ADDENDUM NUMBER 01
Thursday February 06, 2020

PROJECT: **USC Lancaster – Gregory Health and Wellness Center Replace Solarium Glazing**
GMC PROJECT NO. AGRE190013
USC PROJECT NO. H37-9519 50003346-2

This addendum forms a part of the Construction Documents and modifies the original Bidding Documents dated 10.16.19 as noted below. Acknowledge receipt of this addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

GENERAL:

A1G1 Pre-Bid Conference sign in sheet listing the attendees is attached to this addendum.

A1G2 The bill of materials dated 02.04.20 contained in this addendum submitted by Florock Flooring are approved equals provided the color matching is acceptable with the owner and architect.

SPECIFICATIONS:

NONE

DRAWINGS:

NONE

COMMENTS / QUESTIONS:

The following are comments & questions received for addendum #01:

1. Does the GC have to apply for a building permit?

   Local and/or Municipal permits, unless part of a higher governmental or delegated review; or specifically excepted, are covered under USC's Certification from the Office of the State Engineer

2. Where is the description of the unit pricing in the project manual?

   The owner is looking for a unit price for steel in Tonnage. Please provide the unit price for steel in tons.

3. Structural Steel is typically price by the ton. Can the "Unit of Measure" be changed to Ton?

   Yes

4. Where is the description of the Alternates in the project manual? What are the proposed alternates, if any?

There are no alternates associated with this project at this time.

5. Is the structural steel supposed to be listed as an alternate? Either Add or Deduct?

   No. There are no alternates on this project.

6. Concerning the glazing system, is hurricane impact system required for this project? Impact resistant is required but the glazing does not have to be rated as Hurricane Impact.

END OF ADDENDUM NUMBER 01

University of South Carolina
Pre Bid Sign In Sheet
Columbia, South Carolina

Project Name: USC Lancaster Gregory H & W
Replace Solarium Glazing
Project Number: H37-9519 50003346-2
Pre Bid Date & Time: January 23, 2020 at 10:00am 512 Hubbard Dr. Lancaster, SC 29720

SWMBE Contractor?	Name	Company Name	Address	Phone #	Email
S W M B E	Lee Miller Project Manager	USC	1300 Pickens St. Columbia, SC 29208	803-777-2834	mille979@mailbox.sc.edu
S W M B E	Hatice Hikmet- Agency Coordinator via teleconference	USC	1300 Pickens St. Columbia, SC 29208	803-777-9994	hikmeth@mailbox.sc.edu
S W M B E	WES SPIRES	GMC	—	864-527-0460	WSPIRES@GMCNETWORK.COM
S W M B E	NICHOLAS deBESSONET	GMC	—	803 542 1929	NICHOLAS.deBESSONET " "
S W M B E	PHILLIP WHITEHEAD	RNF CONSTRUCTION	2657 MCFARLAND ROAD YORK, SC 29745	803-448-8284	phillip@rnfcons.com
S W M B E	STEVE MASON	DUR-A-FLEX	84 Key Largo Ct AUBURN, GA. 30011	678-215-2786	STEVEM@DUR-A-FLEX.COM
S W M B E	CALEB MORRISON	USC LANCASTER	476 Hubbard Dr. LANCASTER	803-313-7000	CALEBM@MAILBOX.SC.EDU
S W M B E	Chad Waldrop	Capstone Glass	4130 Western Ln Irmo, SC 29063	803-543-7525	Chad@CapstoneGlass
S W M B E	Justin Nicholson	CCI Inc.	1632 Village Harbor Dr Suite 200, Lake Wylie SC 29710	(704) 526-7853	jnicholson@carolinaci.com
S W M B E	KARL WATSON	JM Cope	1069 Bayshore Dr Rock Hill SC 29732	(803)329-3250	kwatson@jmcope.com
S W M B E	ROBERT HOUGH	PERCEPTION BUILDERS	~~1115~~ 115 W DEKALB ST SUITE 201 LANCASTER, SC	~~803-320-7314~~ 803-693-5163	ROBERT@PERCEPTIONBUILDERS.COM

In person

****By signing this sheet you agree to receive information electronically.*

SUBSTITUTION REQUEST FORM (During Bidding)

Project: USC GREGORY H&WC - REPLACE SOLARIUM GLAZING
State Project No. H37-9519 50003346-2
Architect's Project No. AGRE190013

To Goodwyn Mills Cawood
617 East McBee Ave.
Suite 200
Columbia, South Carolina 29201

Attn Wes Spires
wes.spires@gmcnetwork.com

Requested By Kim Rugio

Contract For _____

Bid Date 2-11-20 **Substitution Request Date** _____

Section Name Resilient Flooring

Section No. 096723 **Paragraph** Part 2 2.2A

Related Dwgs. A 8.01

Specified Product/Fabrication Method (List name/description; model no., manufacturer)

Dur-A-Flex HyBri-Flex EQ

Required Information for *Specified* Product

Attached

- Point by Point Comparative Product Data ☑
- Test ☐
- Reports ☐
- Fabrication Drawings ☐
- Samples (Where Applicable) ☐

Proposed Product/Fabrication Method (List trade name/description; model no., manufacturer)

+1700, 6500, Flooded, FloorCote SLX w/quartz + FloorShare MC100

Required Information for *Proposed* Product — Attached

- Point by Point Comparative Product Data ☑
- Test ☐
- Reports ☐
- Fabrication Drawings ☐
- Samples (Where Applicable) ☐

Reason for Request

List of Related Changes/Modifications

None

Differences Between Proposed Substitution and Specified Product

Florock products are equal or superior to those specified

Proposed Product/Fabrication Method Affects Other Parts of the Work Yes ☐ No ☒ **Explain:**

Proposed Product/Fabrication Method Affects the Construction Schedule Yes ☐ No ☒ **Explain:**

Undersigned Pays for Changes to the Building Design, including engineering and detailing costs Caused by the Requested Substitution Yes ☐ No ☐ **Explain:**

N/A

Attach Additional Sheets if Required

CERTIFICATE OF EQUAL PERFORMANCE AND ASSUMPTION OF LIABILITY FOR EQUAL PERFORMANCE

Undersigned certifies:

FloroGel
Epoxy Patch Kit

Product Description: FloroGel is a highly thixotropic, 100% solids epoxy gel that is ideal for quickly and conveniently patching "bug holes", cracks, divets and other minor deformities in concrete slabs. Used alone for periodic concrete maintenance, or under other Florock Systems as part of the slab preparation process, this epoxy exhibits superior compressive strength and wear properties with no shrinkage.

Typical Uses, Applications: FloroGel is ideal for use in facilities that limit the use of solvents and fine, loose silica. Unlike similar products on the market, the addition of separate thickening powders, flours or silicas is unnecessary. The two liquid components, when properly blended, form a ready-to-use gel that is easy to apply with a spatula, spackle knife or flat trowel.

FloroGel may be installed over many existing coatings that are well-bonded and properly prepared. A Test Patch should be installed and approved prior to application and used as the job standard.

Packaging: FloroGel is available in 4 Kit Cases. Each Kit yields 0.8 gallons of blended gel, so each case will yield 3.2 gallons.

Storage: All containers should be stored at 40° F to 95° F and be kept tightly sealed and out of direct sunlight.

Note: FloroGel should not be applied when floor temperature is above 90°F or below 55°F, or when within 5°F of the dew point.

Instructions for Use:

1. Prepare surface in accordance with Preparation of Concrete Section of the Florock Catalog. Product is self-priming and requires no separate primer.

2. After substrate has dried, pour FloroGel Part B into larger can of Part A and blend very well using paint stick or mixer.

3. Scoop gel onto surface to be filled. Spread with spatula, spackle knife or flat trowel. Depending upon thickness applied, allow 1-6 hours cure time at 70˚ F. Proceed with foot traffic or subsequent coats of Florock System, in accordance with product data sheets.

Liquid Physical Properties			
Property	**Test Method**	**Part A X-9253-35**	**Part B U0-144**
Viscosity	ASTM D2196	680,000 cps	250 cps
Flash Point	ASTM D3278	>200°F	>200°F
Weight Per Gallon	ASTM D1475	9.5 lbs	8.5 lbs
N.V.W.	ASTM D2369	100%	100%
N.V.V.	ASTM D1259	100%	100%
VOC	ASTM D3960	0 gpl	0 gpl
Blended Components			
Blending Ratio		3:1 by volume	
Pot Life*		18 - 20 minutes	
N.V.W.		100%	
N.V.V.		100%	
Dry Time at 70°F			
Set to Touch		20 min - 4 hours	
Minimum Recoat		1 - 4 hours	
Foot Traffic		2 - 6 hours	
Floor and Air Temp. Limitaions		55°- 90°F	
Recommended Clean Up Solvent		Florobase Thinner	
Blended Viscosity		10,000 elevated	

*Pot life varies depending upon mass and storage temperature of materials.

Due to the exothermic nature of epoxies, film thickness will effect dry time. Feathered edges can take 4 hours to cure, while thickly poured cracks can cure in 20 minutes. Cooler temperatures require longer dry time.

Please read material safety data before using product.

Disclaimer:
All statements and recommendations are based on experience we believe to be reliable. The use or the application of these products being beyond the control of the Seller or Manufacturer, neither Seller nor Manufacturer make any warranty, expressed or implied, as to results or hazard from its use. The suitability, risk and liability whatsoever of a product for an intended use shall be solely up to the User.

Florock®

Excellence in Polymer Flooring

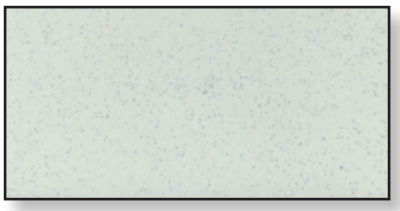
Manufactured Since 1952

FloroCrete Color Selector Chart

Prepigmented

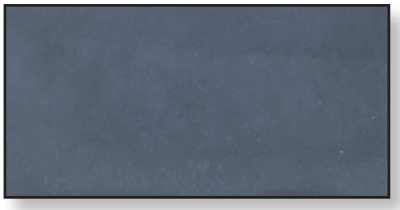
Tile Red

Grey



Neutral

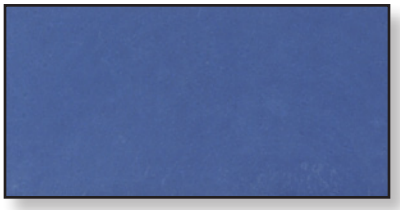
Field Tints



Black Powdered Colorant

Grey Powdered Colorant

Green Powdered Colorant



Blue Powdered Colorant

Red Powdered Colorant

Because the limitations of process printing do not allow accurate color reproductions, the samples shown in this brochure are only close approximations and should not be used for specification purposes. Actual Florock samples will provide the best guide for final color selection and are available upon request from Crawford Laboratories, Inc.

All Florock Colorants are lead-free, hexavalent chromium free, and cadmium free. Consult your Sales Representative for special colors and information on Florock Seamless Flooring Systems.

1-(800) FLOROCK *(356-7625)*

Floro

FloroCrete SLX 3.0

Self-Leveling Slurry Broadcast Urethane Mortar

Product Description: FloroCrete SLX is a solvent free, low odor, slurry-broadcast applied, self-leveling flooring system. It is specially formulated for areas where thermal shock, impact and chemical attack are issues. It allows moisture to move through it at a safe rate. System thickness can vary from 1/8" (3.0 mm) for a neat system to 3/16" (4.8 mm) when broadcast with choice of media.

Typical Uses, Applications: FloroCrete SLX may be used as a part of the Florock FloroProof moisture mitigation system (contact your Florock rep for details) and is suited for commercial, industrial and institutional applications, such as:

- Kitchens/Fryer Areas
- Vehicle Service Areas
- Food Processing Plants
- Breweries, Wineries & Dairies
- Walk-In Coolers & Freezers
- Bottling Facilities
- Laboratories
- Suitable for Indoor & Outdoor use
- Chemical Processing
- Sanitation & Wash-down Areas

Product Advantages:

- CA 01350 Air Quality Compliant
- ADA Compliant
- LEED Credits Available
- Meets FDA, USDA & CFIA Standards
- VOC Compliant/Low Odor
- Thermal Shock Resistant
- Heat Resistant to 235º F
- Contains Antimicrobial Additive
- No Topcoat Required
- Tolerates Dampness
- High Chemical & Abrasion Resistance
- Can be applied to 7 to 14 day old concrete

System Physical Properties

Property	Test Method	Results
Compressive Strength	ASTM C579	9,000 psi
Tensile Strength	ASTM D638	4,200 psi
Flexural Strength	ASTM D790	5,100 psi
Hardness, Shore D	ASTM D2240	85
Bond Strength	ASTM D4541	>400 psi
Co-Efficient of Friction	ASTM D-2047	Passes ADA Recommendations
Co-Efficient of Thermal Expansion	ASTM C531	$1.1x10^{-5}$ in/in/ºF
Impact Resistance	ASTM D2794	>160 in lbs.
Flammability	ASTM E-648	Class I
Abrasion Resistance	ASTM D4060	40 mg loss
Indoor Air Quality	CA 01350	Compliant
Water Absorption	ASTM C413	0.04%
Resistance to Fungi Growth	ASTM G21	Passes
VOC	EPA Method 24	0
Service Temperature	Lab Test	-100º F to 235º F
Workable Life*	1 Mixed Kit	15 min.
Cure time at 70º @ 50% RH**		
Set to Touch		8-10 hours
Foot Traffic		12-16 hours
Full Service		24-48 hours
Clean-Up Solvent		MEK

**After blending the components, immediately empty from mixing bucket onto the floor.*

***Cooler temperatures require longer cure time.* See *FloroCrete Catalyst Tech Data for more information*.

Packaging: FloroCrete SLX components are sold individually. A complete batch consists of:
• Part A – Polyol Component
• Part B – Isocyanate Component
• Part C – FloroCrete SLX Filler
Optional: A variety of broadcast media are sold separately.

Colors: FloroCrete SLX is available in Grey, Tile Red, Neutral and custom colors.

Storage: All containers should be stored at 45° F to 85° F (7° C to 29° C) and be kept tightly sealed and out of direct sunlight. The shelf life for this product is 12 months from date of manufacture.

Coverage: Apply FloroCrete SLX at 50 SF per kit for 100 mils broadcasted to a nominal 3/16" (4 m^2 per kit for 2.5 mm, broadcasted to a nominal 4.5mm) or 45 SF per kit for 1/8" broadcasted to a nominal 3/16" (3.25 m^2 per kit for 3.0 mm, broadcasted to a nominal 4.5 mm).

Limitations: FloroCrete SLX is not to be applied in temperatures below 45° F (7° C) or above 85° F (29° C), or when relative humidity is greater than 85%. Apply only to dry, properly prepared, uncoated, reinforced concrete floor slabs that have a moisture content of less than 10%. Do not apply if air temperature and/or surface temperature are at or below dew point. During application, protect substrate from exposure to water leakage or condensation from pipes. Do not feather-edge, do not hand-mix material and do not apply to cracked or unsound substrates. Product is for horizontal use on dry concrete surfaces only.

Substrate Preparation: Mechanically prepare concrete surface using shot-blaster, diamond grinder or other approved method. Ensure that all surface contaminants are removed. Determine that concrete is sound, with appropriate compressive strength. A Schmidt hammer can be used for this purpose. If concrete has strength of less than 3,000 psi, replace concrete before installing FloroCrete SLX. FloroCrete SLX is not intended for use over existing coatings.

Chemical Resistance of Mortar

Reagent	Results
Hydrochloric Acid 37%	R
Hydrofluoric Acid 4%	R
Hydrofluoric Acid 6%	R
Nitric Acid 30%	R
Phosphoric Acid 85%	R
Sulfuric Acid 39%	R
Sulfuric Acid 45%	R
Acetic Acid 10%	R
Acetic Acid 60%	L
Acetic Acid, Glacial 100%	L
Acetic Anhydride 98%	L
Citric Acid 40%	R
Formic Acid 10%	R
Lactic Acid 85%	R
Dibutylamine 100%	R
Ammonium Hydroxide 30%	R
Potassium Hydroxide 50%	R
Sodium Hydroxide 50%	R
Ammonium Chloride (sat'd)	R
Ammonium Sulphate (sat'd)	R
Ammonium Nitrate 50%	R
Ammonium Aqueous 30%	R
Zinc Chloride 50%	R
Ferric Chloride 50%	R
Hydrogen Peroxide 3%	R
Potassium Carbonate (sat'd)	R
Potassium Chloride (sat'd)	R
Sodium Carbonate (sat')	R
Sodium Chloride (sat'd)	R
Sodium Nitrate (sat'd)	R
Sodium Sulphate (sat'd)	R
Sodium Hydro chlorite 10%	R
Diacetone Alcohol 100%	R
Acetone 100%	L
Benzyl Alcohol 100%	R
n-Butyl Alcohol	R
Ethyl Alcohol 100%	R
Glycol Ether Acetone 100%	R
Hexane 100%	R
Isooctane 100%	R
2-Propanol	R
Methyl Alcohol 100%	R
Methylene Chloride 100%	L

(Continued on Page 3)

FloroCrete SLX 3.0

Self-Leveling Slurry Broadcast Urethane Mortar

Expansion Joints: In addition to standard slab expansion joint construction, place new joints wherever FloroCrete SLX is adjacent to dissimilar materials. Isolate areas subject to movement, vibration, thermal stress, load-bearing columns, and vessel sealing rings. Rout-out cracks and fill with FloroCrete HD or FloroCrete RT prior to floor system installation. Treat very large cracks as expansion joints and fill with Florock 6500 Elastomer Sealant (see tech data for details).

Coving: Prime the area to receive a cove with FloroCrete P and seed using Florock 1-126 sand. This is a wet on wet application, proceed with cove. For FloroCrete SLX cove, mix 1 complete kit of FloroCrete SLX with two 50lb. bags of Florock 1-126 sand. This mix will cover 83 LF of 6" cove or 125 LF of 4" cove (25.3 meters of 10cm cove and 38.1 meters of 15cm cove).

FloroCrete SLX Application:

1. **Primer:** Priming is usually not required. However, if concrete is very porous, or if this product is going to be used neat (without a broadcast) primer is required. Apply primer at 5 mils to 10 mils (127 microns to 254 microns). See FloroCrete P Technical Data Sheet and your Florock Representative for details.

2. Florocrete SLX Mortar: Combine FloroCrete SLX Component A and Component B. Blend together with a "mudd mixer" for 30 to 60 seconds. Add Part C (dry material) to A and B and mix again for 60 seconds making sure aggregate is thoroughly wetted out. Scrape down sides and bottom of container with a flat or straight edge trowel to assure complete mixing, then immediately dump mix onto floor for application. Be sure to MIX FULL KITS. As temperature will affect mixing, mix when air temperature is between 50° F and 70° F (10° C to 21° C).

Chemical Resistance of Mortar
(Continued from pg 2)

Reagent	Results
Mineral Spirits 100%	R
Pentane 100%	R
Petroleum Ether 100%	R
Boric Acid 100%	R
Muriatic Acid 80%	R
Ethylene Glycol 100%	R
Copper Sulfate (in solution)	R
Benzoic Acid 100%	R
Diesel Fuel 100%	R
Stearic Acid	R
Amyl Acetone	R
Fatty Acid 100%	R
Toluene 100%	R
Xylene 100%	R
Antifreeze 100%	R
Glycol Ether PM 100%	R
Transmission Fluid 100%	R
Freon 100%	R
Glycerin 96%	R
Oleic Acid	R
100 Solvent 100%	R
Kerosene 100%	R
Mineral Oil 100%	R
Brake Fluid 100%	R
Sugar Solution (sat'd)	R
Motor Oil 100%	R
Water	R
MEK & MIBK	L

Key:
R - Resistant. Appropriate for long term spills and secondary containment.
L - Limited Resistance. Appropriate for splashing and spills that are promptly cleaned up.
F - Not Recommended.

Note: Flash setting may occur if material remains in bucket too long (10 minutes is max.) or if left in a heap on floor.

Note: Best results are achieved when floor to be coated is divided into areas of 8 LF to10 LF of wet edge per mechanic. Begin working away from or alongside a wall. Trowel a small area and measure thickness. Use this initial area as a standard and proceed.

Application: Pour material onto the floor and spread to the desired thickness using a screed rake or trowel. Spread newly mixed batch across the transition of the previously applied materials before it begins to set. Immediately loop roll or spike roll. Ensure that the surface is level, and then proceed with broadcasting media to rejection while FloroCrete SLX is wet. Use 40/100 mesh silica sand, color quartz or vinyl chips. For aggregates, figure 1/2 lb. per SF (2.4 kg/m^2) and for the vinyl chips, figure 1 lb. per 9 SF (.55kg/m^2). Let broadcast media fall vertically, DO NOT broadcast up to the transition line of new mixes, stay 2 to 3 feet beyond the wet edge. Allow aggregate surface to cure, remove excess by sweeping or vacuuming until surface is dust free.

3. Topcoats: There are many topcoat options available; however the use of epoxy finishes should be avoided wherever thermal shock or hot oil will be present. Consult your Florock Representative for details.

Cure Time:
The chemical curing of FloroCrete SLX is affected by temperature. At 70° F (21° C) curing temperature, expect to walk on the floor in 12 hours, with full traffic after 24 hours. At 45° F (7° C) curing temperature, allowing foot traffic may take 48 hours or longer; therefore, it is imperative that air and substrate temperatures be kept above 70° F (21° C) for best cure.

Notes:
FloroCrete Catalyst R0-178 – Add up to 4 ounces per kit to shorten the cure time. The amount of catalyst added will be based on the temperature & speed of cure desired. Catalyst will shorten the pot life. Contact your Florock Representative for details.

Maintenance:
FloroCrete SLX floors can be maintained by using a stiff mechanical brush and/or hot pressure washer or steam cleaner. Surfactant-type detergents or degreasers may be used. However, avoid products containing Phenol, as this may damage color. Though FloroCrete is highly chemical resistant, a test patch is recommended prior to using any harsh cleaners.

Please read material safety data before using product.

Disclaimer:
All statements and recommendations are based on experience we believe to be reliable. The use or the application of these products being beyond the control of the Seller or Manufacturer, neither Seller nor Manufacturer make any warranty, expressed or implied, as to results or hazard from its use. The suitability, risk and liability of a product for an intended use shall be solely up to the User.

Floropoxy System 4700
Epoxy Primer

Product Description: Floropoxy System 4700 epoxy is 100% solids, fast curing and self-leveling. This coating is designed to penetrate and seal concrete floors. It cures to form a glossy, tough, smooth surface.

Typical Uses, Applications: Ideally suited for priming or midcoat use in commercial, industrial and institutional applications, such as:
- Hospitals
- Detention facilities
- Warehouses
- Manufacturing plants
- Washrooms

Product Advantages:
- Excellent durability and resilience
- Self Leveling Epoxy system restores worn, pitted or deteriorated concrete to a smooth, highly dense and lustrous surface
- A variety of colors can be achieved with the addition of Florock 100% Solids Colorants

Packaging:
4 Gal OverPack
20 Gal Pail Set
220 Gal Drum Set

Storage: All containers should be stored at 40° F to 95° F and be kept tightly sealed and out of direct sunlight.

Coverage:
Properly prepared floors will typically consume 10 to 16 mils of primer depending on the porosity of the surface. The spread ratio will be 100 SF/gal. for 16 mils. The spread ratio will be 160 SF/gal. for 10 mils..

Cured Physical Properties		
Property	**Test Method**	**Results**
Compressive Strength	ASTM D695	13,500 PSI
Tensile Strength	ASTM D2370	8,000 PSI
Hardness, Shore D	ASTM D2240	85 @ 0 sec. 80 @ 15 sec.
Fluxural Strength	ASTM D790	12,000 PSI
Tensile Elongation	ASTM 2370	5%
Abrasion Resistance, Taber Abrader CS 17 Wheel, 1000 gm load, 1000 cycles	ASTM D4060	88 mg loss
Water Absorption	ASTM C413	0.2%
Bond Strength	ASTM D454	>400 PSI
Impact Resistance	ASTM D2794	160 lbs.

Surface Preparation: New concrete must have a 28 day cure, and preferably a broom swept finish, prior to coating. In the case of older concrete flooring, remove all surface oils, paint, dust and debris. Prior to coating, make sure the surface is clean, passes the MVT test and the water drop test and that all surface defects have been repaired. Refer to the Florock "Preparation of Concrete" datasheet for more information on preparation and MVT before proceeding.

Note: Floropoxy should not be applied when floor temperature is above 90° F or below 55° F, or when within 5° F of the dew point.

Primer Application: In a clean, dry container, blend 3 parts by volume of Resin Part A with 1 part by volume of Activator Part B. Mix thoroughly for 3-5 minutes, using a low speed mechanical mixer. Transfer the mixture from the batch container to a transport container. Remix and pour entire mix from the transport container onto floor immediately. Retaining mixture in the bucket will shorten the pot life. Using a flat or 1/8" notched squeegee, apply at desired thickness. Backroll with a 3/8" nap roller.

Note: The cure time will vary with conditions. Allow a minimum of 4 hours and a maximum of 24 hours before next step.

Self Leveler Application:
When the surface is not as smooth as desired after priming and a high performance topcoat will be the final step, a second application of Floropoxy as a self-leveler shall be applied at a sufficient thickness to restore the profile. Mix the same as with primer step. For 16 mils, apply at 100 SF/gal.

Instructions for Use over Existing Coatings:
Examine the existing coating to ensure that it is well bonded to the concrete Any loose coating must be completely removed.

Edges should be sanded to a feathered edge. Clean the entire floor thoroughly with detergent cleaner. The surface must be free of all dirt, oils, or other contaminants.
After the floor has completely dried, sand the existing coating until a powdery residue is evident and all gloss is removed. Sweep or vacuum clean, and wipe with Florobase Thinner to ensure good adhesion of the new System.

Note: When coating over existing coatings, a test patch is recommended to evaluate compatibility.

Chemical Resistance	
Reagent	**Spot Test Results**
Water	1
Isopropyl Alcohol	4
Acetone	4
Sulfuric Acid 10%	1
Nitric Acid	1
Hydrochloric Acid 10%	2
Phosphoric Acid 50%	1
Citric Acid 10%	1
Brake Fluid	1
Salt 20%	1
Acetic Acid 10%	4
Sugar Solution 10%	1
MEK	4
JP 4 Jet Chloride	1
Methylene Chloride	D
Xylene	4
Toluene	4
Mineral Spirits	1
Skydrol	1
Tincture of Iodine	4,S
Lactic Acid 10%	4
Sulfuric Acid 25%	3

Rating Scale: Spot Test, ASTM D1308
Pencil Hardness Test, ASTM D3363
1 – No change in pencil hardness
2 – 1 Unit change in pencil hardness
3 – 2 Units change in pencil hardness
4 – 3 Units change in pencil hardness
D – Destroyed
S - Stains

4165 S. Emerald • Chicago, IL 60609 • (800) 356-7625 • www.florock.net

Floropoxy System 4700
Epoxy Primer

Please read material safety data before using product.

DISCLAIMER:
All statements and recommendations above are based on experience we believe to be reliable. The use or application of these products being beyond the control of the Seller or Manufacturer, neither Seller nor Manufacturer make any warranty, expressed of implied, as to results or hazard from its use. The suitability, risk and liability whatsoever of a product for an intended use shall be solely up to the User.

Liquid Physical Properties			
Property	**Test Method**	**M0-076 Component A**	**U0-144 Component B**
Viscosity	ASTM D2196	1000 cps	75 cps
Flash Point	ASTM D3278	>200 F	>200 F
Weight Per Gallon	ASTM D1475	9.13 lbs	8.10 lbs
N.V.W.	ASTM D2369	100%	100%
N.V.V.	ASTM D1259	100%	100%
VOC	ASTM D3960	0	0

Blended Components	
Blended Ratio	3:1 by volume
Curing Time, 70º F @ 50% RH	
Set to Touch	4 hours
Minimum Recoat (Foot Traffic)	6 hours
Maximum Recoat	24 hours
Pot Life (4 Gal. Volume)*	18 minutes @70º F
Minimum Recommended Spread Time	160 SF/gal.
Weight Per Gallon, ASTM D1475	8.62 lbs.
N.V.W., ASTM D2369	100%
N.V.V., ASTM D1259	100%
Blended Viscosity, ASTM D2196	500 – 800 cps
Recommended Clean Up Solvent	S 41Florobase Thinner
VOC, ASTM D3960	0

*Pot Life will be less with warmer slab and material temperatures.

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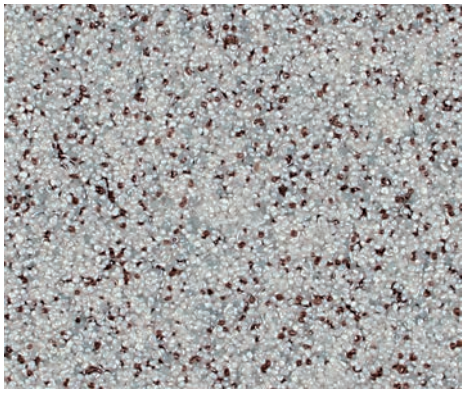
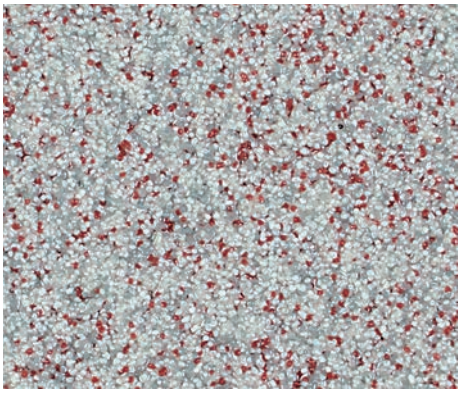
Florock®
Excellence in Polymer Flooring
Manufactured Since 1952

FloroQuartz
Decorative Quartz

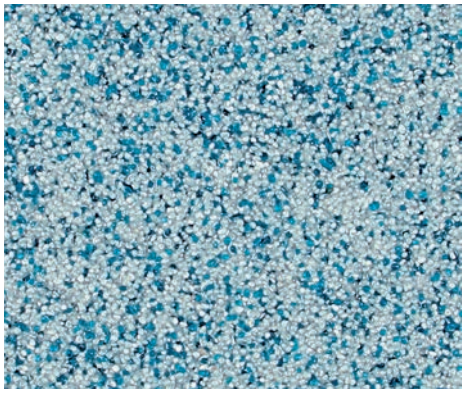
FloroQuartz Color Selector Chart



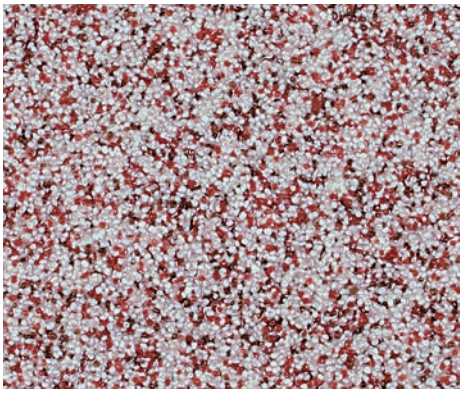
City Lights White
Blend # 11



Great Plains Grey
Blend # 5

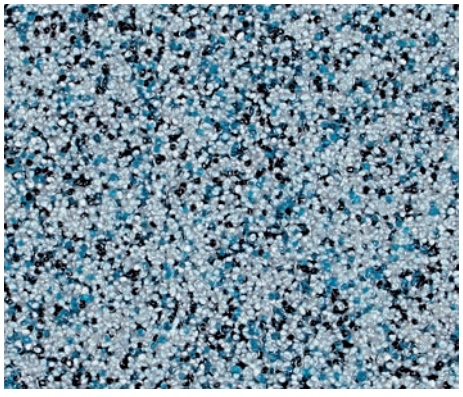


Lake Michigan Blue
Blend # 9-2



River Boat Red
Blend # 15

Prairie Gold
Blend # 2



Night Sky Navy
Blend # 10-2

Skyline Silver
Blend # 8-3

Samples shown are only approximations and should not be used for specification purposes.
Note: Most decorative quartz floors are high gloss as shown, except FloroCryl (MMA) quartz floors. These have a "Silk Matte" finish.

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FloroThane MC Ultra 100

Aliphatic Moisture Cure
Gloss Urethane

Product Description: FloroThane MC is an economical, light stable, high gloss standard traffic system. It provides outstanding gloss retention and superior hardness as well as exceptional abrasion resistance. It is resistant to many chemicals and solvents and it stops concrete dusting, providing a floor that is easy to maintain.

Typical Uses, Applications: Ideally suited for commercial, industrial and institutional applications, such as:

- Aircraft hangars
- Vehicle maintenance facilities
- Showrooms

Product Advantages:

- Resistant to Skydrol®, jet fuels and other vehicle maintenance fluids
- FloroThane MC is high solids, low odor
- USDA and FDA compliant
- Aliphatic (non-ambering)
- A variety of colors can be achieved with the addition of Florock Universal Colorants.

Packaging:
FloroThane MC Ultra 100 Clear– 4.5 Gal Kit

Note: Catalyst is not for use with FloroThane MC Utlra 100.

Cured Physical Properties		
Abrasion Resistance, Taber Abrader CS 17 Wheel, 1000 gm load, 1000 cycles	ASTM D4060	18.8 mg loss
Sward Hardness	ASTM D2240	40 – 50
Gloss, 60 Degree	ASTM E97	90+
Konig Hardness, 3 Mil Film	ASTM D4366	171.3
Coefficient of Friction – James Friction Tester	ASTM D2047	0.60 – 0.65
Tensile Strength	ASTM 2370	9,500 psi
Tensile Elongation, %	ASTMD2370	6
Dry Film Thickness	Per Coat	2.9 mils

Storage: All containers should be stored at 40° F to 95° F and be kept tightly sealed and out of direct sunlight.

Coverage:
FloroThane MC 100: 500 SF/gallon, one coat applied over primer.

Surface Preparation: New concrete must have a 28 day cure, and preferably a broom swept finish, prior to coating. In the case of older concrete flooring, remove all surface oils, paint, dust and debris. Prior to coating, make sure the surface is clean, passes the water drop test and that all surface defects have been repaired.

Note: FloroThane MC should not be applied when floor temperature is above 90° F or below 55° F, or when within 5° F of the dew point.

1. Primer Application: Once surface preparation is complete, apply FloroPoxy 4700 primer to the concrete floor. In a clean, dry container, blend 3 parts by volume of Component A and 1 part by volume of Component B. Mix only the amount that can be applied during the working time. Mix thoroughly for 3-5 minutes using a low speed mechanical mixer. Pour onto floor and, using a 1/8" V notched squeegee, apply primer at a rate of 160 sf/gallon; back roll with a 3/8" nap roller immediately after spreading.

Note: The cure time will vary with conditions. Allow a minimum of 4 hours and a maximum of 24 hours before next step.

2. Topcoat Application: For a pigmented coating, add 2 quarts of Florock Universal Colorant into the mixture of parts A & B. Mix parts A & B for 3 minutes using a Jiffy mixer blade with slow speed drill. Apply only one coat at 500 square feet per gallon with a 3/8 inch nap roller. It is important to take great care not to apply this coating above or below 500 square feet per gallon. Excess material could result in blisters; insufficient material could result in an uneven appearance. Allow coating to cure for 24 hours. If skid resistant characteristics are required, broadcast #60 or #80 grit into the wet primer or topcoat at the rate of 4 to 8 lbs/1000 square feet.

Chemical Resistance		
Reagent	**1 Day**	**7 Days**
Hydrochloric Acid 10%	E	E
Hydrochloric Acid 30%	E	E
Nitric Acid 10%	G	F
Phosphoric Acid 50%	E	G
Sulfuric Acid 37%	E	G
Acetic Acid 10%	E	E
Citric Acid 10%	E	E
Oleic Acid	E	E
Ammonia Hydroxide 10%	E	E
Ethylene Glycol (Antifreeze)	E	E
Isopropyl Alcohol	G	G
Methanol	G	F
D-Limonene	E	E
JP-4 Jet Fuel	E	E
Gasoline	E	E
Mineral Spirit	E	E
Xylene	E	E
Methylene Chloride	P	P
MEK	F	F
PMA	E	G
Ammonium Nitrate 20%	E	E
Brake Fluid	E	E
Bleach	E	E
Motor Oil	E	E
Skydrol ® 500B	E	E
Skydrol ® LD4	E	E
Sodium Chloride 20%	E	E
Tide Laundry Soap 1%	E	E
Trisodium Phosphate 10%	E	E

System cured 2 weeks prior to testing. Testing results are 1 day and 7 day exposures with 2 hr. recovery.
E – Recommended for longer-term spills
G – Recommended for shorter-term spills
F – Recommended for intermittent spills which are cleaned up promptly.
P – Not Recommended
S - Stains

FloroThane MC Ultra 100

Aliphatic Moisture Cure
Gloss Urethane

Instructions for Use Over Existing Coatings:

1. Examine the existing coating to ensure that it is well bonded to the concrete. Any loose coating must be completely removed and edges should be sanded to a feathered edge.

2. Clean the entire floor thoroughly with detergent cleaner. The surface must be free of all dirt, oils, or other contaminants.

3. After the floor has completely dried, sand the existing coating until a powdery residue is evident and all gloss is removed. Sweep or vacuum clean, and wipe with Florobase Thinner to ensure good adhesion of the new system. Any bare concrete should be mechanically prepared and primed with FloroPoxy 4700.

Maintenance: Sweep away dust and debris with a broom. Clean on a regular basis with a surfactant type mild detergent. Florock floors never need to be waxed.

Please read safety data before using product.

DISCLAIMER:

All preceding statements and recommendations are based on experience we believe to be reliable. The end use or application of these products being beyond the control expressed of implied, as to results or hazard from its use. The suitable risk and liability of a product for unintended use shall be solely up to the user.

Liquid Physical Properties		
Property	**Test Method**	**Ultra 100 R0-158/R0-159**
Viscosity, A+B	ASTM D2196	450 cps
Flash Point, ºF	ASTM D3278	185/185
Wt. Per Gal. A+B	ASTM D1475	9.2 lbs
N.V.W., A+B	ASTM D2369	91%
VOC, lbs/gal	ASTM D3960	0.83
VOC, grams/ltr	ASTM D3960	45 gpl
Blended Components		
Recommended Spread Rate		500 sf/gal
Dry Film Thickness per Coat		2.9 mils
Floor and Air Temp. Limits*		55º F- 90º F
Set to Touch, 70º F *		8 - 12 hrs.
Minimum Recoat (Foot Traffic)		16 hrs.
Maximum Recoat		24 hrs

System 6500 Elastomer

Product Description: System 6500 Elastomer is an elastomeric waterproofing underlayment intended for use in conjunction with Floropoxy Topcoats or as an expansion joint filler. This two-component, 100% solids system is solvent-free and has an elongation of 150%.

Typical Uses, Applications: Ideally suited for commercial, industrial and institutional applications, such as:

- Parking Decks
- Mechanical rooms
- Mezzanines
- Ramps and walkways

Product Advantages:
- 150% Elongation
- Solvent free 100% solids
- Provides excellent resistance to urine, chlorine and pool chemicals, sun tan lotions, spirits and beverages
- Able to withstand heavy loads, extreme weather conditions, abrasion, chipping and high impact
- A variety of colors can be achieved with the addition of Florock 100% Solids Colorants

Packaging:
3 Gallon Case
15 Gallon Pail Set

Storage: All containers should be stored at 40° F to 95° F and be kept tightly sealed and out of direct sunlight.

Coverage:
System 6500 Elastomer will cover 80 SF/gal @ 20 mils as a membrane coating. As an expansion joint filler, each gallon of System 6500 Elastomer will fill approximately 77 linear feet of joints (assuming ½" wide and ½" deep).

Cured Physical Properties		
Property	**Test Method**	**Results**
Hardness, Shore A	ASTM D2240	75
Tensile Strength	ASTM D412	460 PSI
Impact Resistance	ASTM D2794	Excellent
Elongation	ASTM D412	150%
Abrasion Resistance, Taber Abrader CS 17 Wheel, 1000 gm load, 1000 cycles	ASTM D460	100 mg loss
Tear Strength	ASTM D6240	300 pli

Surface Preparation: New concrete must have a 28 day cure, and preferably a broom swept finish, prior to coating. In the case of older concrete flooring, remove all surface oils, paint, dust and debris. Prior to coating, make sure the surface is clean, passes the MVT test and water drop test and that all surface defects have been repaired. Refer to the "Preparation of Concrete" datasheet for more information on preparation and MVT before proceeding.

Note: Floropoxy should not be applied when floor temperature is above 90° F or below 55° F, or when within 5° F of the dew point.

1. Primer Application: Once surface preparation is complete, apply Floropoxy 4700 primer to the concrete floor. In a clean, dry container, blend 3 parts by volume of Component A and 1 part by volume of Component B. Mix only the amount that can be applied during the working time. Mix thoroughly for 3-5 minutes, using a low speed mechanical mixer. Transfer the mixture from the batch container to a transport container. Remix and pour entire mix from the transport container onto floor immediately. Retaining mixture in the bucket will shorten the pot life. Using a 1/8" V notched squeegee, apply primer at a rate of 160 SF/gallon and then backroll with a 3/8" nap roller immediately after spreading.

Note: The cure time will vary with conditions. Allow a minimum of 4 hours and a maximum of 24 hours before next step.

2. Elastomer Application:

1. In a clean, dry container, mix 2 parts by volume of System 6500 Component A with 1 part by volume of Component B. With a low speed mechanical mixer, mix well for 3 to 5 minutes. Apply the blended System 6500 using a 1/8" notched trowel or notched squeegee at an approximate rate of 80 SF/gallon and then backroll with a 3/8" nap roller. This will produce dry film thickness of approximately 20 mils.

2. If skid resistant characteristics are required, put on spiked shoes and broadcast #20 or #36 aluminum oxide at the rate of 7lbs/1000 SF into the wet coating.

3. When the 1st coat is cured, apply a fill coat of System 6500, using the same technique as in step 2.

Note: For tinting System 6500, add one quart Florock Epoxy Colorant to each 3 gallon mix of System 6500.

Note: When using as a membrane, 6500 should not be coated with a urethane. When used as a joint filler, 6500 can be coated with a urethane

Note:For additional chemical and abrasion resistance, apply 2 top coats of Florothane CR or Florothane MC Ultra over a coat of Floropoxy.

Instructions for Use over Existing Coatings: Examine the existing coating to ensure that it is well bonded to the concrete. Any loose coating must be completely removed. Edges should be sanded to a feathered edge. Clean the entire floor thoroughly with detergent cleaner. The surface must be free of all dirt, oils, or other contaminants.

Liquid Physical Properties	
Blended Components	**M0-099/U0-157**
Solids by Weight	100%
Solids by Volume	100%
Spread Rate @ 20 mils DFT	80 SF/Gal
Weight per Gallon	8.5 lbs.
Viscosity	2000 cps
SETA Flash	>200°
Pot Life (10 lb. mass @ 77˚ F @ 50% F	17 min.
Mixing Ratio	2:1 by volume
Dry time @ 77° F @ 50% RH	
Set-to-touch	7-8 hours
Minimum Recoat	16 hours
Maximum Recoat	24 hours
Full Chemical Cure	7 days
Floor & Air Temp. Limitations	55˚ F - 90° F
Recommended Clean-Up Solvent	Xylene

After the floor has completely dried, sand the existing coating until a powdery residue is evident and all gloss is removed. Sweep or vacuum clean, and wipe with Florobase Thinner to ensure good adhesion of the new System.

Application as a Crack Filler or Expansion Joint Filler: For best results, treat cracks and joints before coating the floor. Chip out all foreign debris and coatings to achieve a clean surface. Mix Floropoxy 4700 primer and brush onto crack or joint walls. Once cured, install backer rod into deep crevices. Mix System 6500 and pour until slightly over-filled. Allow to cure, then run over cracks/joints with sander to create a flush surface.

System 6500 Elastomer

Maintenance:
Sweep away dust and debris with a broom. Clean on a regular basis with a surfactant type, mild detergent. Florock floors never need to be waxed.

Please read material safety data before using product.

Disclaimer:
All statements and recommendations above are based on experience we believe to be reliable. The use or application of these products being beyond the control of the Seller or Manufacturer, neither Seller nor Manufacturer make any warranty, expressed or implied, as to results or hazard from its use. The suitability, risk and liability of a product for an intended use shall be solely up to the User