

DATA SHEET

DESCRIPTION:

ES-2065 Broadcast System is a 65-mil multi-product system that includes a 100% solids semi-rigid epoxy receiver coat, a 100% solids top coat, a 4-mil aliphatic urethane finish coat and aggregate layered together to form a 65-mil broadcast flooring system. This system exhibits very good chemical, wear and chip resistance.

A total of 16 different standard colors can be achieved by mixing the clear epoxy coating in the ES-2065 Broadcast System and the clear chemical resistant urethane finish coat with one of 16 "specialty" urethane/epoxy Colorants in the field.



RECOMMENDED USES:

The ES-2065 Broadcast Coating System is designed for use on concrete areas found in apparatus bays and other service area floors that are subjected to moderate to heavy traffic and chemical spillage. This system is also used in auto and truck service area floors.

PACKAGING:

The liquid components of the 65-mil Solid Color Broadcast System are available in semi-bulk and bulk liquid units. The silica flour is available in 50-lb. bags, while the "special" broadcast aggregate is available in 100-lb. bags.

COVERAGE:

The "semi-rigid" 2200 Epoxy Receiver Coat (with the silica flour) is applied at the rate of 30-mils (53.3 sq. ft./gal) and the aggregate is broadcast at the rate of 0.67-lbs. per sq. ft. per application layer. The 3150 Epoxy Top Coat is applied at the rate of 80-90 sq. ft. per gallon depending on the final surface texture desired. The VOC-Chemical Resistant Urethane finish coat is applied at 300 sq. ft./gal.

FEATURES:

- 16 Standard UV Stable Colors
- Good Chemical Resistance-Resists Brake Fluid, Battery Acid, Skydrol 500B
- Good Abrasion Resistance
- VOC Compliant products
- Gloss Finish; Final floor requires less maintenance and upkeep.
- Will give your facility a bright, clean and professional appearance.
- Full Range of textures; provides a safe surface on which to work.
- Can Be Installed With an Integral Cove Base to Create a Monolithic Floor

SURFACE PREPARATION:

In general, the substrate must be clean, dry and sound with new concrete cured for at least 30 days at 70°F. Remove dust, laitance, grease, curing compounds, waxes, foreign particles, disintegrated or soft base materials, and any previously applied potentially incompatible coatings. Create a surface profile on concrete by steel shot blasting. Cracks and joints should be repaired before the installation of the 65-mil Broadcast System.

1. If the floor has an existing paint or coating to be removed, grind the entire area using a self-contained, dust controlled, 480 volt 30-amp, "Diamond Grinder" (Photo #1).
2. Using a 15", 480-volt "Shot Blast" unit (Photo #2), profile the bare concrete floor surface to affect an approximate 80-grit sand paper finish to achieve a sound mechanical bonding surface for the squeegee applied, 100% solids epoxy.
3. Power sand and/or hand grind (using vacuumized diamond grinders) all edges, perimeter areas, etc. that are inaccessible to the shot blast equipment. If necessary, clean out ALL expansion, isolation and control joints using a concrete saw.
4. Power sweep and/or vacuum the surface to remove all laitance, dust and excess shot.



Photo #1



Photo #2

5. If the concrete surface is not prepared properly, product adhesion will fail and warranties will be voided.

FOR OPTIMUM RESULTS:

- New Concrete Must Cure For at Least 30 Days @ 70°F and tested for moisture content.
- DO NOT Reduce the Epoxy components ... with ANY thinner.
- DO NOT Use when Humidity Exceeds 75% Indoors.
- DO NOT Apply to Structurally Unsound Surfaces.
- Allow Each Coat to Dry Tack-Free Before Recoating.
- Apply subsequent coats within 24 Hours of Previous Coat.
- Test Compatibility with Existing Coatings Prior to Application of This System

Review the Material Safety Data Sheets (MSDS) for this product prior to mixing and applying. In addition, thoroughly review the Application Guide and product labels.

General Properties:	Data	
Shelf Life	2 Years	
Application Temp & Humidity	55°F to 85°F @ less than 75% R.H.	
Induction	None	
Mixing Ratio: (A to B)	Receiver Coat & Top Coat: 1 to 2 ratio; CRU 1 to 2 ratio	
Colors	Variety with Urethane/Epoxy Colorants	
Working Time @ 75 °F	Receiver Coat: 25 minutes; Top Coat: 18-20 minutes.	
Application Methods	Receiver Coat: Notched Squeegee & High quality 3/8" nap roller; Top Coat: Flat Squeegee & High quality 3/8" nap roller.	
Cure Rate @ 75 °F		
Recoat	10 hrs.	
Foot Traffic	14 hrs.	
Heavy Traffic	24+ hrs.	
Chemical Resistance	72+ hrs.	
Test	Method	Typical Values
Bond Strength (psi)	ACI COM #503 (pp. 1139-1141)	400+ w/ concrete failure
% Solids by Volume	ASTM D-1644	100.0
Flash Point	Pensky-Martens CC	>200°F
UV Light Resistance	Q-U-V Accelerated Weather Tester	Good
Hardness-Shore D	ASTM D-2240	84+
VOC	EPA Method 24	0.12 lbs./gal
Gloss (60°)	BYK-Gardner Tri-Gloss	90+
Impact Resistance	ASTM D-2794	160 in-lbs.
Indentation	MIL-D-3134F	None
Abrasion Resistance (mg) (CS-17 wheel, 1000 GM load, 1,000 cycles)	ASTM D-1044	55*
Flammability	ASTM D-635	Self-Extinguishing
Dry Heat Resistance		140 °F Constant 200 °F Intermittent
Compression Strength (psi)	ASTM D-695	13,100
Tensile Strength (psi)	ASTM D-638	7,100
Flexural Strength (psi)	ASTM D-790	8,250
Water Absorption (%)	ASTM C-413	0.18%

*Note: Test results based on complete system with final coat of ES-5322 CRU

MIXING:

Avoid mixing and application of these products if the floor temperature is below 55°F or above 85°F. Also, avoid application if the relative humidity is higher than 75%. The temperature of the floor, materials and air in the area of the installation all play a role in how the product will apply and cure.

If Colorants are to be used with the 65-Mil Broadcast Coating System, the appropriate quantity of Colorant is added to the Part-B Resin and mixed in uniformly before the Part-A Hardener is added.

Blend the Part-A and Part-B components thoroughly for a minimum of 2 minutes with a "Jiffy" or "Spiral" mixing blade attached to a low-speed (400-600 RPM) electric drill. Take care not to induce air into the material when mixing. This will cause "bubbles" in the coating when applied.

APPLICATION:

1. Pre-patch all large holes, divots, cracks, etc., using an epoxy paste made of Econo Surf 3150 Epoxy and Cab-O-Sil TS-720 or Garamite 1958.
2. Notch squeegee apply a coat of 100% solids epoxy (Econo Surf 2200 Receiver Coat) filled with Sil-Co-Sil 125 at the rate of 30-mils or 53.3 sq. ft./gal and back roll to level using a 3/8" nap, 18" wide, roller sleeve.
3. Seed (broadcast) to excess (rejection) with a specially blended silica aggregate at the rate of 0.67 lbs. per sq. ft.
4. Sweep and /or vacuum to remove all excess silica aggregate.
5. Saw cut all moving joints as required and fill them with a flexible epoxy joint material.
6. Sweep and /or vacuum to remove dust, debris, contamination etc. resulting from the sanding/cutting process.
7. Notched or flat squeegee apply 20-mils (80 sq. ft./gal) of clear, 100% solids epoxy (Econo Surf 3150 Epoxy) and back roll to level using a 3/8" or 1/2" nap (depending on the desired finished texture), 18" roller sleeve.
8. **OPTIONAL COAT:** Roller apply one (1) finish coat of a pigmented, V.O.C. compliant, chemical resistant aliphatic urethane (Econo Surf 5322 CRU) using a 1/2" nap, 18" wide, mohair roller at approximately 5-mils (300 sq. ft./gallon).

POT LIFE:

Based on 75°F and 50% R.H., the Receiver Coat has a pot life of 22-25 minutes while the Epoxy Top Coat has a pot life of 18-20 minutes. Using any product beyond this time will yield variable results and therefore any mixed product beyond the pot life should be discarded. Only the amount of urethane that can be applied within 30 minutes should be mixed at one time.

CLEAN UP:

Application equipment should be cleaned using soap and water or solvent where necessary. Roller covers should be discarded after use.

DISPOSAL:

Empty containers may contain product residue, including flammable or combustible vapors. Do not cut, puncture or weld near these containers. Label warnings must be observed until containers have been commercially cleaned or reconditioned. Any containers to be thrown out must be disposed in accordance with federal, state and local regulations.

CUSTOMER NOTE:

For information on application situations not covered above, contact the corporate office at 1-302-322-4290.

ECONO SURF

ES-2065 65-Mil Solid Color Broadcast System (Firehouse) DS Rev.: 3/4/11

Corporate Headquarters: P. O. Box 732, New Castle, DE 19720

PHONE (302) 322-4920 • FAX (302) 322-4981 • Email: info@econo-surf.com

DATA SHEET

DESCRIPTION:

ES-2125 Broadcast system is a multi-product system that includes a 100% solids, semi-rigid epoxy receiver coat, a 100% solids epoxy top coat, and a 4 mil aliphatic urethane finish coat and an aggregate layered together to form a 125-Mil broadcast flooring system. This system exhibits very good chemical, wear and chip resistance.

This system exhibits very good chemical, abrasion, chip and UV resistance. It is available in 16 standard colors and can be installed in varying degrees of texture—from smooth to severe. It is also installed vertically to create a “bath tub” effect for clean rooms.



RECOMMENDED USES:

This system is used on concrete floors areas in Fire House and EMS Facilities: Apparatus Bays, lounges, offices, bathrooms, etc. Automotive: Service Write-Up and customer lounges, showrooms that are NOT subject to direct continuous sunlight. Kitchens, lunchrooms, bathrooms, locker rooms, clean rooms, labs and anywhere seamless “grout joint free” easy to maintain semi permanent floors would be beneficial.

PACKAGING:

The liquid components of the 125-mil Solid Color Broadcast System are available in semi-bulk and bulk liquid units. The silica flour is available in 50-lb. bags, while the “special” broadcast aggregate is available in 100-lb.bags.

COVERAGE:

The “semi-rigid”, 2200 Epoxy Receiver Coat (with the silica flour) is applied at the rate of 30-mils (53.3 sq. ft./gal) and the aggregate is broadcast at the rate of 0.67-lbs. per sq. ft. per application layer. The 3150 Epoxy Top Coat is applied at the rate of 80-90 sq. ft. per gallon depending on the final surface texture desired. The VOC-Chemical Resistant Urethane finish coat is applied at 300 sq. ft./gal.

FEATURES:

- 16 Standard UV Stable Colors
- Good Chemical Resistance-Resists Brake Fluid, Battery Acid, Skydrol 500B
- Good Abrasion Resistance
- VOC Compliant products
- Gloss Finish; Final floor requires less maintenance and upkeep.
- Will give your facility a bright, clean and professional appearance.
- Full Range of textures; provides a safe surface on which to work.
- Can Be Installed With an Integral Cove Base to Create a Monolithic Floor

SURFACE PREPARATION:

In general, the substrate must be clean, dry and sound with new concrete cured for at least 30 days at 70°F. Remove dust, laitance, grease, curing compounds, waxes, foreign particles, disintegrated or soft base materials, and any previously applied potentially incompatible coatings. Create a surface profile on concrete by steel shot blasting. Cracks and joints should be repaired before the installation of the 125-mil Broadcast System.

1. If the floor has an existing paint or coating to be removed, grind the entire area using a self-contained, dust controlled, 480 volt 30-amp, “Diamond Grinder” (Photo #1).
2. Using a 15”, 480-volt “Shot Blast” unit (Photo #2), profile the bare concrete floor surface to affect an approximate 80-grit sand paper finish to achieve a sound mechanical bonding surface for the squeegee applied, 100% solids epoxy.
3. Power sand and/or hand grind (using vacuumized diamond grinders)



Photo #1



Photo #2

all edges, perimeter areas, etc. that are inaccessible to the shot blast equipment. If necessary, clean out ALL expansion, isolation and control joints using a concrete saw.

4. Power sweep and/or vacuum the surface to remove all laitance, dust and excess shot.
5. If the concrete surface is not prepared properly, product adhesion will fail and warranties will be voided.

General Properties:	Data	
Shelf Life	2 Years	
Application Temp & Humidity	55 F to 85°F @ less than 75% R.H.	
Induction	None	
Mixing Ratio: (A to B)	Receiver Coat: 1 to 2 by volume: Top Coat: 1 to 2 ratio	
Colors	Variety with Urethane/Epoxy Colorants	
Working Time @ 75 °F	Receiver Coat: 22-25 minutes; Top Coat: 18-20 minutes.	
Application Methods	Receiver Coat: Notched Squeegee & High quality 3/8" nap roller; Top Coat: Flat Squeegee & High quality 3/8" nap roller.	
Cure Rate @ 75 °F		
Recoat	10 hrs.	
Foot Traffic	14 hrs.	
Heavy Traffic	24+ hrs.	
Chemical Resistance	72+ hrs.	
Test	Method	Typical Values
Bond Strength (psi)	ACI COM #503 (pp. 1139-1141)	400+ w/ concrete failure
% Solids by Volume	ASTM D-1644	100.0
Flash Point	Pensky-Martens CC	>200°F
UV Light Resistance	Q-U-V Accelerated Weather Tester	Good
Hardness-Shore D	ASTM D-2240	84+
VOC	EPA Method 24	0.12 lbs./gal
Gloss (60°)	BYK-Gardner Tri-Gloss	90+
Impact Resistance	ASTM D-2794	160 in-lbs.
Indentation	MIL-D-3134F	None
Abrasion Resistance (mg) (CS-17 wheel, 1000 GM load, 1,000 cycles)	ASTM D-1044	55*
Flammability	ASTM D-635	Self-Extinguishing
Dry Heat Resistance		140 °F Constant 200 °F Intermittent
Compression Strength (psi)	ASTM D-695	13,100
Tensile Strength (psi)	ASTM D-638	7,100
Flexural Strength (psi)	ASTM D-790	8,250
Water Absorption (%)	ASTM C-413	0.18%

*Note: Test results based on complete system with final coat of ES-5322 CRU

FOR OPTIMUM RESULTS:

- New Concrete Must Cure For at Least 30 Days @ 70°F and tested for moisture content.
- DO NOT Reduce the Epoxy components with ANY thinner.
- DO NOT Use when Humidity Exceeds 75% Indoors.
- DO NOT Apply to Structurally Unsound Surfaces.
- Allow Each Coat to Dry Tack-Free Before Recoating.
- Apply subsequent coats within 24 Hours of Previous Coat.
- Test Compatibility with Existing Coatings Prior to Application of Top Coat

Review the Material Safety Data Sheets (MSDS) for this product prior to mixing and applying. In addition, thoroughly review the Application Guide and product labels.

MIXING:

Avoid mixing and application of these products if the floor temperature is below 55°F or above 85°F. Also, avoid application if the relative humidity is higher than 75%. The temperature of the floor, materials and air in the area of the installation all play a role in how the product will apply and cure.

If Colorants are to be used with the 125-Mil Broadcast Coating System, the appropriate quantity of Colorant is added to the Part-B Resin and mixed in uniformly before the Part-A Hardener is added.

Blend the Part-A and Part-B components thoroughly for a minimum of 2 minutes with a "Jiffy" or "Spiral" mixing blade attached to a low-speed (400-600 RPM) electric drill. Take care not to induce air into the material when mixing. This will cause "bubbles" in the coating when applied.

APPLICATION:

1. Pre-patch all large holes, divots, cracks, etc., using an epoxy paste made of Econo Surf 3150 Epoxy and Cab-O-Sil TS-720 or Garamite 1958.
2. Notch squeegee apply a coat of 100% solids epoxy (Econo Surf 2200 Receiver Coat) filled with Sil-Co-Sil 125 at the rate of 30-mils or 53.3 sq. ft./gal and back roll to level using a 3/8" nap, 18" wide, roller sleeve.
3. Seed (broadcast) to excess (rejection) with a specially blended silica aggregate at the rate of 0.67 lbs. per sq. ft.
4. Sweep and /or vacuum to remove all excess silica aggregate.
5. Steps 2, 3, 4 are repeated.
6. Saw cut all moving joints as required and fill them with a flexible epoxy joint material.
7. Sweep and /or vacuum to remove dust, debris, contamination etc. resulting from the sanding/cutting process.
8. Notched or flat squeegee apply 20-mils (80 sq. ft./gal) of pigmented, 100% solids epoxy (Econo Surf 3150 Epoxy) and back roll to level using a 3/8" or 1/2" nap (depending on the desired finished texture), 18" roller sleeve.
9. Roller apply one (1) finish coat of a pigmented, V.O.C. compliant, chemical resistant aliphatic urethane (Econo Surf 5322 CRU) using a 3/8" nap, 18" wide, mohair roller at approximately 5-mils (300 sq. ft./gallon).

POT LIFE:

Based on 75°F and 50% R.H., the Receiver Coat has a pot life of 22-25 minutes while the Epoxy Top Coat has a pot life of 18-20 minutes. Using any product beyond this time will yield variable results and therefore any mixed product beyond the pot life should be discarded. Only the amount of urethane that can be applied within 30 minutes should be mixed at one time.

CLEAN UP:

Application equipment should be cleaned using soap and water or solvent where necessary. Roller covers should be discarded after use.

DISPOSAL:

Empty containers may contain product residue, including flammable or combustible vapors. Do not cut, puncture or weld near these containers. Label warnings must be observed until containers have been commercially cleaned or reconditioned. Any containers to be thrown out must be disposed in accordance with federal, state and local regulations.

CUSTOMER NOTE:

For information on application situations not covered above, contact the corporate office at 1-302-322-4290.

ECONO SURF

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DATA SHEET

DESCRIPTION:

ES-2425 125-mil Broadcast Decorative Quartz(Tweed) System is an 1/8" thick system (125 mils) consisting of two (2) applications of 100% solids, squeegee applied 'bulked up" epoxy with the color quartz aggregate blend, followed by a top coat application of a 100% solids epoxy system. An optional satin to high gloss aliphatic urethane finish coat is usually applied.

This system exhibits very good chemical, abrasion, chip and UV resistance. It is available in virtually hundreds of tweed color blends and can be installed in varying degrees of texture—from smooth to severe. It is also installed vertically to create a "bath tub" effect for clean rooms.



RECOMMENDED USES:

This system is used on concrete floors that are subjected to light to moderate traffic and chemical spillage.

Fire House and EMS Facilities: Apparatus Bays, lounges, offices, etc. that are NOT subject to direct continuous sunlight. Kitchens, lunchrooms, bathrooms, locker rooms, and anywhere seamless "grout joint free" easy to maintain semi permanent floors would be beneficial.

COVERAGE:

The two "Receiver Coats" of 3150-Epoxy, bulked up with Sil-Co-Sil 125, are applied at the rate of 30-mils or 53.3 sq. ft. per gallon. The color quartz aggregate is broadcast into each receiver coat at the rate of 0.67-lbs. per sq. ft.

The "Top Coat" of 3150 Epoxy is applied at the rate of 80-90 sq. ft. per gallon depending on the final surface texture desired. The ES-5322-Chemical Resistant Urethane finish coat is applied at 300 sq. ft. per gallon.

FEATURES:

- A system alternative to VCT and Ceramic
- Requires Minimum Maintenance and Has NO Grout Joints
- Very Good Chemical and Abrasion Resistance
- VOC Compliant—Solvent Free
- Satin to High Gloss Finish
- Full Range of Textures
- Hundreds of Blended Tweed Colors
- USDA Accepted
- Can be Installed With 4" to 6" Integral Troweled Cove Base

PACKAGING:

The liquid components of the ES-2425 125-mil Broadcast Decorative Quartz System are available in semi-bulk and bulk liquid units for easy job-site mixing and application. The "color" quartz decorative aggregate is available in 50-lb. bags. The ES-5322 Chemical Resistant Urethane is available in 15-gal semi-bulk units.

SURFACE PREPARATION:

In general, the substrate must be clean, dry and sound with new concrete cured for at least 30 days at 70°F. Remove dust, laitance, grease, curing compounds, waxes, foreign particles, concrete slag, disintegrated or soft base materials, and ANY previously applied and potentially incompatible coatings. Create an adequate surface profile (similar to 80 to 100 grit sand paper) on concrete by mechanical steel shot blasting and/or diamond grinding. Stress cracks, joints, holes and divots etc., should be repaired prior to the application of the system. If the concrete surface is not prepared properly, product adhesion will fail and warranties will be voided.

1. If the floor has an existing paint or coating to be removed, grind the entire area using a self-contained, dust controlled, 480-volt 30-amp, "Diamond Grinder".
2. Using a 15", 480-volt "Shot Blast" unit (Photo #2), profile the bare concrete floor surface to affect an approximate 80-grit sand paper finish to achieve a sound mechanical bonding surface for the squeegee applied, 100% solids epoxy.



Photo #1



Photo #2

3. Power sand and/or hand grind (using vacuumized diamond grinders) all edges, perimeter areas, etc. that are inaccessible to the shot blast equipment.

4. If necessary, clean out ALL expansion, isolation and control joints using a concrete saw. Power sweep and/or vacuum the surface to remove all laitance, dust and excess shot.

General Properties:	Data	
Shelf Life	2 Years	
Colors	Unlimited; Multi-Colored based on aggregate blend used	
Induction	None	
Coverage:	Two Receiver Coats @ 53.3/gal or 30 mils; Top Coat: 80-90 @ 18-20 mils ;Finish Coat: 300 @ 5.3 mils	
Mixing Ratio: (A to B)	1:2 by volume for 3150 Epoxy; 1:2 by volume for CRU clear	
Application Temp & Humidity	55°F to 85°F @ less than 75% R.H.	
Packaging	15 Gal and 165-gal Units of 3150 Epoxy	
Working Time @ 75 °F	3150: 18-20 min.; 5322 CRU: 3-hrs.	
Application Methods	Notched & Flat Squeegee & High quality 3/8" nap roller	
Cure Rate @ 75 °F		
Recoat	5-6 hrs.	
Foot Traffic	10 hrs.	
Heavy Traffic	24+ hrs.	
Chemical Resistance	72+ hrs.	
Test	Method	Typical Values
Bond Strength (psi)	ACI COM #503 (pp. 1139-1141)	400+ w/ concrete failure
% Solids by Volume	ASTM D-1644	100.0
Flash Point	Pensky-Martens CC	>200°F
UV Light Resistance	Q-U-V Accelerated Weather Tester	Good
Hardness-Shore D	ASTM D-2240	84+
VOC	EPA Method 24	0.12 lbs./gal
Gloss (60°)	BYK-Gardner Tri-Gloss	90+
Impact Resistance	ASTM D-2794	160 in-lbs.
Indentation	MIL-D-3134F	None
Abrasion Resistance (mg) (CS-17 wheel, 1000 GM load, 1,000 cycles)	ASTM D-1044	55*
Flammability	ASTM D-635	Self-Extinguishing
Dry Heat Resistance		140 °F Constant 200 °F Intermittent
Compression Strength (psi)	ASTM D-695	13,100
Tensile Strength (psi)	ASTM D-638	7,100
Flexural Strength (psi)	ASTM D-790	8,250
Water Absorption (%)	ASTM C-413	0.18%
Dry Heat Resistance		140 °F Constant 200 °F Intermittent
Water Absorption (%)	ASTM C-413	0.18%

*Based on using ES-5322 CRU

FOR OPTIMUM RESULTS:

- New Concrete Must Cure For at Least 30 Days @ 70°F and tested for acceptable moisture levels.
- DO NOT Reduce the Epoxy components of the ES-2425 Broadcast System with ANY thinner.
- DO NOT Use When Temperature of Floor is below 55° F or above 85° F or if the Humidity Exceeds R.H. of 75% Indoors.
- DO NOT Apply to Structurally Unsound Surfaces.
- Apply subsequent coats within 24 Hours of Previous Coat.
- Test Compatibility With Existing Coatings Prior to Top Coating

Review ECONO SURF's Material Safety Data Sheets (MSDS) for this product prior to mixing and applying. In addition, thoroughly review the Application Guide and product labels.

MIXING:

Avoid mixing and application of these products if the floor temperature is below 55°F or above 85°F. Also, avoid application if the relative humidity is higher than 75%. The temperature of the floor, materials and air in the area of the installation all play a role in how the product will apply and cure.

Blend the Part-A and Part-B components thoroughly for a minimum of 2 minutes with a "Jiffy" or "Spiral" mixing blade attached to a low-speed (400-600 RPM) electric drill. Take care not to induce air into the material when mixing. This will cause "bubbles" in the coating when applied.

APPLICATION of 125-Mil DOUBLE BROADCAST DECORATIVE QUARTZ SYSTEM:

1. Pre-patch all large holes, divots, cracks, etc., using an epoxy paste made of Econo Surf 3150 Epoxy and Cab-O-Sil TS-720 or Garamite.
2. Notch squeegee apply the 1st Receiver Coat which consists of 100% solids epoxy (Econo Surf 3150-Epoxy) bulked up with Sil-Co-Sil 125 and applied at an approximate blended thickness of 30-mils (53.3 sq. ft./gal), and back rolled to level using a 3/8" nap, 18" wide, roller sleeve.
3. Seed (broadcast) to excess (rejection) with color quartz aggregate at the rate of 0.67 lbs. per sq. ft.
4. Sweep and /or vacuum to remove all excess color quartz aggregate.
5. For the 2nd Receiver Coat, steps 2, 3, 4 are repeated.
6. Then notched or flat squeegee apply 20-mils (80 sq. ft./gal) of a clear, 100% solids epoxy (Econo Surf 3150 Epoxy) and back roll to level using a 3/8" or 1/2" nap (depending on the desired finished texture), 18" roller sleeve.
7. Roller apply one (1) finish coat of a clear, V.O.C. compliant, chemical resistant aliphatic urethane (Econo Surf 5322 CRU) using a 3/8" nap, 18" wide, mohair roller at approximately 5 mils (300 sq. ft./gallon).
8. Saw cut all moving joints as required and fill them with a flexible epoxy joint material. Sweep and /or vacuum to remove dust, debris, contamination etc. resulting from the sanding/cutting process.

POT LIFE:

Based on 75°F and 50% R.H., the Receiver Coats and Top Coat have a pot life of are 18-20 minutes. The CRU Finish Coat has a pot life of approx. 2-hrs. Using any product beyond this time will yield variable results and therefore any mixed product beyond the pot life should be discarded. Only the amount of urethane that can be applied within 30 minutes should be mixed at one time.

CLEAN UP:

Application equipment should be cleaned using soap and water or solvent where necessary. Roller covers should be discarded after use.

DISPOSAL:

Empty containers may contain product residue, including flammable or combustible vapors. Do not cut, puncture or weld near these containers. Label warnings must be observed until containers have been commercially cleaned or reconditioned. Any containers to be thrown out must be disposed in accordance with federal, state and local regulations.

CUSTOMER NOTE:

For information on application situations not covered above, contact the corporate office at 1-302-322-4920.

ECONO SURF

Corporate Headquarters: P. O. Box 732, New Castle, DE 19720

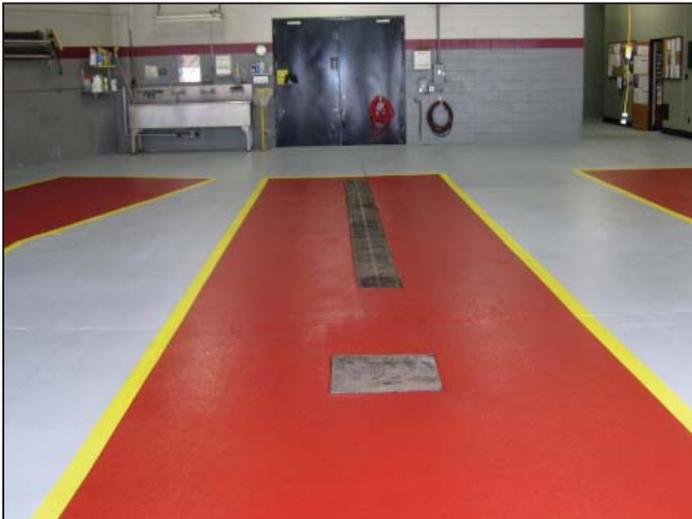
PHONE (302) 322-4920 • FAX (302) 322-4981 • Email: info@econo-surf.com

DESCRIPTION:

ES-2565 Resurfacer Composite System is a multi-product system that includes a 100% solids epoxy Resurfacer (ES-1100 Resurfacer), and a solid-color, full aggregate broadcast system (ES-3065 Broadcast). The ES-2565 Resurfacer Composite System is generally applied at total thickness of 250-Mils.

RECOMMENDED USES:

When the ES-1100 Resurfacer & ES-2065 65-Mil Broadcast systems are combined, they become a specialize composite system which cures chemically to an extremely tough, corrosion, and abrasion resistant surface that has good non-skid characteristics. Typically used in areas exposed to heavy industrial traffic from forklift trucks and steel wheeled carts. Also used in areas that are exposed to impact and abrasion from heavy equipment.



FEATURES:

- Decorative, multi-colored appearance
- Good Chemical Resistance
- Good Abrasion Resistance
- VOC Compliant
- Solvent Free....Odorless
- Gloss Finish
- USDA Accepted
- Smooth or Anti-Slip Finishes

PACKAGING:

ES-2565 Resurfacer Composite System is comprised of ECONO SURF's 1100 Resurfacer System and a solid color ES-2065 Broadcast system.

ES-1100 Resurfacer System

Resurfacer Primer A&B
ES-1100 Resurfacer A&B&C
ES-3000 Top Dressing

ES-2065 Broadcast System

ES-2200 Receiver Coat
ES-360C Broadcast Aggregate
ES-3150 Grout Coat with Colorant
ES-5322 Chemical Resistant Urethane (optional)

The ES-1100 Resurfacer and the ES-2065 Broadcast systems are available in semi-bulk and bulk units.

FOR BEST RESULTS:

- For Interior Use Only
- DO NOT thin the 2565-Broadcast-Resurfacer Composite System Components
- Apply a Test Patch to Ensure Compatibility
- DO NOT Allow Material to Puddle During Application
- Allow Each Coat to Dry Tack-Free Before Re-coating
- DO NOT USE when Humidity Exceeds 75% Indoors
- Apply Topcoat within 24 Hours of Previous Coat
- New Concrete Must Cure For at Least 30 Days
- Discard any Material Subjected to Freezing

SURFACE PREPARATION:

In general, the substrate must be clean, dry and sound with new concrete cured for at least 30 days at 70°F. Remove dust, laitance, grease, curing compounds, waxes, paints and loose coatings, foreign particles, and disintegrated or soft base materials. Create a surface profile on concrete by either steel shot blasting or acid etching. Repair cracks and joints with 1100 Resurfacer. Remember, for a proper cure, the floor & air temperature must range between 55°F and 85°F prior to application.

1. Shot or bead blast the entire area to remove all contaminants and to profile the surface to achieve a sound mechanical bonding surface for the new flooring materials.
2. Power sand and/or grind the blasted surface as required to remove all loose laitance or contaminants left from the shot blasting operation.
3. Power stone grind all perimeter areas and/or areas inaccessible to the shot blast unit.
4. Sweep and/or vacuum the surface to remove all laitance, dust and excess shot.

Review ECONO SURF'S Material Safety Data Sheets (MSDS) for this product prior to mixing and applying. In addition, thoroughly review the Application Guide and product labels.

MIXING:

Avoid mixing and application of these products if the floor temperature is below 55°F or above 85°F. Also, avoid application if the relative humidity is higher than 75%. The temperature of the floor, materials and air in the area of the installation all play a role in how the product will apply and cure.

Blend the Part-A and Part-B components thoroughly for a minimum of 2 minutes with a "Jiffy" or "Spiral" mixing blade attached to a low-speed (400-600 RPM) electric drill. Take care not to induce air into the material when mixing. This will cause "bubbles" in the coating when applied.

APPLICATION:

3/16" TROWELED FLOORING

1. Pre-fill low spots, holes, or cracks with epoxy fill material.
2. Apply the 100% solids epoxy Resurfacer Primer with squeegee and back roll @ 8-10 dry mils.
3. Screed out a nominal one-quarter inch of blended epoxy/silica mortar and power-trowel to compact and finish to 3/16"
4. Power sand the cured mortar to remove excessive trowel licks, slag, or splash material.
5. Saw cut joints as requested and fill them with a flexible joint material.
6. Sweep and/or vacuum off all loose particles and contaminants.
7. Flat squeegee apply one coat of clear ES-3000 Epoxy Top Dressing and back roll to fill in any porosity.

1/16 FULL AGGREGATE BROADCAST FLOOR SYSTEM

1. Power sand or grind the newly installed system to remove any trowel marks, etc. prior to beginning the application of the Broadcast system.
2. Notched squeegee apply the clear, 100% solids 2200 Receiver Coat at 18 mils bulked up to 30-mils and back roll as evenly as possible.
3. Immediately seed (broadcast) to excess with blended silica aggregate at the rate of 0.67 lbs. per square foot.
4. Sweep and /or vacuum to remove all excess aggregate.
5. Power sand the exposed aggregate to achieve the desired finish texture prior to applying the final dress coat using the ES-3150 Epoxy coating.
6. Joint treatment, if required, can be done a number of ways and at different stages of the application process.
7. Sweep and /or vacuum to remove dust/contamination resulting from the sanding/cutting process.
8. Notched or flat squeegee apply 18-20 mils of the pigmented, 100% solids epoxy (ES-3150 Epoxy) and back roll.

OPTIONAL – CHEMICAL RESISTANT URETHANE

1. A two (2) component, chemical resistant urethane can be applied to the cured ES-2565 Resurfacer Composite System to obtain better abrasion resistance and a longer lasting gloss.
2. This final top coat is applied at the rate of 300-333 sq. ft. per gallon, using a high quality, 1/2" nap, 18" roller.

POT LIFE:

At 75°F and 50% R.H.:

Product	Time
ES-1100 Resurfacer System	20-22 minutes
ES-2200 Receiver Coat	25-30 minutes
ES-3150 Epoxy Coating	20-25 minutes
ES-5322 Urethane	35-45 minutes

Using any product beyond its pot life will yield undesirable results and therefore any mixed product beyond the pot life should be discarded.

General Properties:	Data	
Shelf Life	2 Years	
Application Temp & Humidity	55°F to 85°F @ less than 75% R.H.	
Induction	None	
Mixing Ratio: (A to B)	Receiver Coat & Top Coat: 1 to 2 ratio; CRU 1 to 2 ratio	
Colors	Variety with Urethane/Epoxy Colorants	
Working Time @ 75 °F	Resurfacer 20-22 min. Receiver Coat: 25-28 min.; Top Coat: 18-20 min.	
Application Methods	Resurfacer system: Hand or Power Trowel; Receiver Coat: Notched Squeegee & High quality 3/8" nap roller; Top Coat: Flat Squeegee & High quality 3/8" nap roller.	
Cure Rate @ 75 °F		
Recoat	10 hrs.	
Foot Traffic	14 hrs.	
Heavy Traffic	24+ hrs.	
Chemical Resistance	72+ hrs.	
Test	Method	Typical Values
Bond Strength (psi)	ACI COM #503 (pp. 1139-1141)	400+ w/ concrete failure
% Solids by Volume	ASTM D-1644	100.0
Flash Point	Pensky-Martens CC	>200°F
UV Light Resistance	Q-U-V Accelerated Weather Tester	Good
Hardness-Shore D	ASTM D-2240	84+
VOC	EPA Method 24	0.12 lbs./gal
Gloss (60°)	BYK-Gardner Tri-Gloss	90+
Impact Resistance	ASTM D-2794	160 in-lbs.
Flammability	ASTM D-635	Self-extinguishing
Dry Heat Resistance		140 °F Constant 200 °F Intermittent
Indentation	MIL-D-3134F	None
Abrasion Resistance (mg) (CS-17 wheel, 1000 GM load, 1,000 cycles)	ASTM D-1044	55*
Thermal Coefficient of Linear Expansion	ASTM D-696	3.7 x 10 ⁻³ in/in/°F
Compression Strength (psi)	ASTM C-579	15,100
Tensile Strength (psi)	ASTM C-307	2,560
Flexural Strength (psi)	ASTM C-580	4,250
Water Absorption (%)	ASTM C-413	0.18%

*Based on using ES-5322 CRU as final coat.

CLEAN UP:

Application equipment should be cleaned using soap and water or solvent where necessary. Roller covers should be discarded after use.

DISPOSAL:

Empty containers may contain product residue, including flammable or combustible vapors. Do not cut, puncture or weld near these containers. Label warnings must be observed until containers have been commercially cleaned or reconditioned. Containers to be thrown out must be disposed in accordance with federal, state and local regulations.

CUSTOMER NOTE:

For information on application situations not covered above, contact your local ECONO SURF representative or the corporate office at 302-322-4920

ECONO SURF

ES-2565 Resurfacer Composite System (FH-RTC) DS Rev: 3 5/08

Corporate Headquarters: P. O. Box 732, New Castle, DE 19720

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FLOOR COATINGS ETC., INC.

P.O. Box 784 • New Castle, DE 19720

Phone: 302-322-4177 • Fax: 302-322-4457

PREPARATION AND INSTALLATION SPECIFICATIONS FOR:

ES-2065 65-MIL BROADCAST SHOP FLOOR

ES-2400 65-MIL BROADCAST DECORATIVE QUARTZ SYSTEM

SURFACE PREPARATION FOR EITHER SYSTEM:

1. If the floor has an existing paint or coating to be removed, grind the entire area using a self-contained, dust controlled, 480 volt 30-amp, "Diamond Grinder" (Photo #1).
2. Using a 15", 480-volt "Shot Blast" unit (Photo #2), profile the bare concrete floor surface to affect an approximate 80-grit sand paper finish to achieve a sound mechanical bonding surface for the squeegee applied, 100% solids epoxy.
3. Power sand and/or hand grind (using vacuumized diamond grinders) all edges, perimeter areas, etc. that are inaccessible to the shot blast equipment.
4. If necessary, clean out ALL expansion, isolation and control joints using a concrete saw.
5. Power sweep and/or vacuum the surface to remove all laitance, dust and excess shot.

Photo #1



Photo #2



PRODUCT INSTALLATION NOTES:

The difference between a 65-mils solid color shop floor and a 65-mils decorative color quartz floor is that the shop floor utilizes a blend of silica sand and pigmented top coats while the decorative color quartz utilizes a blend of colored quartz particles and clear top coats.

It is also important to note that with either of these systems, ALL moving joints are honored. They can be filled before the system is installed to create a seamless floor or ANY other point in the process. Consult your Econo Surf technical representative for descriptions and explanations of the different methods. If a 4" integral cove base is being installed, it is done prior to the installation of the flooring.

PRODUCT INSTALLATION: 65-MIL BROADCAST FLOORS(WITH URETHANE TOPCOAT)

Description: A (3) coat, 65-mil full aggregate broadcast system with a chemically resistant, aliphatic urethane topcoat.

1. Pre-patch all large holes, divots, cracks, etc., using an epoxy paste made of Econo Surf 3150 Epoxy and Cab-O-Sil TS-720 or Garamite.
2. Notch squeegee apply a coat of 100% solids epoxy (Econo Surf 2200 Receiver Coat) filled with Sil-Co-Sil 125 at the rate of 30-mils or 53.3 sq. ft./gal and back roll to level using a 3/8" nap, 18" wide, roller sleeve.
3. Seed (broadcast) to excess (rejection) a specially blended silica aggregate at the rate of 0.67 lbs. per sq. ft.
4. Sweep and /or vacuum to remove all excess silica aggregate.

5. If an "orange peel" texture is desired, power sand the exposed aggregate at the rate of approximately 2,000 sq. ft./hour using a slow speed floor buffer with a 60-grit sanding head.
6. Saw cut all moving joints as required and fill them with a flexible epoxy joint material.
7. Sweep and /or vacuum to remove dust, debris, contamination etc. resulting from the sanding/cutting process.
8. Notched or flat squeegee apply 20-mils (80 sq. ft./gal) of pigmented, 100% solids epoxy (Econo Surf 3150 Epoxy) and back roll to level using a 3/8" nap (depending on the desired finished texture), 18" roller sleeve.
9. Roller apply one (1) finish coat of a pigmented, V.O.C. compliant, chemical resistant aliphatic urethane (Econo Surf 5322 CRU) using a 3/8" nap, 18" wide, mohair roller at approximately 5 mils (300 sq. ft./gallon).
10. Material Requirements per 1,000 sq. ft.:
 - 12.5 gallons of ES-2200 Epoxy for Receiver Coat
 - 50-lbs. Sil-Co-Sil 125
 - 667 -lbs. Silica aggregate for Receiver Coat
 - 12.5 gallons of ES-3150 Epoxy for Dress Coat
 - 3.3 gallons ES-5322 CRU for Finish Coat

PRODUCT INSTALLATION: ES-2400 65-MIL QUARTZ BROADCAST FLOORS(WITH URETHANE TOPCOAT)

Description: A (3) coat, 65-mil full Decorative Quartz aggregate broadcast system with a chemically resistant, aliphatic urethane topcoat.

1. Pre-patch all large holes, divots, cracks, etc., using an epoxy paste made of Econo Surf 3150 Epoxy and Cab-O-Sil TS-720 or Garamite 1958.
2. Notch squeegee the pigmented initial coat of the 100% solids, 3150 Epoxy (with the silica flour) at the rate of 30-mils (53.3 sq. ft./gal) and back roll to level using a 3/8" nap, 18" wide, roller sleeve.
3. Seed (broadcast) to excess (rejection) with a specially blended silica aggregate at the rate of 0.67 lbs. per sq. ft.
4. Sweep and /or vacuum to remove all excess silica aggregate.
5. Saw cut all moving joints as required and fill them with a flexible epoxy joint material.
6. Sweep and /or vacuum to remove dust, debris, contamination etc. resulting from the sanding/cutting process.
7. Notched or flat squeegee apply 20-mils (80 sq. ft./gal) of clear, 100% solids epoxy (Econo Surf 3150 Epoxy) and back roll to level using a 3/8" or 1/2" nap (depending on the desired finished texture), 18" roller sleeve.
8. Roller apply one (1) finish coat of a pigmented, V.O.C. compliant, chemical resistant aliphatic urethane (Econo Surf 5322 CRU) using a 1/2" nap, 18" wide, mohair roller at approximately 5-mils (300 sq. ft./gallon).
9. Material Requirements per 1,000 sq. ft.:
 - 12.5 gallons of ES-2200 Epoxy for Receiver Coat
 - 50-lbs. Sil-Co-Sil 125
 - 667-lbs. Decorative Quartz aggregate for Receiver Coat
 - 12.5 gallons of ES-3150 Epoxy for Dress Coat
 - 3.3 gallons ES-5322 CRU for Finish Coat

TEXTURED AND NON-SKID SURFACES STATEMENT:

- The degree or amount of texture or non-skid that is used in a given coating is a relative decision. Therefore, it is imperative that our customer determine the degree of non-skid required for his/her particular floor. FCEI cannot and will not accept the liability or responsibility for this decision.
- Our supervisor will be happy to inform your representative several hours in advance of when the non-skid or textured finish will be installed. Should you choose not to have one of your representatives present during this process, you are hereby accepting the degree of non-skid that will be installed by our supervisor.

FLOOR COATINGS ETC., INC.

P.O. Box 784 • New Castle, DE 19720

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PREPARATION AND INSTALLATION SPECIFICATIONS FOR:

ES-2125 125-MIL DOUBLE BROADCAST SHOP FLOOR

ES-2425 125-MIL DOUBLE BROADCAST DECORATIVE QUARTZ SYSTEM

SURFACE PREPARATION FOR EITHER SYSTEM:

1. If the floor has an existing paint or coating to be removed, grind the entire area using a self-contained, dust controlled, 480 volt 30-amp, "Diamond Grinder" (Photo #1).
2. Using a 15", 480-volt "Shot Blast" unit (Photo #2), profile the bare concrete floor surface to affect an approximate 80-grit sand paper finish to achieve a sound mechanical bonding surface for the squeegee applied, 100% solids epoxy.
3. Power sand and/or hand grind (using vacuumized diamond grinders) all edges, perimeter areas, etc. that are inaccessible to the shot blast equipment.
4. If necessary, clean out ALL expansion, isolation and control joints using a concrete saw.
5. Power sweep and/or vacuum the surface to remove all laitance, dust and excess shot.

Photo #1



Photo #2



PRODUCT INSTALLATION NOTES:

The difference between a 125-mils solid color Shop Floor and a 125-mils Decorative Color Quartz floor is that the shop floor utilizes a blend of silica sand and pigmented top coats while the decorative color quartz utilizes a blend of colored quartz particles and clear top coats.

It is also important to note that with either of these systems ALL moving joints are honored. They can be filled before the system is installed to create a seamless floor or ANY other point in the process. Consult your Econo Surf technical representative for descriptions and explanations of the different methods.

If a 4" integral cove base is being installed, it is done prior to the installation of the flooring.

PRODUCT INSTALLATION: 125-MIL DOUBLE BROADCAST SHOP FLOOR (WITH URETHANE TOPCOAT)

1. Pre-patch all large holes, divots, cracks, etc., using an epoxy paste made of Econo Surf 3150 Epoxy and Cab-O-Sil TS-720 or Garamite.
2. Notch squeegee apply a coat of 100% solids epoxy (Econo Surf 2200 Receiver Coat) filled with Sil-Co-Sil 125 at the rate of 30-mils or 53.3 sq. ft./gal and back roll to level using a 3/8" nap, 18" wide, roller sleeve.
3. Seed (broadcast) to excess (rejection) with a specially blended silica aggregate at the rate of 0.67 lbs. per sq. ft.
4. Sweep and /or vacuum to remove all excess silica aggregate.
5. Steps 2, 3, 4 are repeated.
6. If an "orange peel" texture is desired, power sand the exposed aggregate at the rate of approximately 2,000 sq. ft./hour using a slow speed floor buffer equipped with a sanding head and 60-grit paper.
7. Saw cut all moving joints as required and fill them with a flexible epoxy joint material.

8. Sweep and /or vacuum to remove dust, debris, contamination etc. resulting from the sanding/cutting process.
9. Notched or flat squeegee apply 20-mils (80 sq. ft./gal) of pigmented, 100% solids epoxy (Econo Surf 3150 Epoxy) and back roll to level using a 3/8" or 1/2" nap (depending on the desired finished texture), 18" roller sleeve.
10. Roller apply one (1) finish coat of a pigmented, V.O.C. compliant, chemical resistant aliphatic urethane (Econo Surf 5322 CRU) using a 3/8" nap, 18" wide, mohair roller at approximately 5 mils (300 sq. ft./gallon).
11. Material Requirements per 1,000 sq. ft.:
 - 12.5 gallons of ES-2200 Epoxy for 1st Receiver Coat
 - 50-lbs of Sil-Co-Sil 125
 - 667 –lbs. Silica aggregate for Receiver Coat
 - 12.5 gallons of ES-2200 Epoxy for 2nd Receiver Coat
 - 50-lbs of Sil-Co-Sil 125
 - 667 –lbs. Silica aggregate for Receiver Coat
 - 12.5 gallons of ES-3150 Epoxy for Dress Coat
 - 3.3 gallons ES-5322 CRU for Finish Coat

PRODUCT INSTALLATION: 125-MIL DOUBLE BROADCAST DECORATIVE COLOR QUARTZ (WITH URETHANE TOPCOAT)

1. Pre-patch all large holes, divots, cracks, etc., using an epoxy paste made of Econo Surf 3150 Epoxy and Cab-O-Sil TS-720 or Garamite.
2. Notch squeegee apply 20-mils (80 sq. ft./gallon) of Sil-Co-Sil125 filled 1st Receiver Coat of 100% solids epoxy (Econo Surf 3150-Epoxy) and back roll to level using a 3/8" nap, 18" wide, roller sleeve. (Approx. blended thickness is 30-mils).
3. Seed (broadcast) to excess (rejection) with color quartz aggregate at the rate of 0.67 lbs. per sq. ft.
4. Sweep and /or vacuum to remove all excess color quartz aggregate.
5. Steps 2, 3, 4 are repeated.
6. Notched or flat squeegee apply another 20-mils (80 sq. ft./gal) of a clear, 100% solids epoxy (Econo Surf 3150-Epoxy) and back roll to level using a 3/8" or 1/2" nap (depending on the desired finished texture), 18" roller sleeve.
7. Saw cut all moving joints as required and fill them with a flexible epoxy joint material.
8. Sweep and /or vacuum to remove dust, debris, contamination etc. resulting from the sanding/cutting process.
9. Roller apply one (1) finish coat of a clear, V.O.C. compliant, chemical resistant aliphatic urethane (Econo Surf 5322 CRU) using a 3/8" nap, 18" wide, mohair roller at approximately 5 mils (300 sq. ft./gallon).
10. Material Requirements per 1,000 sq. ft.:
 - 12.5 gallons of ES-3150 Epoxy for 1st Receiver Coat
 - 50-lbs. Sil-Co-Sil 125
 - 667–lbs. Color Quartz aggregate for 1st Receiver Coat
 - 12.5 gallons of ES-3150 Epoxy for 2nd Receiver Coat
 - 667–lbs. Color Quartz aggregate for 2nd Receiver Coat
 - 12.5 gallons of ES-3150 Epoxy for Top Coat
 - 3.3 gallons clear ES-5322 CRU for Finish Coat

TEXTURED AND NON-SKID SURFACES STATEMENT:

- The degree or amount of texture or non-skid that is used in a given coating is a relative decision. Therefore, it is imperative that our customer determine the degree of non-skid required for his/her particular floor. FCEI cannot and will not accept the liability or responsibility for this decision.
- Our supervisor will be happy to inform your representative several hours in advance of when the non-skid or textured finish will be installed. Should you choose not to have one of your representatives present during this process, you are hereby accepting the degree of non-skid that will be installed by our supervisor.