

INDUSTRY LEADING SYSTEMS

FLOORING SYSTEMS

2025



FLOORING SYSTEM GUIDES

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GROCERY & RETAIL

HEALTHCARE

PHARMACEUTICAL RESIDENTIAL

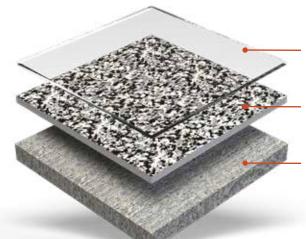


> SIMFLAKE SB 1-DAY **EPOXY FLOOR**

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, longlasting results. This three-layer system offers a variety of blends. Simflake SB 1-Day Epoxy consists of a basecoat, ½" 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 -



POLYASPARTIC HS

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

PREPARED SUBSTRATE: CSP 3+

SYSTEM ATTRIBUTES



ADHESION:

> 400 psi



COEFFICIENT

OF FRICTION:

> .65



5 - 10%









FLEXIBILITY 1/8" BEND MANDREL:





HARDNESS: Shore D 70, 86





FLAMMABILITY:

Self-extinguishing

on concrete

VOC:

ABRASION: 30 mg loss

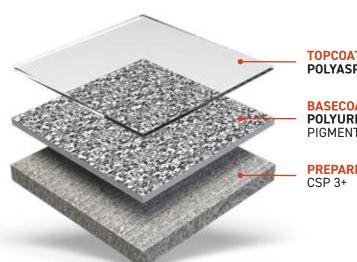
STRENGTH: 4,000 psi

> 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



TOPCOAT: POLYASPARTIC HS

POLYUREA BASECOAT,
PIGMENTED & DECORATIVE CHIP

PREPARED SUBSTRATE:

SYSTEM ATTRIBUTES



ADHESION:

> 400 psi



COEFFICIENT

OF FRICTION:

> .65





5 - 10%













BEND MANDREL:





HARDNESS: Shore D 70, 86



TABER ABRASION: 30 mg loss



TENSILE STRENGTH: 4,000 psi

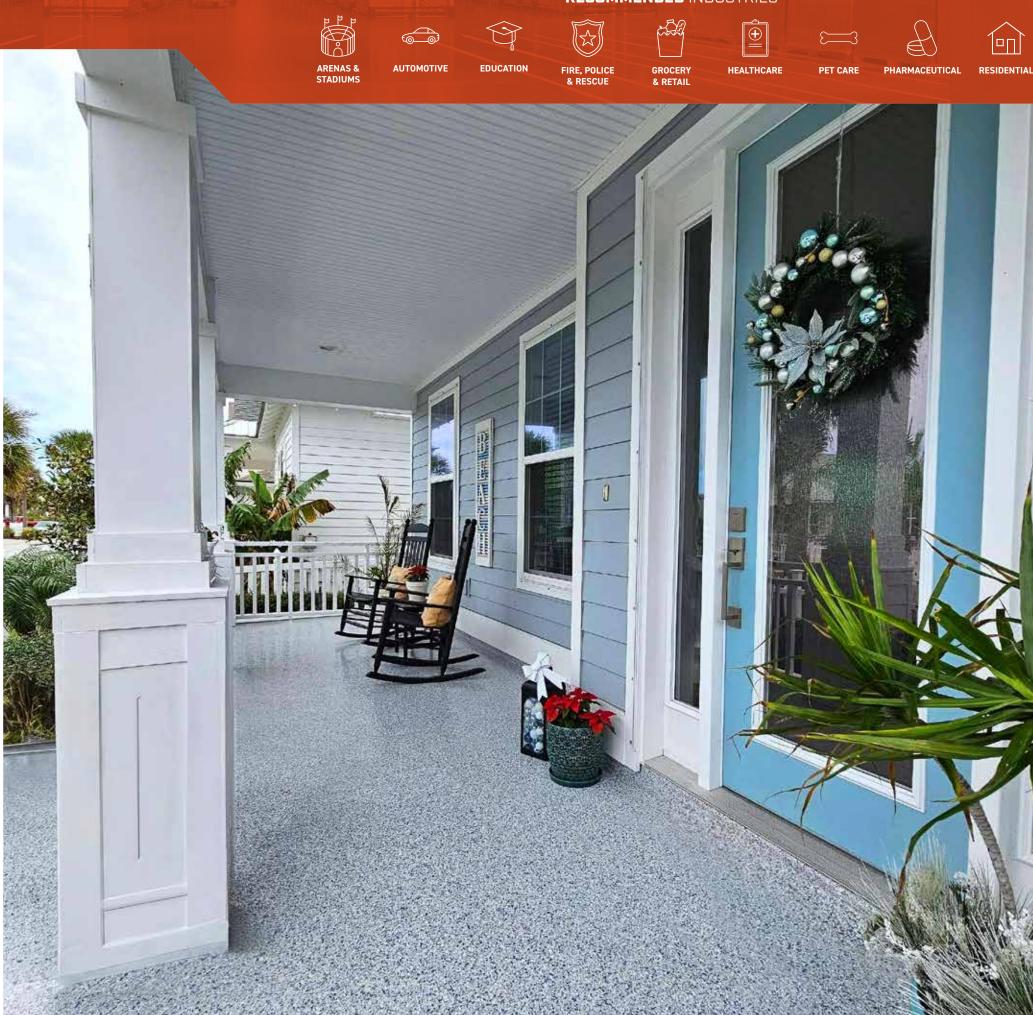


on concrete

RESISTANT



VOC: < 50 g/L

















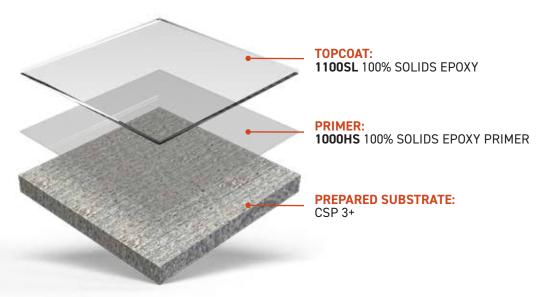


>SIMFLOOR HB-EPOXY

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:



OF FRICTION:







ELONGATION: 5 - 10%

FLAMMABILITY: Self-extinguishing on concrete







HARDNESS: Shore D 75



STRENGTH:

ABRASION: 50 mg loss



TENSILE STRENGTH:



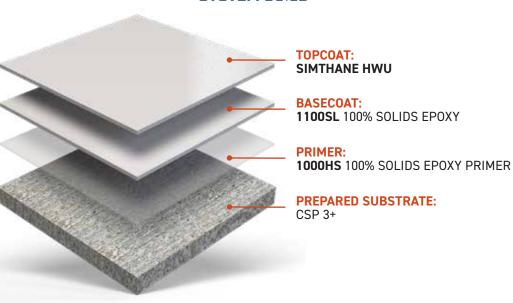
VOC:

> 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

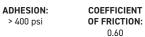


SYSTEM ATTRIBUTES



GLOSS:

60 - 70°









COMPRESSIVE STRENGTH: 11,600 psi



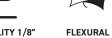






















TABER ABRASION: 12 mg loss



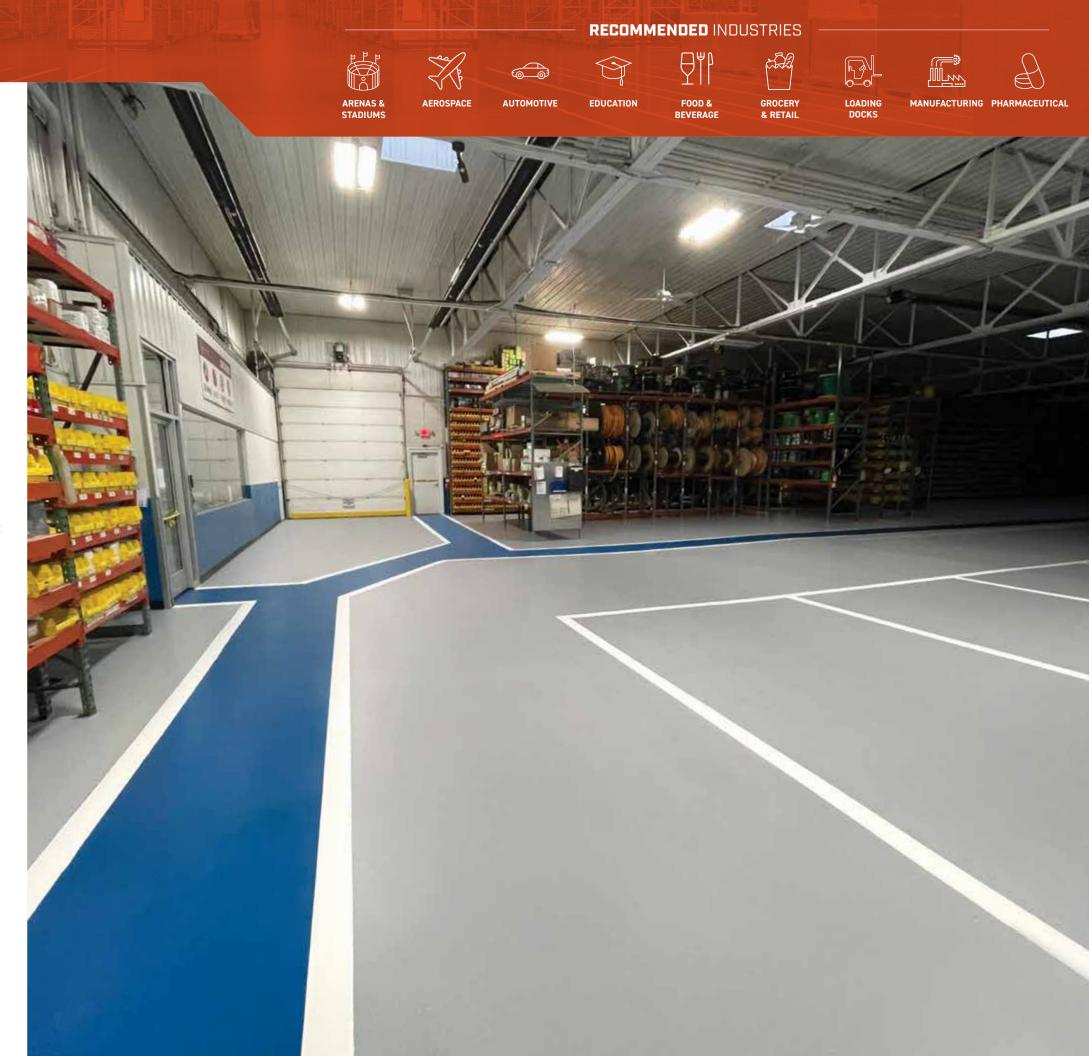
TENSILE STRENGTH: 9,600 psi



RESISTANT



VOC: 95 g/L



















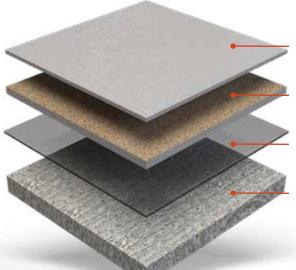


>SHOP FLOOR

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:



SLIP RESISTANT

COF: > .55



COMPRESSIVE





















12,800 psi

HARDNESS: Shore D 70, 86

ABRASION: 30 mg loss

STRENGTH: 9.600 psi

RESISTANT

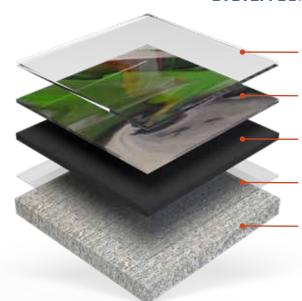


> SIMFLOOR METALLIC

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



> 400 psi

ADHESION:





COMPRESSIVE STRENGTH: 11,600 psi



ELONGATION:





FLEXIBILITY 1/8" BEND MANDREL:



FLEXURAL STRENGTH: 12,800 psi





GLOSS: HARDNESS: Shore D 75



TABER ABRASION: 40 mg loss



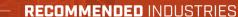
TENSILE STRENGTH: 9,600 psi



RESISTANT



VOC:











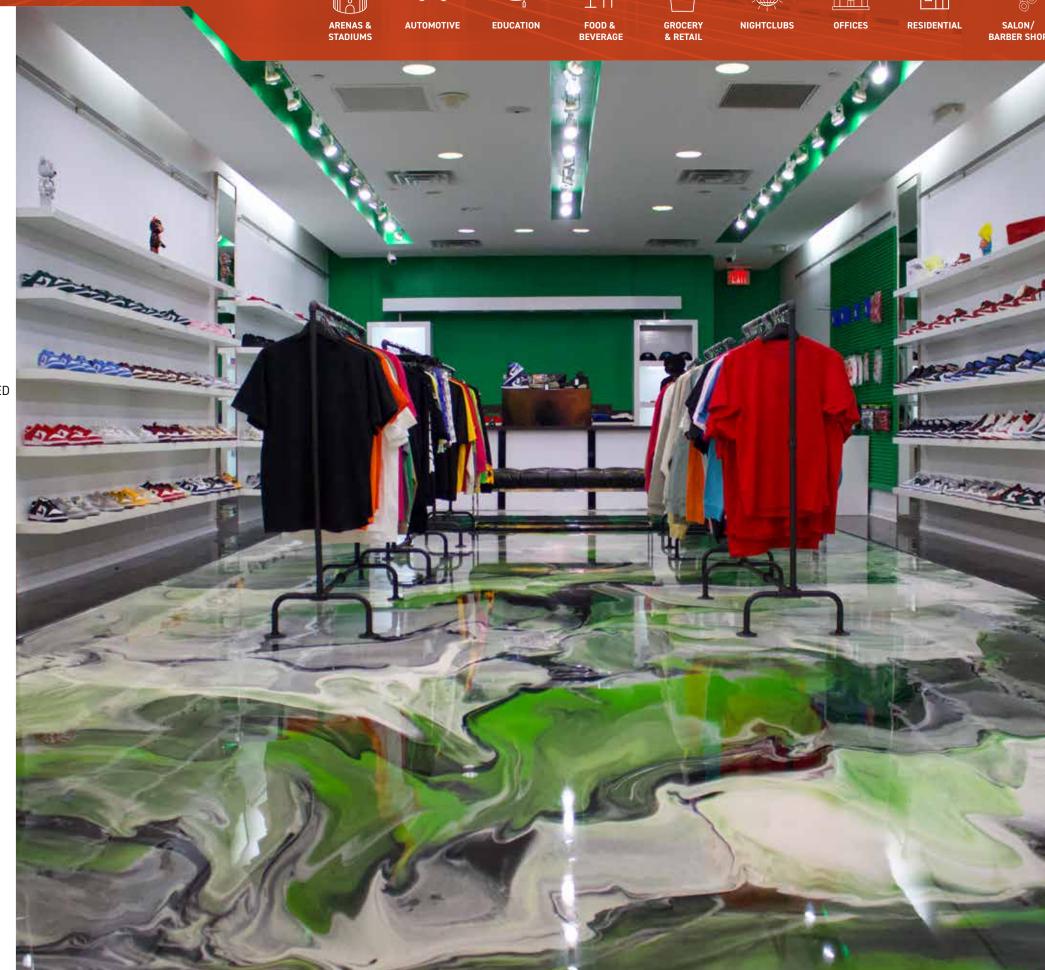












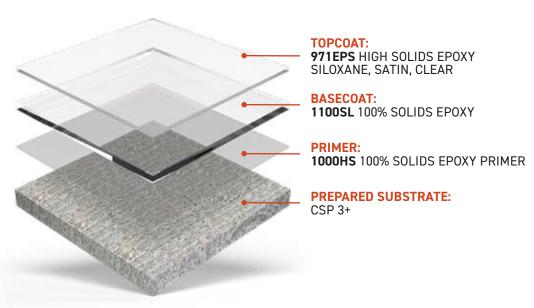


SIMFLOOR **EPOXY SILOXANE**

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



ADHESION:

> 400 psi



.50

Shore D 75



STRENGTH:

11,600 psi









Self-extinguishing on concrete





12,800 psi





ABRASION:

40 mg loss





STRENGTH:

9.600 psi

5 - 10%



RESISTANT



VOC: < 100 g/L



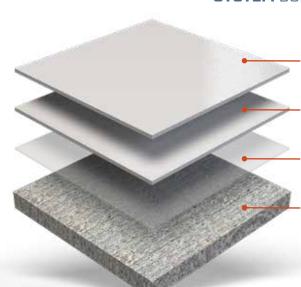


> SIMFLOOR ESD

ELECTROSTATIC DISSIPATIVE FLOORING

SIMIRON SIMFLOOR ESD has a static dissipative topcoat that helps to protect small, sensitive computer circuitry. The system provides a valuable foundation for any comprehensive static charge management solution. The coating system has resistance to most machine fluids and will also provide protection to airplane fuel. The satin finish resists damage from abrasion and UV exposure from large windows and access doors and creates a background to find small tools, parts, and fasteners.

SYSTEM BUILD



SIMTHANE ESD, SATIN, LIGHT GRAY

BASECOAT:

1100SL 100% SOLIDS EPOXY, LIGHT GRAY

PRIMER:

1000HS 100% SOLIDS EPOXY PRIMER. CLEAR

PREPARED SUBSTRATE:

SYSTEM ATTRIBUTES



ADHESION:

GLOSS: 60 - 70°





RESISTANCE:

1x106 - <1x109

ohms







COMPRESSIVE 11,600 psi

12 mg loss



FLAMMABILITY: Self-extinguishing on concrete



FLEXIBILITY 1/8"





HARDNESS:

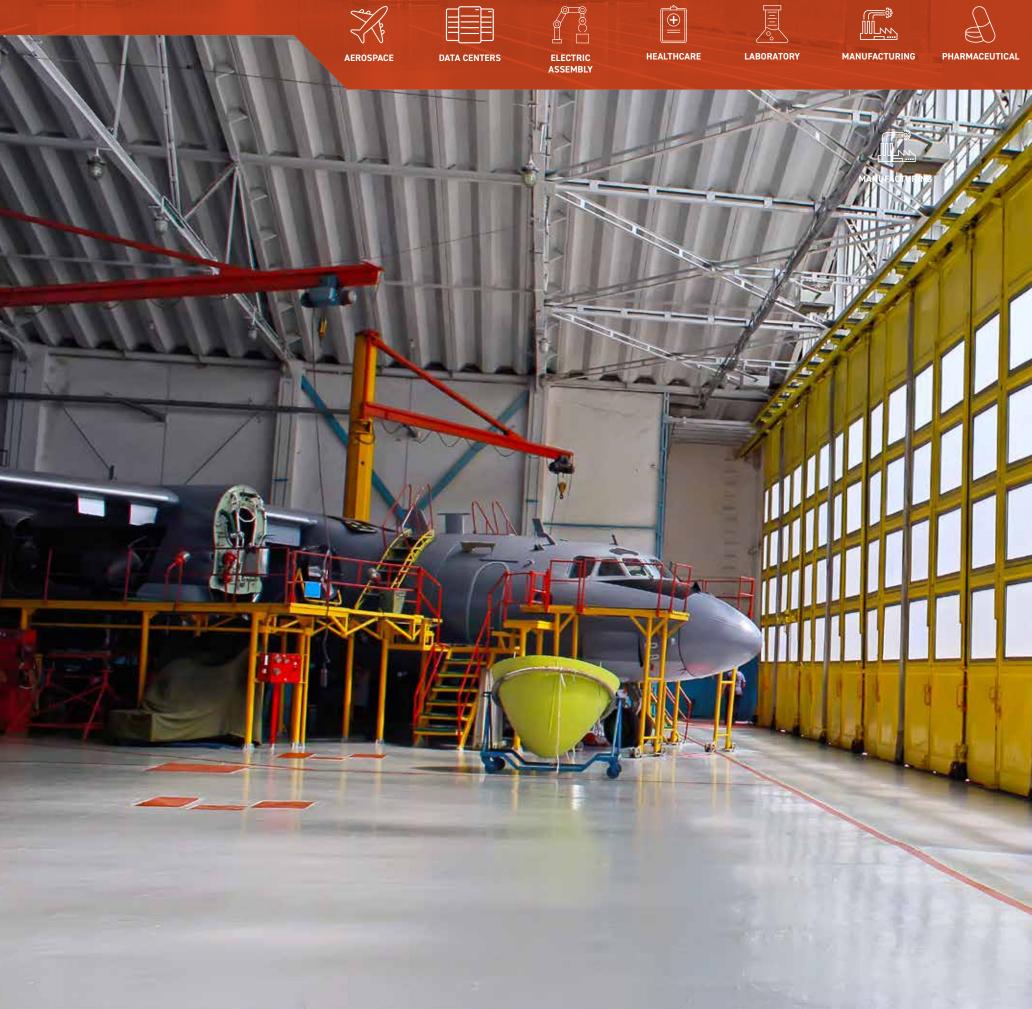


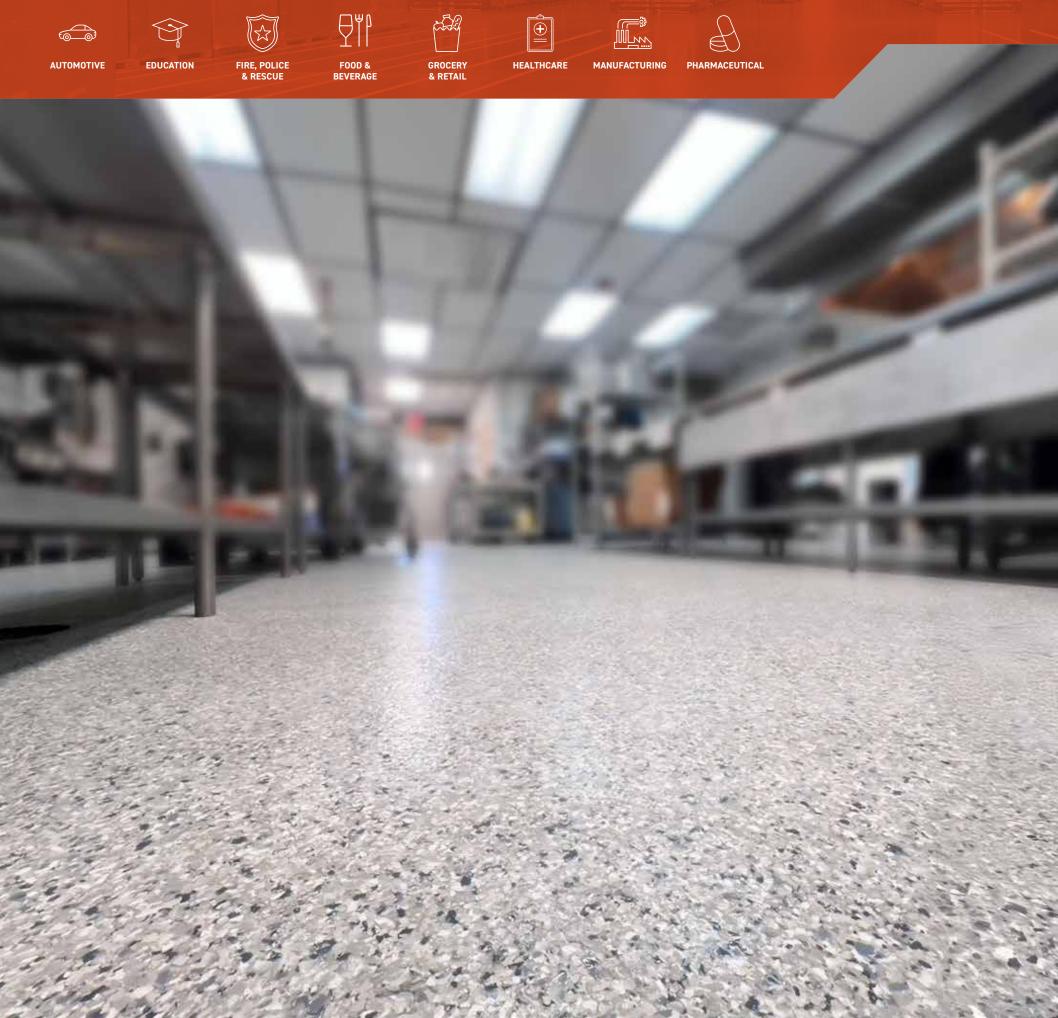
TENSILE 9,600 psi



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.

Simcrete SL Flake 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 -



SYSTEM ATTRIBUTES



Failure











Self-extinguishing







IMPACT STRENGTH: > 160 in./lbs.



RESISTANCE:

PASSES

> 0.63

TABER ABRASION:



TENSILE STRENGTH:



UV RESISTANT



VOC: < 50 g/



> 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



SYSTEM ATTRIBUTES



100% Concrete

Failure

BOND STRENGTH:



SLIP RESISTANT **COF:** > .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 RESISTANCE: ABRASION:



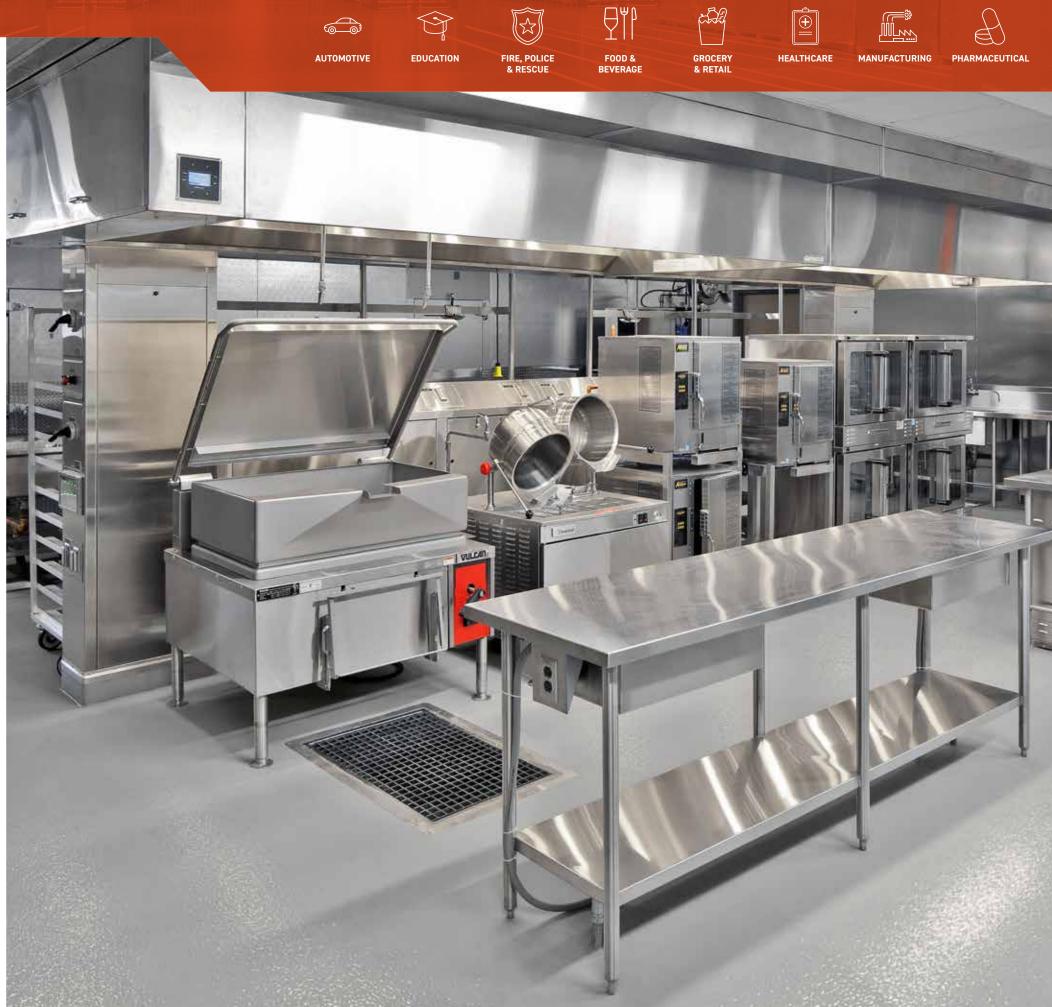
TENSILE STRENGTH:



UV RESISTANT

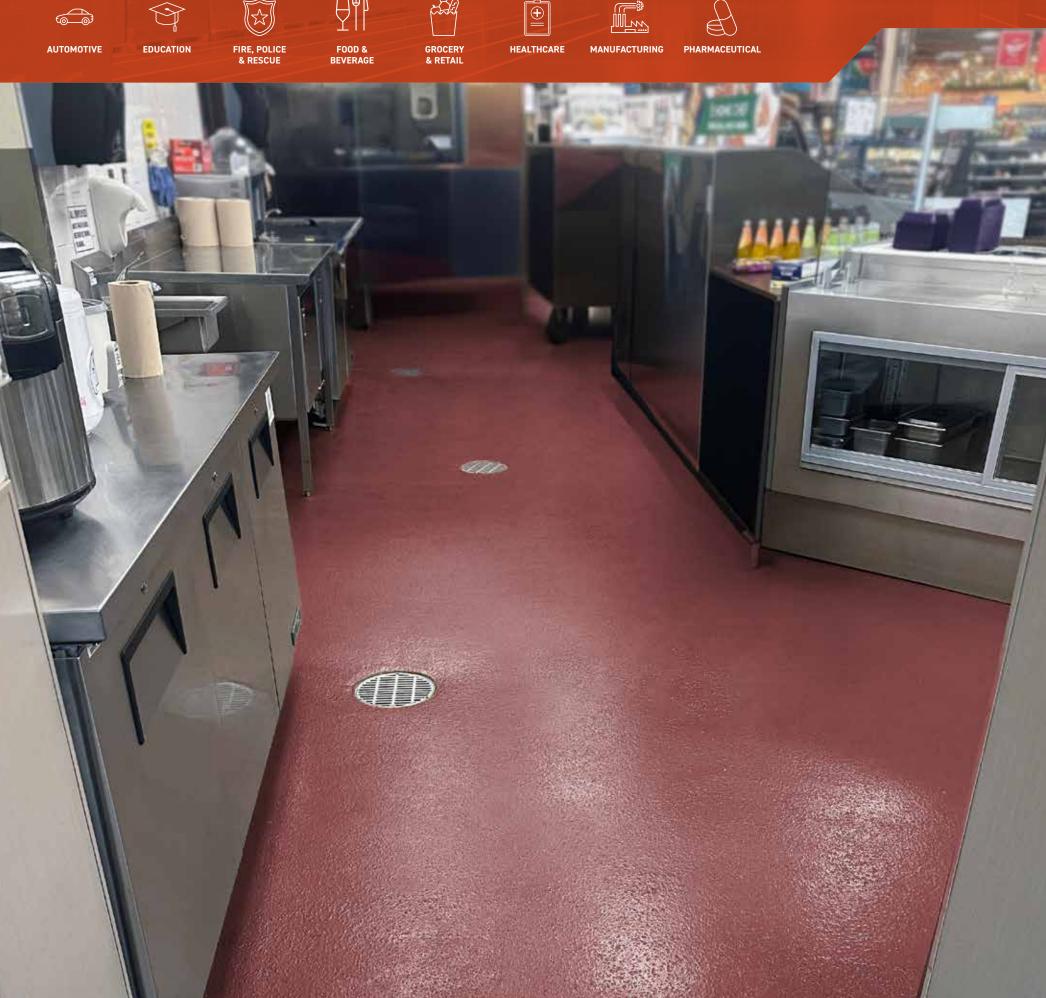


VOC: < 50 g/L









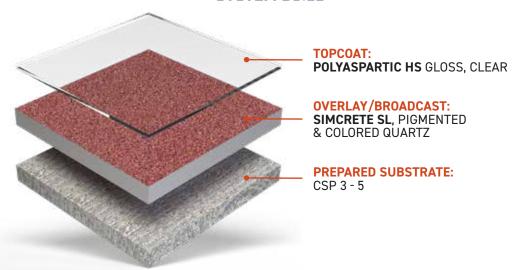
> SIMCRETE SL QUARTZ

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.

Simcrete SL Quartz 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



SYSTEM ATTRIBUTES







8,558 psi

30 mg loss







GLOSS: 92 - 95°

COMPRESSIVE FLAMMABILITY: STRENGTH: Self-extinguishing on concrete

FLEXURAL STRENGTH:



100% Concrete

Failure

IMPACT STRENGTH: > 160 in./lbs.

FUNGI GROWTH

RESISTANCE:

PASSES

COF: > .63

TABER ABRASION:



TENSILE STRENGTH:



RESISTANT



















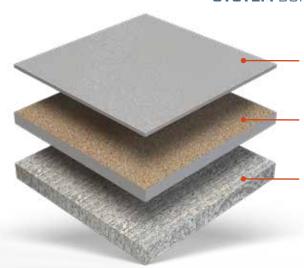
> SIMCRETE SL+TC

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.

Simcrete SL+TC 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:

SIMCRETE TC, PIGMENTED

OVERLAY/BROADCAST: SIMCRETE SL, PIGMENTED & SILICA SAND

PREPARED SUBSTRATE: CSP 3 - 5

SYSTEM ATTRIBUTES



100% Concrete

Failure



OF FRICTION:

> 0.63



COMPRESSIVE

STRENGTH:

8,550 psi







Self-extinguishing

on concrete







FLEXURAL STRENGTH: 2,900 psi













STRENGTH: 1,120 psi



















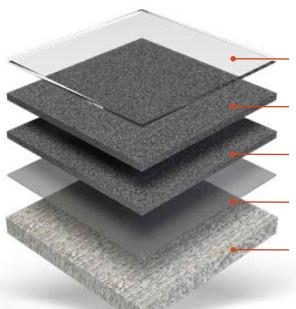




> SIMQUARTZ DB DOUBLE BROADCAST QUARTZ

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



COEFFICIENT

OF FRICTION:

0.65



ELONGATION:

5 - 10%







GLOSS:

FLEXIBILITY 1/8" FLAMMABILITY: Self-extinguishing on concrete

BEND MANDREL:



HARDNESS: Shore D 70, 86



RESISTANT



30 mg loss

ABRASION: STRENGTH:

4,000 psi



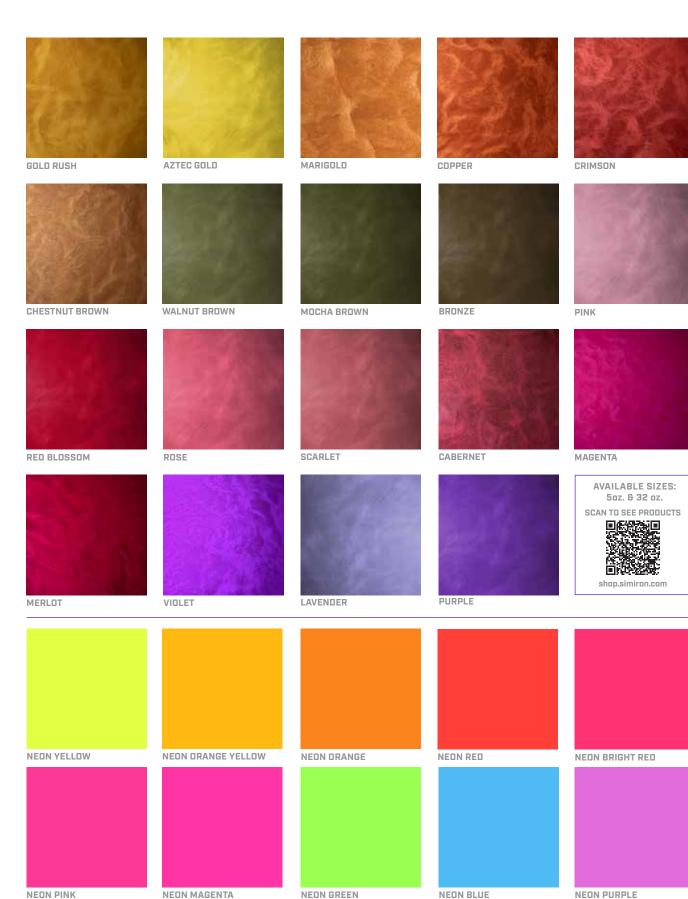




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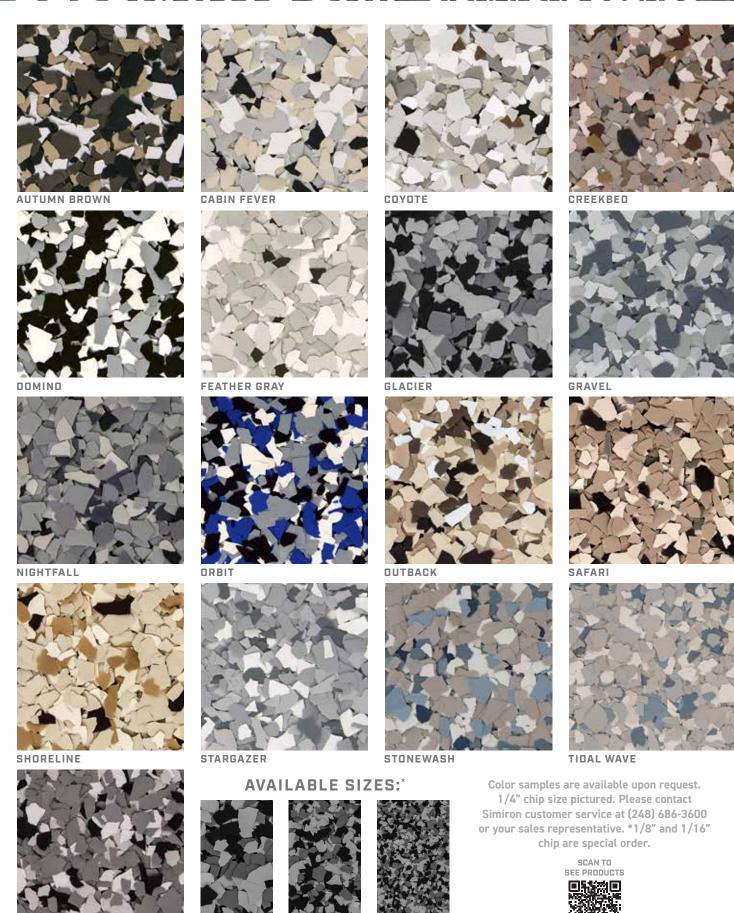
METALLIC ADDITIVES - COLOR SELECTIONS





DECORATIVE CHIP SIGNATURE BLENDS

U-TINT UNIVERSAL PIGMENT PACKS



1/16"

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





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	E	E	G
30% Hydrochloric Acid (muriatic)	G	G	G	Е	Е	Е	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	Е	Е	Е	Е
20% Sodium Chloride	E	E	E	E	E	E	E
50% Sodium Hydroxide	G	G	E	Е	Е	E	G
Methyl Ethyl Ketone	Е	E	G	E	Е	E	E
Xylene	E	E	F	Е	E	Е	Е
Ethylene Glycol	Е	E	G	E	Е	Е	E
Isopropyl Alcohol	E	E	F	Е	E	E	Е
Mineral Spirits	F	F	E	E	Е	Е	F
Brake Fluid	E	E	F	G	G	G	Е
Transmission Fluid	Е	E	E	E	Е	Е	Е
Motor Oil	Е	E	E	Е	Е	Е	Е
50:1 Gas/Oil Mixture	E	E	E	Е	E	Е	Е
E85 Gasoline	Е	E	E	Е	Е	Е	Е
E95 Gasoline	E	E	E	E	E	Е	E
Unleaded Gasoline	E	E	G	Е	Е	E	Е
Skydrol	E	E	E	E	E	Е	E
Betadine	E	E	G*	G*	G*	G*	Е
Bleach	Е	Е	Е	Е	E	E	Е
Urine	E	E	E	Е	Е	E	Е
Coffee	Е	E	E	E	Е	Е	E
Cola	E	E	E	E	Е	E	E
Ketchup	E	E	G	F	F	Е	E
Mustard	G*	G*	G	G	G	G*	G*
Red Wine	Е	E	E	E	E	Е	E

^{*}Stain is only defect.

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

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

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