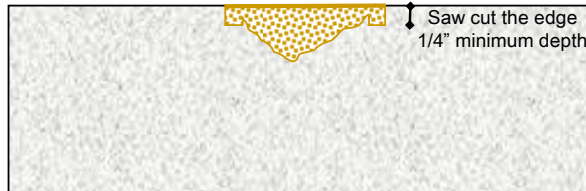
Original Condition

Step ②



Actual Condition

Step ③



Epoxy Mortar

-Clean and solvent wipe concrete.  
 -Mix 70714/70715 or 70714/70715-09 with 40-95 silica sand at a ratio of 1:4 and fill, pack and trowel the crack.

- a.- After it cures top coat with 70714-xx/70715 or 70714-xx/70715-09 at 100 sf/gal.  
 b.- You are done...

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JOB NAME:

Major Repair

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SCALE:  
 N.T.S.

DRW. NO.:  
 NEO-FL-12

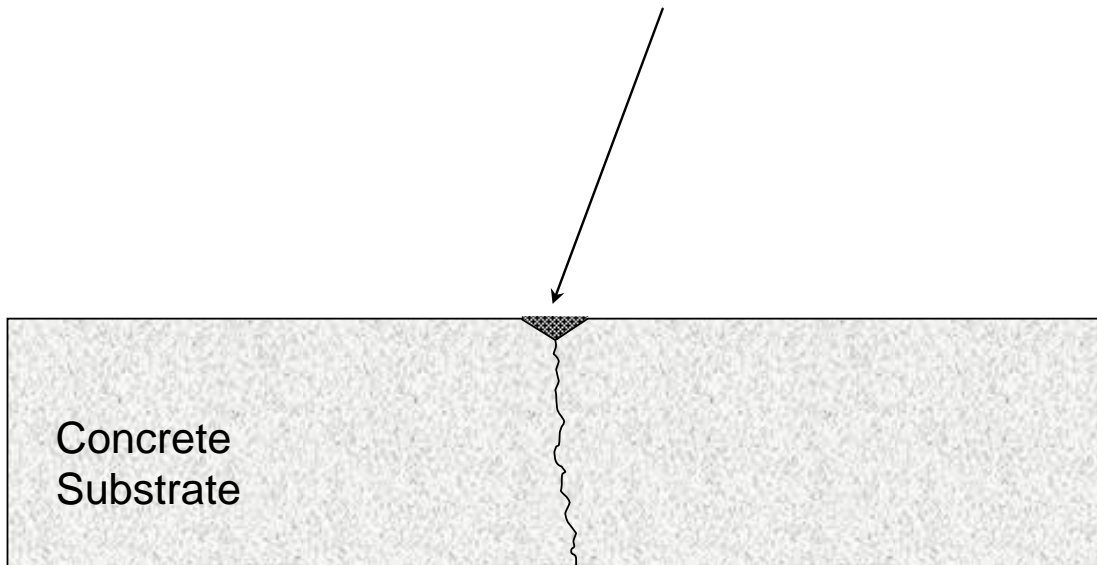
DATE:  
 11/16/2008

# Epoxy Putty

70714/70715-09 + Fumed Silica

70714/70715 + Fumed Silica

Mixing Ratio 1 : 3



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JOB NAME:

Reinforced Crack Detail

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SCALE:  
N.T.S.

DRW. NO.:  
NEO-FL-13

DATE:  
11/16/2008

## VIII. MAINTENANCE GUIDE

- The cleaner the floor is kept, the longer the floor will last. Fine particles of dust, dirt, debris, if not removed regularly act as an abrasive with traffic.
- Proper cleaning is a function of utilizing the cleaning solution that will dissolve or emulsify the type of soil or contamination the area is subjected to and thorough rinsing techniques.
- One important aspect to ensure long lasting of your Neogard Floor System is that chemical spills and even cleaning solutions will affect the system if they are not removed and rinsed thoroughly.
- The best cleaning technique is achieved by utilizing scrub brushes, (either hand types or automatic equipment types) to positively attack the soil with the appropriate cleaning solution. The correct cleaning compound is important, but the cleaning technique is the most important factor in effective cleaning. After the surface has been subjected to the cleaning solution and properly agitated with scrubbing, particular concentration must be given to remove the resultant emulsion of cleaning solution and soil. This is best achieved by rinsing with clean water and picking up with vacuums, or using a squeegee or broom to remove to floor drains. A second rinsing with clean water is recommended to minimize the possibility of any residue remaining. If the rinsing is not complete, a film may develop.
- Maintenance of Neogard's flooring systems must be performed at regular intervals to assure that the coating system will continue to provide service for which it was intended.
- Suggested maintenance procedures should include:
  - a. Repeated physical inspections.
  - b. Clean up and removal of spilled chemical reagents.
  - c. Periodic cleaning.
  - d. Coating system repairs.
  - e. Top coat and/or worn surface restoration.
- Avoid dragging heavy pointed metal or concrete objects across the flooring system
- Avoid Moving pallets by shoving across floor coating system. Pallets should be lifted and placed in required location.
- It is important to report any irregularities, such as cracks that may develop due to building movement or at expansion joints, gouges that may occur from extreme occasional impact, certain solvent and chemical attack. These irregularities can happen in industrial situations.
- Depending on the degree of use conditions of the area, you may require a new finish coat every three to five years.

## IX. FINAL STATEMENT

- If there is something not covered in this Manual... Call NEOGARD
- If you have a question... Call NEOGARD
- If you have a doubt... Call NEOGARD
- So... Call NEOGARD!!!

We are committed to you.

(800) 321-6588

(214) 353-1600

[neogard@neogard.com](mailto:neogard@neogard.com)

**Ask for Flooring Technical Service**

**REMINDER: This Manual is for you... FOR YOU TO USE IT ALL THE TIME!**