

INDISTRY LEADING SYSTEMS

FLOORING SYSTEMS

2025



FLOORING SYSTEM GUIDES

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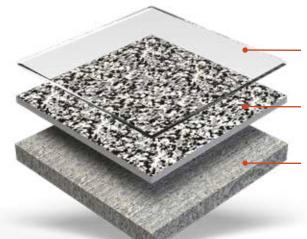
GROCERY & RETAIL **HEALTHCARE** RESIDENTIAL **AUTOMOTIVE** PET CARE **PHARMACEUTICAL**

>SIMFLAKE SB 1-DAY EPOXY FLOOR

DECORATIVE CHIP

SIMIRON SIMFLAKE SB 1-DAY EPOXY is a versatile, single-broadcast floor system that utilizes Simiron Decorative Chip to achieve easy-to-maintain, long-lasting results. This three-layer system offers a variety of blends. Simflake SB 1-Day Epoxy consists of a basecoat, ¼" vinyl chip broadcast, and topcoat. With 16 total mils of 1150FC, this system also resists moisture vapor transmission up to 12 pounds per 1,000 square feet in 24 hours per ASTM F1869 or 85% relative humidity in the slab as directed by ASTM F2170. The featured system on this page has a gloss finish, but optional satin and non-skid texture is also available. The base system will produce an average nominal thickness of over 50 mils.

SYSTEM BUILD -



TOPCOAT: POLYASPARTIC HS

BASECOAT/BROADCAST: 1150FC 100% SOLIDS EPOXY, PIGMENTED & DECORATIVE CHIP

PREPARED SUBSTRATE: CSP 3+

SYSTEM ATTRIBUTES















FLEXIBILITY 1/8" BEND MANDREL:





HARDNESS: Shore D 70, 86



> .65

TABER
ABRASION:
30 mg loss



TENSILE STRENGTH: 4,000 psi



UV ESISTANT



VOC: < 50 g/















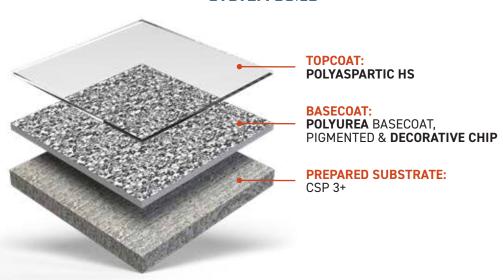




> SIMFLAKE SB 1-DAY **POLYUREA FLOOR DECORATIVE CHIP**

SIMIRON SIMFLAKE SB 1-DAY POLYUREA is a versatile, single-broadcast floor system that utilizes Simiron Decorative Chip to achieve easy-to-maintain, long-lasting results and is offered in a variety of blends. The featured system has a gloss finish, but optional satin and non-skid texture is available. Simflake SB 1-Day Polyurea consists of a basecoat, ¼" vinyl chip broadcast, and topcoat. The base system will produce an average nominal thickness of over 50 mils.

SYSTEM BUILD



SYSTEM ATTRIBUTES







ELONGATION:



FLAMMABILITY: Self-extinguishing on concrete





BEND MANDREL:





HARDNESS: Shore D 70, 86



> .65

TENSILE ABRASION: STRENGTH: 30 mg loss 4,000 psi



5 - 10%

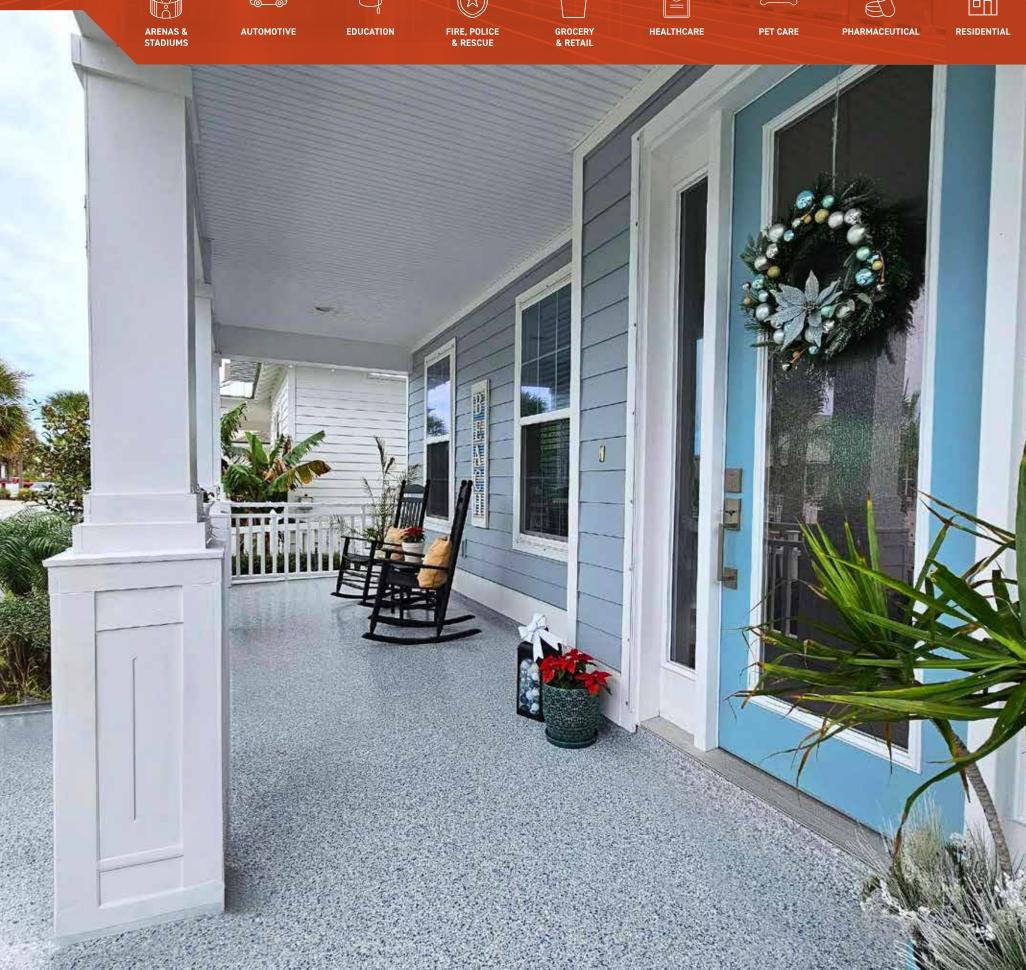


RESISTANT



VOC: < 50 g/L









AUTOMOTIVE















RESIDENTIAL

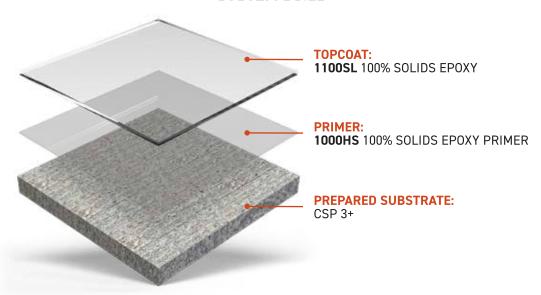


>SIMFLOOR HB-EPOXY

HIGH-GLOSS **DURABLE EPOXY SYSTEM**

SIMIRON SIMFLOOR HB-EPOXY is a high-gloss and durable epoxy system designed to withstand abusive environments. This 2-layer system restores eroded floors to a high-gloss finish and can be top-coated with high-wear and chemical resistant topcoats for extra levels of protection.

SYSTEM BUILD



SYSTEM ATTRIBUTES



SOLIDS



ADHESION:

> 400 psi

GLOSS:









COEFFICIENT OF FRICTION:

COMPRESSIVE STRENGTH:

ELONGATION: 5 - 10%

FLAMMABILITY: Self-extinguishing on concrete



12,800 psi





HARDNESS: Shore D 75



ABRASION:



TENSILE STRENGTH:

VOC:

50 mg loss



















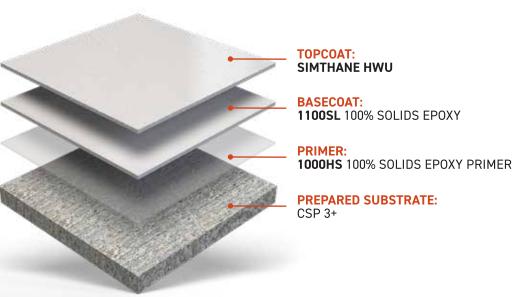


> SIMFLOOR HWU

HIGH-WEAR **URETHANE**

SIMIRON SIMFLOOR HWU system is based on a unique high performance, three-component, high solids, low VOC urethane floor coating that provides superior resistance against abrasion, chemicals and UV exposure while imparting excellent flexibility. The topcoat, Simthane HWU, comes neutral and has a satin finish with a light, consistent texture.

SYSTEM BUILD



SYSTEM ATTRIBUTES



ADHESION:

> 400 psi





















FLEXIBILITY 1/8" BEND MANDREL:

















TABER

ABRASION: 12 mg loss



TENSILE STRENGTH: 9,600 psi



RESISTANT





VOC: 95 g/L

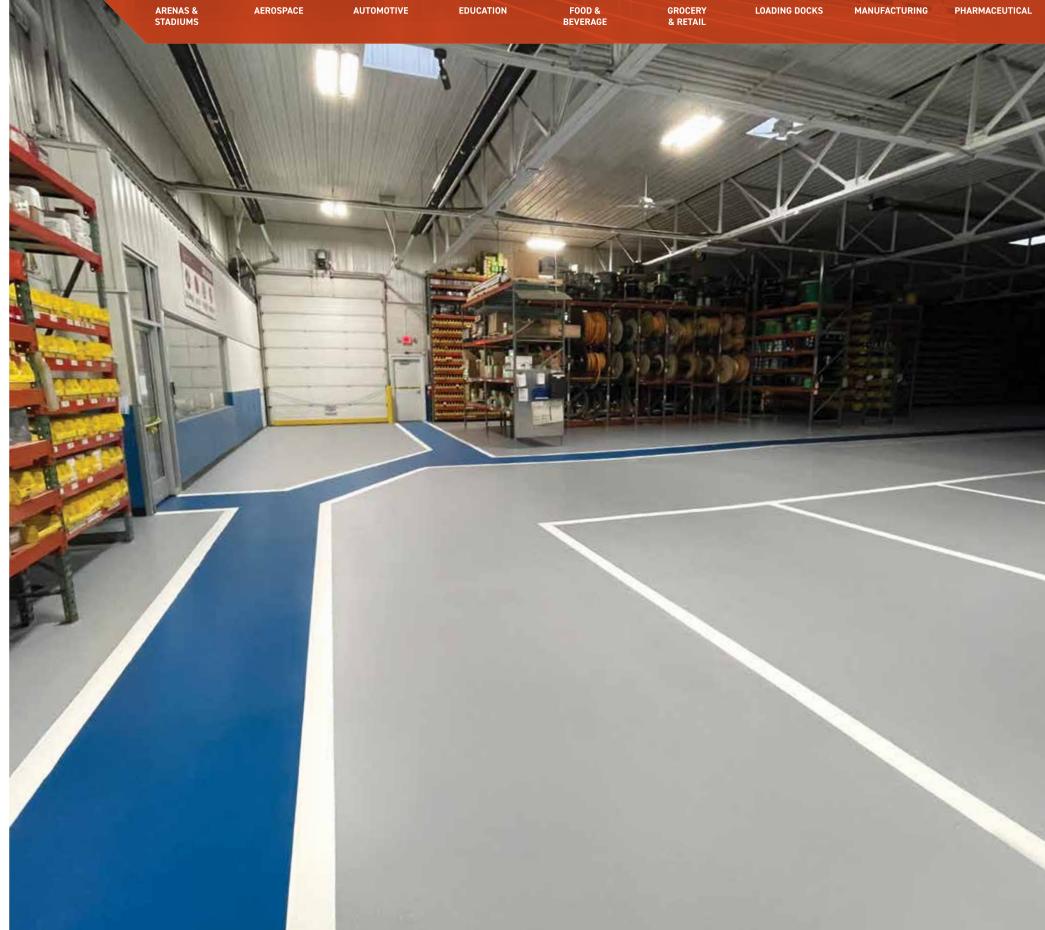


EDUCATION





PHARMACEUTICAL



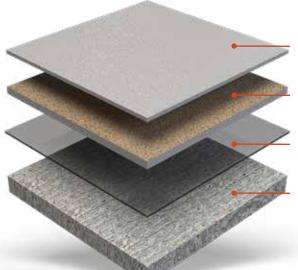


>SHOP FLOOR

HIGH-GLOSS **DURABLE EPOXY SYSTEM**

SIMIRON SHOP FLOOR is a durable system with slip-resistant texture, achieved with a single-broadcast of silica sand. This 1/16" floor is an industry standard for protecting concrete in manufacturing and work zones. Shop Floor is also used in areas subject to tough traffic. Our version locks in the broadcast with a polyaspartic, which provides UV stability and chemical resistance for the base and broadcast.

SYSTEM BUILD



TOPCOAT: POLYASPARTIC HS, PIGMENTED

BASECOAT/BROADCAST: 1100SL 100% SOLIDS EPOXY, PIGMENTED & SILICA SAND

PRIMER: 1000HS 100% SOLIDS EPOXY PRIMER

PREPARED SUBSTRATE: CSP 3+

SYSTEM ATTRIBUTES



ADHESION:





STRENGTH:

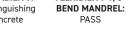








FLAMMABILITY: Self-extinguishing on concrete





12,800 psi



Shore D 70, 86





30 mg loss



























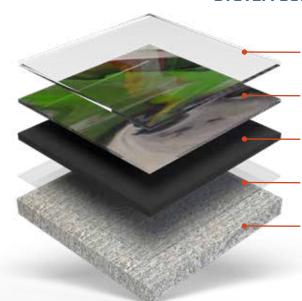


> SIMFLOOR METALLIC

EXOTIC PIGMENT SYSTEM

SIMIRON SIMFLOOR METALLIC floor system uses an exotic pigment that creates a beautiful three-dimensional appearance that gives the illusion of waves, swirls and ripples. The finished appearance of the Metallic flooring system can vary from gradual, subtle changes in color to more distinctive effects. Each project is truly unique.

SYSTEM BUILD



TOPCOAT:
971EPS HIGH SOLIDS EPOXY SILOXANE, SATIN

METALLIC ADDITIVE: 1100SL W/METALLIC ADDITIVE

BASECOAT:

1100SL 100% SOLIDS EPOXY PIGMENTED

1000HS 100% SOLIDS EPOXY PRIMER. CLEAR

PREPARED SUBSTRATE:

SYSTEM ATTRIBUTES













COMPRESSIVE STRENGTH: 11,600 psi



ELONGATION:



FLEXIBILITY 1/8" BEND MANDREL:



FLEXURAL STRENGTH:





GLOSS:







TABER ABRASION: 40 mg loss



TENSILE STRENGTH: 9,600 psi

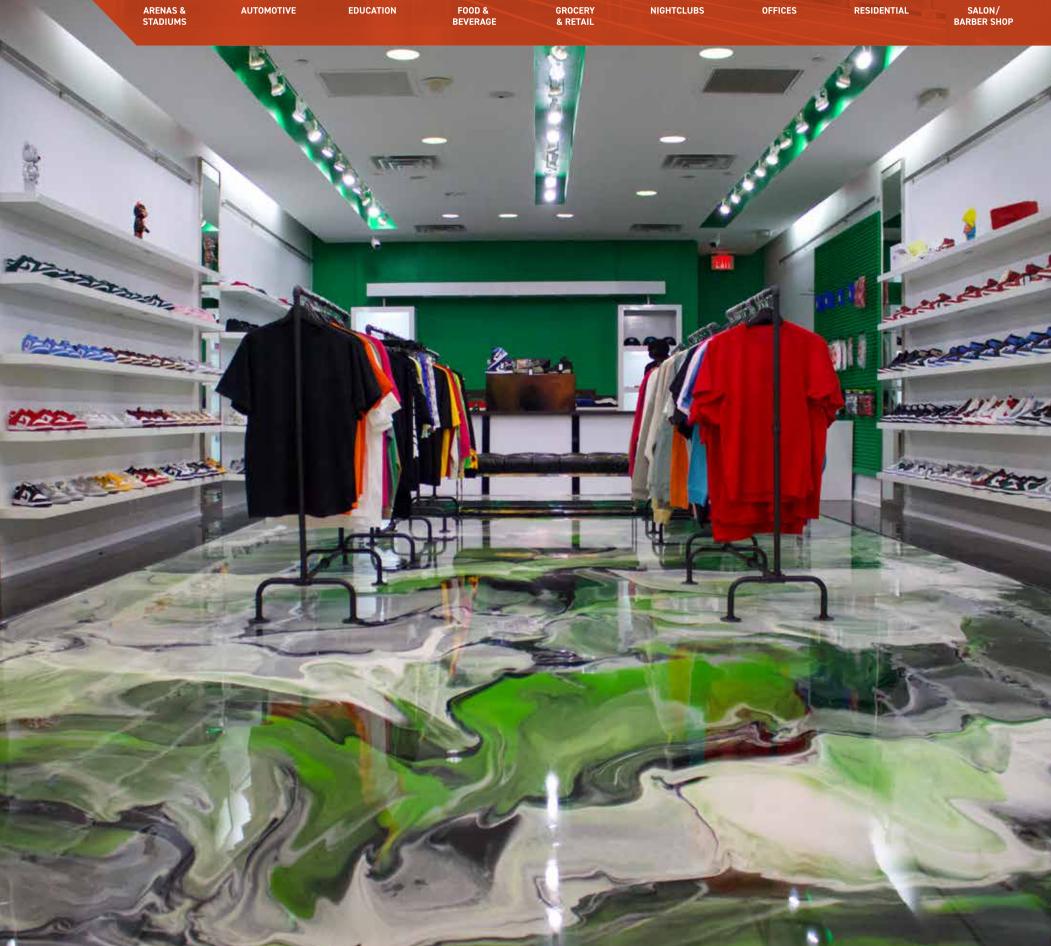


RESISTANT



VOC:





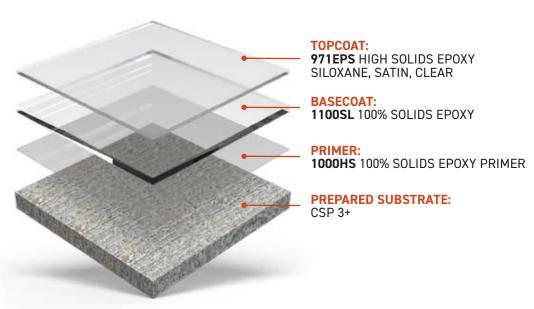


SIMFLOOR **EPOXY SILOXANE**

CHEMICAL-RESISTANT FLOOR SYSTEM

SIMIRON SIMFLOOR EPOXY SILOXANE is a chemical-resistant floor system that offers maximum surface protection commonly found in abusive environments. This low odor, low VOC system offers abrasion, chemical, and UV resistance. The recommended topcoat finish is satin and is easy-to-apply. A gloss version is also available.

SYSTEM BUILD



SYSTEM ATTRIBUTES



12,800 psi





COEFFICIENT

OF FRICTION:

.50

COMPRESSIVE STRENGTH: 11,600 psi





ELONGATION: 5 - 10%



FLAMMABILITY: Self-extinguishing on concrete







TABER ABRASION:

40 mg loss











BEND MANDREL:

PASS

RESISTANT















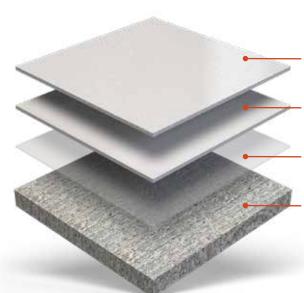


> SIMFLOOR ESD

ELECTROSTATIC DISSIPATIVE FLOORING

SIMIRON SIMFLOOR ESD has a static dissipative topcoat that helps to protect small, sensitive computer circuitry used in aircraft electronic components. The system provides a valuable foundation for any comprehensive static charge management solution. The coating system will also provide protection against airplane fluids and fuel, and resists damage from abrasion and UV exposure from large access doors.

SYSTEM BUILD



TOPCOAT:

SIMTHANE ESD, SATIN, LIGHT GRAY

BASECOAT:

1100SL 100% SOLIDS EPOXY, LIGHT GRAY

PRIMER:

1000HS 100% SOLIDS EPOXY PRIMER, CLEAR

PREPARED SUBSTRATE: CSP 3+

SYSTEM ATTRIBUTES



ADHESION:

> 400 psi







COEFFICIENT OF FRICTION: 0.60



COMPRESSIVE STRENGTH: 11,600 psi



FLAMMABILITY: Self-extinguishing on concrete



BEND MANDREL: PASS



HARDNESS:











ABRASION: 12 mg loss



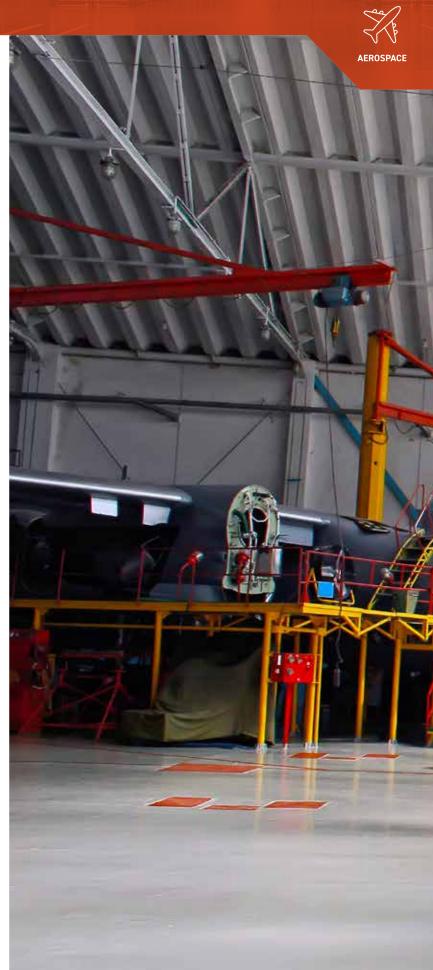
TENSILE STRENGTH: 9,600 psi



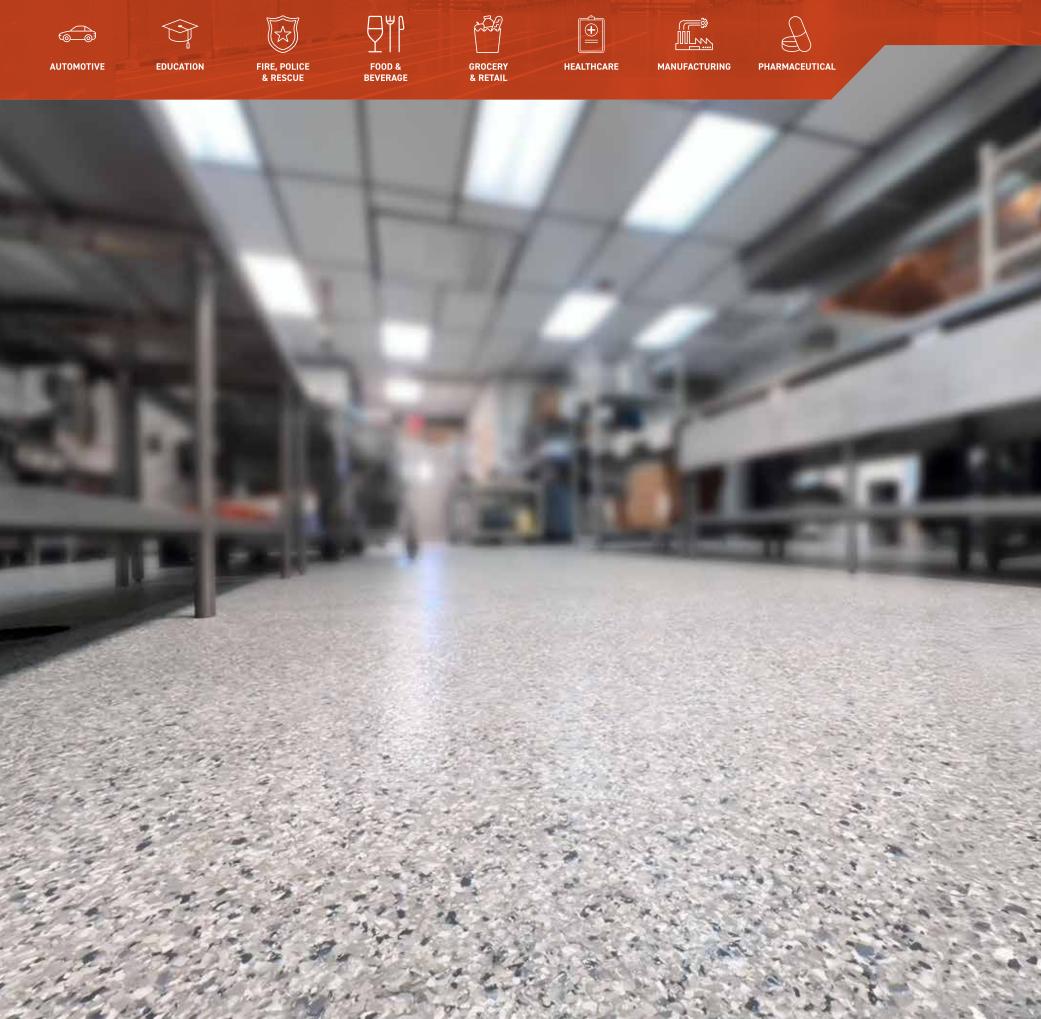
RESISTANT









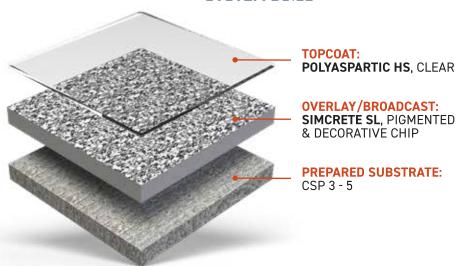


>SIMCRETE SL FLAKE

SINGLE BROADCAST DECORATIVE FLAKE **URETHANE MORTAR SYSTEM**

SIMIRON SIMCRETE SF FLAKE is a 3-layer cementitious urethane mortar slurry system with a single broadcast of **Decorative Chip** applied at 1/4" thick. This system resurfaces eroded concrete, offers extreme thermal shock resistance, and has excellent resistance to moisture vapor transmission.

SYSTEM BUILD



OVERLAY/BROADCAST: SIMCRETE SL, PIGMENTED & DECORATIVE CHIP

SYSTEM ATTRIBUTES



100% Concrete

Failure









FLAMMABILITY: Self-extinguishing on concrete



FLEXURAL





STRENGTH:



OF FRICTION:

FUNGI GROWTH RESISTANCE:



30 mg loss











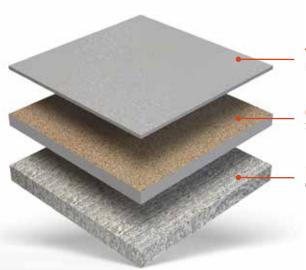
> SIMCRETE SL

HEAVY-DUTY URETHANE CEMENT

SIMIRON SIMCRETE SL is a self-leveling urethane cement. This heavy-duty flooring system is typically installed at 1/8" thick and broadcast to rejection with silica sand to achieve 3/16" total thickness and a slip-resistant texture suited for wet environments subject to thermal shock. This featured system locks in the broadcast with a polyaspartic, which provides UV stability and chemical resistance.

Simcrete SL also has moisture control properties and can withstand moisture vapor transmission up to 12 lbs./1,000 sq. ft. in 24 hours as measured by calcium chloride using ASTM F1869 or 85% RH as measured by in-situ relative humidity using ASTM F2170.

SYSTEM BUILD



TOPCOAT:

POLYASPARTIC HS, LIGHT GRAY

OVERLAY/BROADCAST: SIMCRETE SL, GRAY & SILICA SAND

PREPARED SUBSTRATE: CSP 3+

SYSTEM ATTRIBUTES



Failure

BOND STRENGTH: 100% Concrete



COEFFICIENT OF FRICTION: > 0.63





COMPRESSIVE STRENGTH: 8,558 psi



FLAMMABILITY: Self-extinguishing on concrete



FLEXURAL STRENGTH: 2,780 psi



GLOSS: 92 - 95°



STRENGTH: > 160 in./lbs.



PASSES



TABER ABRASION:



TENSILE STRENGTH:

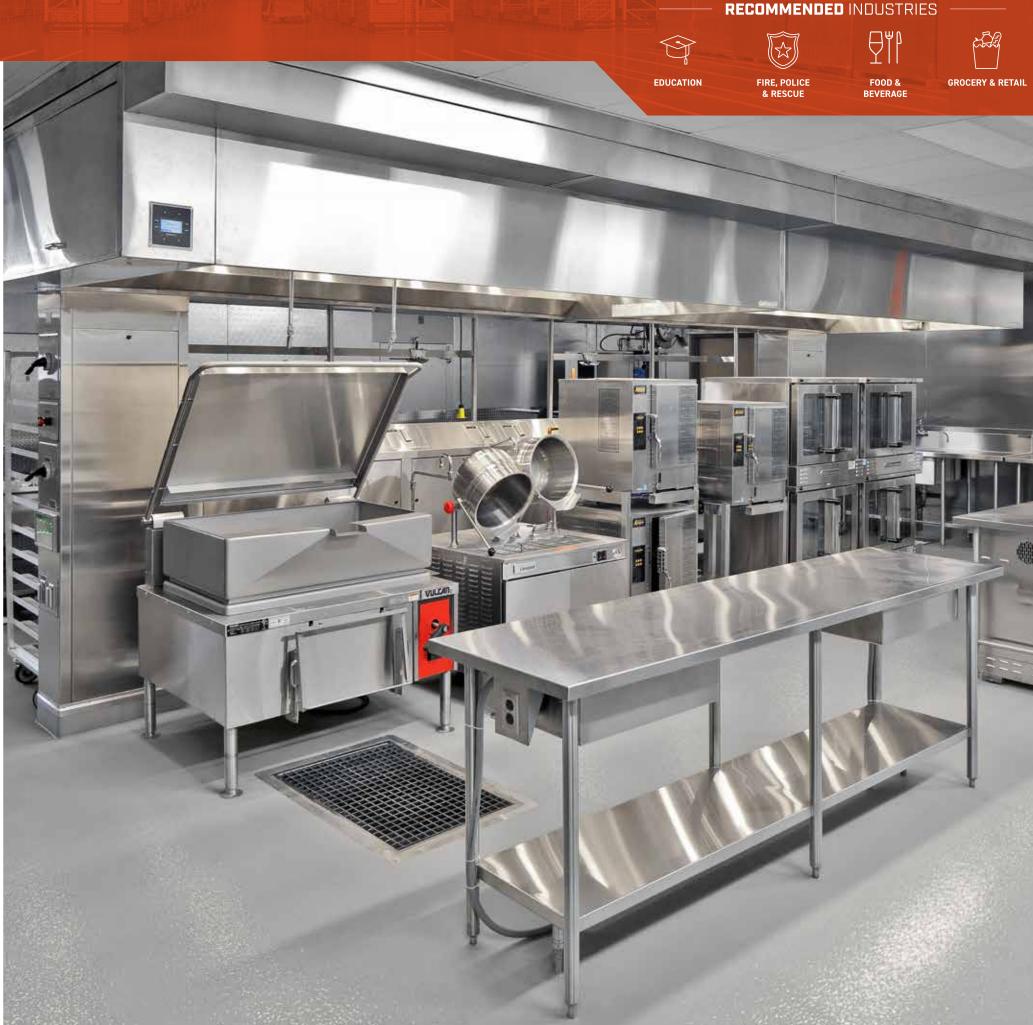


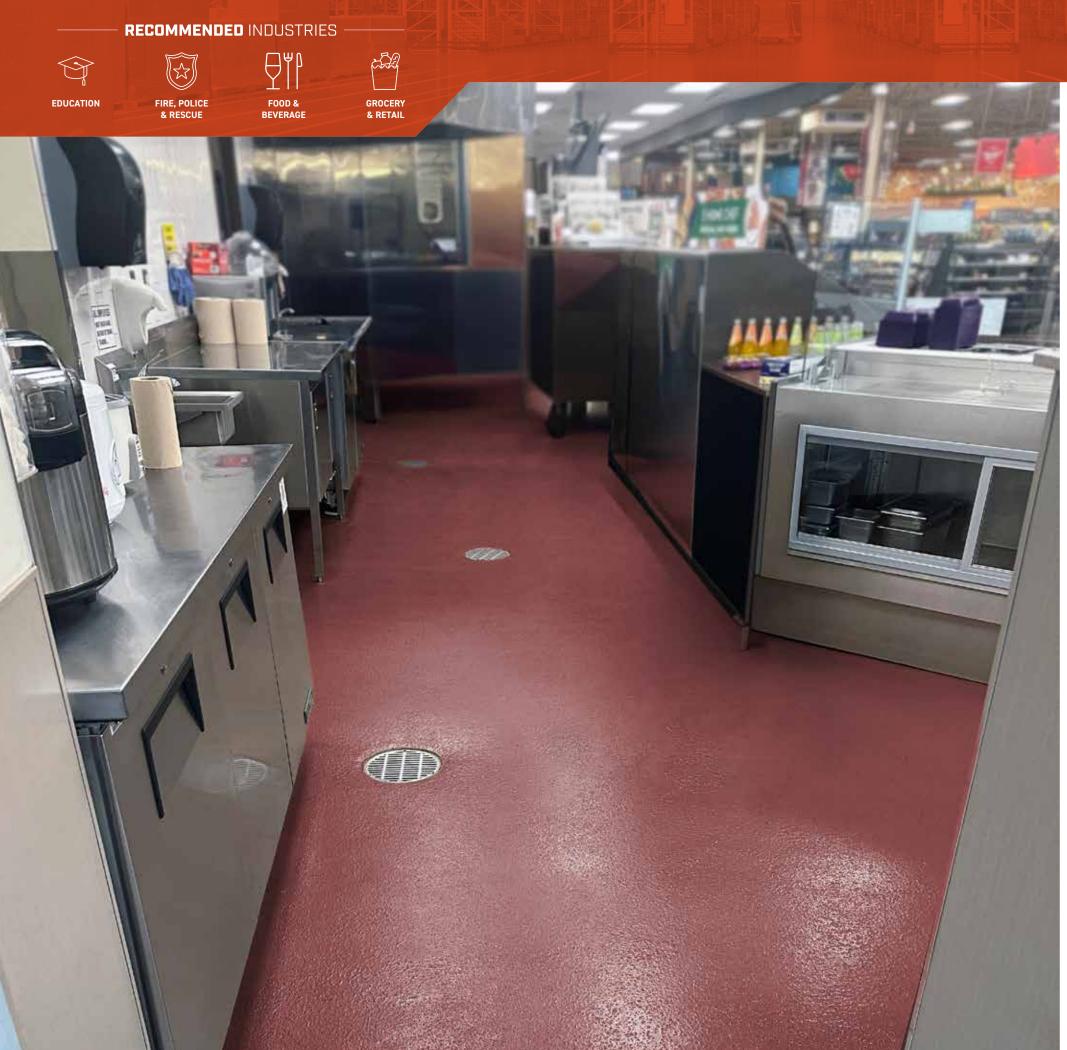
UV RESISTANT





VOC: < 50 g/L





> SIMCRETE SL QUARTZ SINGLE BROADCAST QUARTZ

URETHANE MORTAR SYSTEM

SIMIRON SIMCRETE SL QUARTZ is a 3-layer cementitious urethane mortar slurry system with a single broadcast of decorative quartz applied at 3/16" thick. This system resurfaces eroded concrete, offers extreme thermal shock resistance, and has excellent resistance to moisture vapor transmission.

SYSTEM BUILD -



SYSTEM ATTRIBUTES







COMPRESSIVE STRENGTH:



FLAMMABILITY: Self-extinguishing on concrete



FLEXURAL STRENGTH:





IMPACT STRENGTH: > 160 in./lbs.



COEFFICIENT

OF FRICTION:



ABRASION:

30 mg loss



















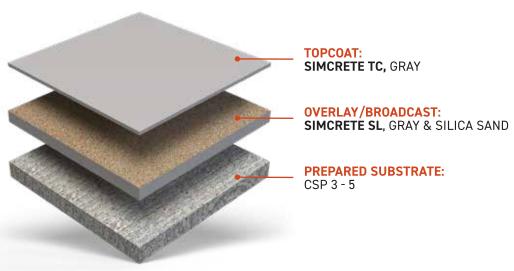


> SIMCRETE SL+TC

SINGLE BROADCAST QUARTZ **URETHANE MORTAR SYSTEM**

SIMIRON SIMCRETE SL+TC is a self-leveling urethane cement. This heavy-duty flooring system is typically installed at 1/8" thick and broadcast to rejection with silica sand to achieve 3/16" total thickness and a slip-resistant texture suited for wet environments subject to thermal shock. The broadcast is locked in with a Simcrete topcoat, that provides a flat finish and maintains urethane cement properties through the entire system.

SYSTEM BUILD



SYSTEM ATTRIBUTES



BOND STRENGTH: 100% Concrete Failure



COEFFICIENT OF FRICTION: > 0.63







FLAMMABILITY: Self-extinguishing









IMPACT STRENGTH: > 160 in./lbs.



RESISTANCE:



TENSILE STRENGTH:



VOC: < 50 g/L



GROCERY & RETAIL

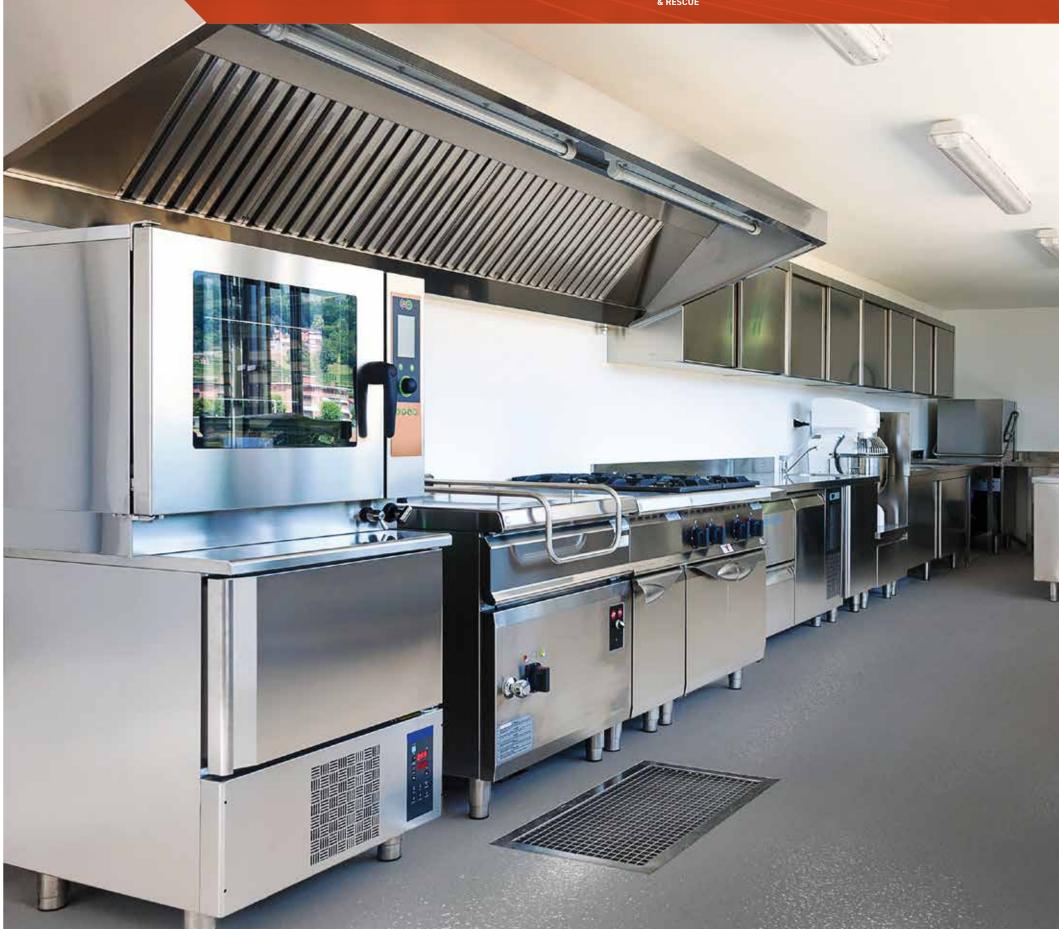


FIRE, POLICE

FOOD & BEVERAGE

























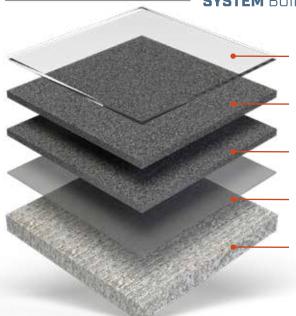


> SIMQUARTZ DB DOUBLE BROADCAST QUARTZ

URETHANE MORTAR SYSTEM

SIMIRON SIMQUARTZ DB is a versatile, double-broadcast floor system that utilizes decorative quartz to achieve easy-to-maintain, long-lasting results. This three-layer system is available in numerous color blends. The featured system on this page has a non-skid gloss finish, but optional smoother textures and a satin finish are available. SimQuartz DB consists of two decorative quartz broadcast layers and a topcoat.

SYSTEM BUILD



TOPCOAT: POLYASPARTIC HS, CLEAR

2ND BASECOAT/BROADCAST: 1100SL 100% SOLIDS EPOXY, CLEAR & DECORATIVE QUARTZ

1ST BASECOAT/BROADCAST: 1100SL 100% SOLIDS EPOXY, PIGMENTED & DECORATIVE QUARTZ

1000HS 100% SOLIDS EPOXY PRIMER

PREPARED SUBSTRATE:

CSP 3 - 5

SYSTEM ATTRIBUTES



ADHESION:

> 400 psi



OF FRICTION:

RESISTANT



30 mg loss



Self-extinguishing

on concrete





BEND MANDREL:





HARDNESS:



ABRASION:



STRENGTH: 4,000 psi





> COATING ADDITIVES <

>U-TINT UNIVERSAL PIGMENT PACKS

SIMIRON U-TINT is a line of universal pigment packs that are 100% solids, zero VOC and designed to easily mix into SilMIRON'S EPOXY, URETHANE and POLYASPARTIC coatings.

U-TINT packs exhibit excellent color consistency and stability for in-field tinting and application—allowing greater flexibility for applicators. All available in convenient pint-sized cans, **U-TINT** allows for tinting of multiple sizes of resin.



FEATURES + BENEFITS:

Excellent Color Stability

14 Color Options

Low Viscosity

Easy-to-Mix

In-field Tinting

Excellent Hiding Properties

RECOMMENDED USES:

SIMCRETE

SIMTHANE HWU

SIMTHANE ESD

POLYASPARTIC HS

POLYUREA

TAUPE

SAFETY BLUE

1000HS - 100% SOLIDS EPOXY PRIMER

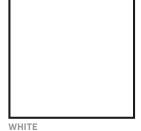
1100SL - 100% SOLIDS EPOXY

1150FC - HYBRID POLYUREA-EPOXY

MVB - MOISTURE VAPOR BARRIER



COLOR SELECTIONS:





HAZE GRAY



DECK GRAY

SAFETY GREEN









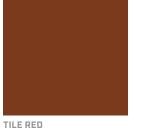


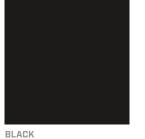
LIGHT GRAY



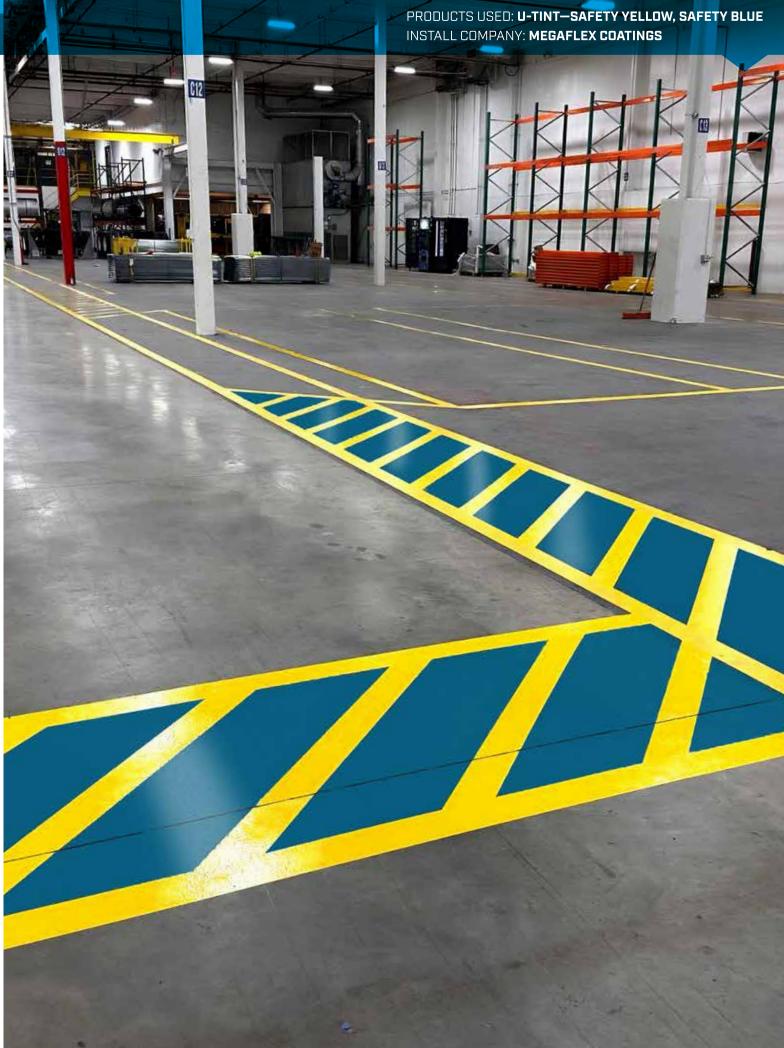


BUFF





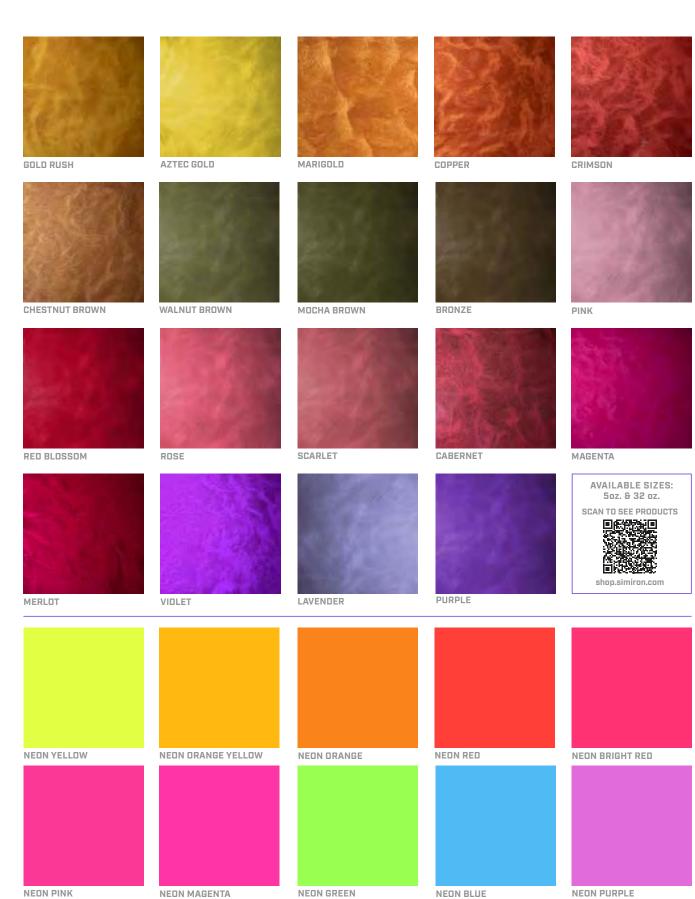




SAFETY RED

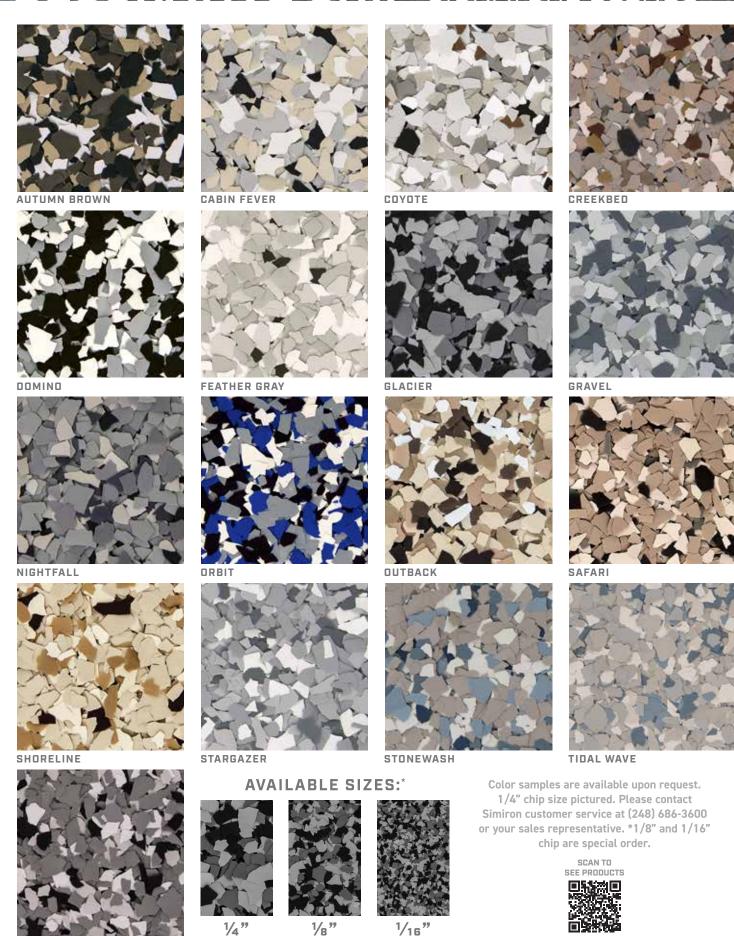
METALLIC ADDITIVES - COLOR SELECTIONS





DECORATIVE CHIP SIGNATURE BLENDS

U-TINT UNIVERSAL PIGMENT PACKS



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U-TINT packs exhibit excellent color consistency and stability for in-field tinting and application—allowing greater flexibility for applicators. All available in convenient pint-sized cans, **U-TINT** allows for tinting of multiple sizes of resin.





CHIP

CHIP

CHEMICAL RESISTANCE CHART

SIMIRON SYSTEMS	SIMFLAKE SB EPOXY	SIMFLAKE SB POLYUREA	SIMFLOOR HB-EPOXY	SIMFLOOR HWU	SIMFLOOR ESD	SIMFLOOR EPOXY SILOXANE	SHOP FLOOR
CHEMICAL	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
10% Acetic Acid	G	G	G	F	F	E	G
Vinegar	G	G	G	G	G	G	G
10% Citric Acid	G	G	G	G	G	G	G
10% Hydrochloric Acid	G	G	G	Е	Е	E	G
30% Hydrochloric Acid (muriatic)	G	G	G	E	E	E	G
10% Nitric Acid	NR	NR	G*	G	G	G	NR
50% Phosphoric Acid	F	F	F	G	G	G	F
10% Sulfuric Acid	F	F	G	F	F	G	F
37% Sulfuric Acid	F	F	F	F	F	G	F
70% Sulfuric Acid	F	F	F	F	F	G*	F
20% Ammonium Nitrate	Е	E	E	E	E	E	E
20% Sodium Chloride	Е	E	E	Е	E	E	E
50% Sodium Hydroxide	G	G	E	E	E	E	G
Methyl Ethyl Ketone	Е	E	G	E	E	E	E
Xylene	E	E	F	E	E	E	E
Ethylene Glycol	E	E	G	E	E	E	E
Isopropyl Alcohol	Е	E	F	Е	E	E	E
Mineral Spirits	F	F	E	Е	E	E	F
Brake Fluid	Е	E	F	G	G	G	E
Transmission Fluid	Е	Е	E	Е	E	E	E
Motor Oil	Е	E	E	E	E	E	Е
50:1 Gas/Oil Mixture	Е	E	E	E	E	E	E
E85 Gasoline	Е	E	E	E	E	E	Е
E95 Gasoline	Е	E	E	Е	E	E	E
Unleaded Gasoline	E	E	G	E	E	E	E
Skydrol	Е	Е	E	Е	E	E	Е
Betadine	Е	E	G*	G*	G*	G*	Е
Bleach	Е	E	E	Е	Е	Е	E
Urine	E	Е	E	E	E	E	E
Coffee	E	E	E	E	E	E	E
Cola	E	E	E	E	E	E	E
Ketchup	Е	E	G	F	F	E	E
Mustard	G*	G*	G	G	G	G*	G*
Red Wine	E	E	E	E	E	E	E
*Stain is only defect.							

^{*}Stain is only defect.

SIMIRON SYSTEMS	SIMCRETE SL	SIMCRETE SL FLAKE	SIMCRETE SL QUARTZ	SIMQUARTZ DB	SIMCRETE SL+TC	SIMFLOOR METALLIC
CHEMICAL	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS	RESULTS
10% Acetic Acid	G	G	G	F	E	E
Vinegar	G	G	G	F	E	G
10% Citric Acid	G	G	G	E	E	G
10% Hydrochloric Acid	G	G	G	E	E	Е
30% Hydrochloric Acid (muriatic)	G	G	G	E	E	Е
10% Nitric Acid	NR	NR	NR	NR	G	G
50% Phosphoric Acid	F	F	F	NR	G	G
10% Sulfuric Acid	F	F	F	E	G	G
37% Sulfuric Acid	F	F	F	G	F	G
70% Sulfuric Acid	F	F	F	NR	NR	G*
20% Ammonium Nitrate	Е	E	E	E	E	Е
20% Sodium Chloride	Е	E	Е	E	E	Е
50% Sodium Hydroxide	G	G	G	G	E	E
Methyl Ethyl Ketone	Е	E	E	E	F	Е
Xylene	E	E	Е	E	E	Е
Ethylene Glycol	Е	E	E	E	E	Е
Isopropyl Alcohol	E	E	Е	E	E	Е
Mineral Spirits	F	F	F	E	E	Е
Brake Fluid	E	E	Е	G	E	G
Transmission Fluid	Е	E	Е	E	E	Е
Motor Oil	E	E	Е	E	E	E
50:1 Gas/Oil Mixture	Е	E	Е	E	E	Е
E85 Gasoline	E	E	Е	E	E	E
E95 Gasoline	Е	E	E	E	E	E
Unleaded Gasoline	E	E	Е	E	E	E
Skydrol	Е	E	E	E	E	Е
Betadine	E	E	Е	G*	E	G*
Bleach	E	E	E	E	E	E
Urine	Е	E	E	E	E	Е
Coffee	E	E	E	E	E	Е
Cola	Е	E	E	E	E	Е
Ketchup	E	E	E	F	E	Е
Mustard	G*	G*	G*	G	E	G*
Red Wine	Е	E	E	E	E	Е
*Stain is only defect.						

^{*}Stain is only defect.

E = Excellent G = Good F = Fair NR = Not Recommend



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