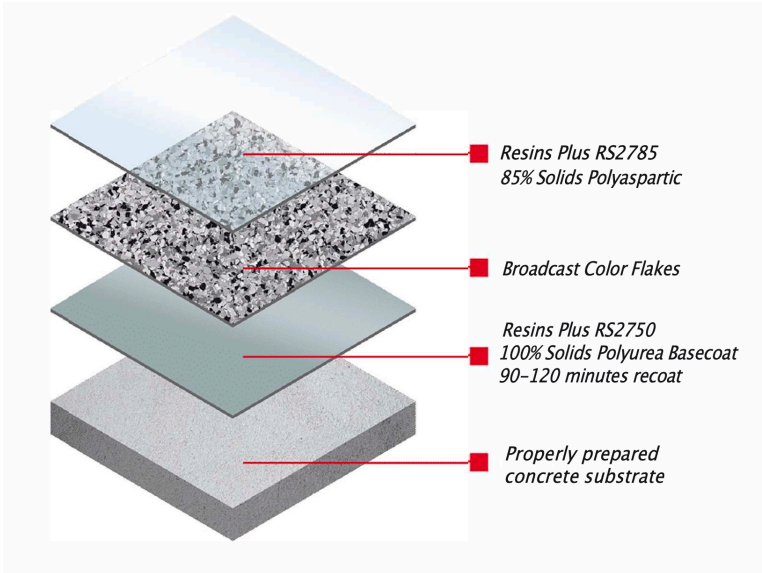
Resins Plus™

Resins Plus One Day Garage Floor

System Information

RESINS PLUS DECORATIVE POLYASPARTIC GARAGE SYSTEM is a polyurea/polyaspartic color flake garage floor is a highly durable and attractive flooring option that is perfect for residential and commercial garages, as well as other high-traffic areas that require a strong, long-lasting surface. This type of flooring is composed of a polyurea/polyaspartic base layer, which provides excellent resistance to abrasions, impacts, and chemicals, and a decorative layer of multi-colored flakes that add a stylish and unique touch to the floor's appearance. Additionally, the polyaspartic color flake garage floor is easy to maintain and clean, making it a popular choice among homeowners and businesses alike.



Advantages

- Limitless color options
- Very good adhesion with various substrates
- Cure at low and high temperature
- Good chemical resistance
- High gloss finish
- Zero and low VOC

Uses

- Garage Floors
- Clean rooms and pharmaceuticals
- Office buildings
- Locker and restrooms
- Cafeterias

1. Hardness: Polyaspartic garage floors have a high Shore D hardness rating, typically between 60-80. This means they are highly resistant to indentation and can withstand heavy loads without denting or cracking.
2. Tensile Strength: Polyaspartic garage floors have a high tensile strength, typically between 2,000-4,000 psi. This means they can withstand tension and stretching without tearing or breaking.
3. Elongation: Polyaspartic garage floors have a high elongation capacity, typically between 100-200%. This means they can stretch without breaking and can accommodate slight movements in the underlying substrate without cracking.
4. Chemical Resistance: Polyaspartic garage floors have high chemical resistance, making them resistant to oils, solvents, and other chemicals that can damage other types of flooring.
5. UV Stability: Polyaspartic garage floors have high UV stability, meaning they won't yellow or degrade when exposed to sunlight.
6. Temperature Range: Polyaspartic garage floors can withstand a wide range of temperatures, from -40°F to 250°F, without cracking or warping.
7. Bond Strength: Polyaspartic garage floors have a high bond strength to concrete, which means they adhere well to the substrate and can prevent delamination and other issues.

Overall, polyurea garage floors have excellent physical properties that make them highly durable, resistant, and long-lasting. They are an excellent choice for a variety of commercial and residential garage flooring applications.

Installation

Resins Plus Resin materials shall only be installed by approved contractors. The following information is to be used as a guideline for the installation of the Resins Plus DECORATIVE POLYASPARTIC GARAGE SYSTEM. Contact the Technical Service Department for assistance prior to application.

Surface Preparation — General

Resins Plus Resin systems can be applied to a variety of substrates, if the substrate is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate, such as wood, concrete block, quarry tile, etc. Should there be any questions regarding a specific substrate or condition, please contact the Technical Service Department prior to starting the project.

Surface Preparation — Concrete

Concrete surfaces shall be abrasive blasted to remove all surface contaminants and laitance. The prepared concrete shall have a surface profile depending upon system selected.

After initial preparation has occurred, inspect the concrete for bug holes, voids, fins and other imperfections. Protrusions shall be ground smooth while voids shall be filled with a system compatible filler.

Temperature

Throughout the application process, substrate temperature should be 50ºF – 90ºF. Substrate temperature must be at least 5ºF above the dew point. Applications on concrete substrate should occur while temperature is falling to lessen offgassing. The material should not be applied in direct sunlight, if possible. Protect material from freezing prior to installation.

VOC MIXED		MATERIAL	MIX RATIO	THEORETICAL COVERAGE PER COAT	PACKAGING
<42 g/L	Basecoat with Color Flake Broadcast	RS2750	2:1	160 sq. ft./gal with Color Flake 7 SF per pound	3 or 15 gals 40 lb box
<200 g/L	Topcoat	RS2785	1:1	200-300 sq. ft./gal	2 or 10 gals

For additional topcoat options consult the Resins Plus Topcoat Selection Guide, or contact your Resins Plus Resin representative.

RS2750 Base Coat

Mixing and Application

1. Mechanically premix PART A (resin) with an appropriate slow speed drill equipped with a Jiffy Mixer, for 1 minute.

2. Slowly empty entire content of PART B into container holding PART A and continue to mix for minimum 3 minutes To insure proper system cure and performance, strictly follow mix ratio recommendations. **DO NOT MIX MORE MATERIAL THAN CAN BE APPLIED WITHIN WORKING TIME LIMITS.**

3. Apply RS2750 Basecoat using a squeegee or trowel and back roll with a 1/4"-3/8" nap roller at a spread rate of 160 square feet per gallon making sure of uniform coverage. Take care not to puddle materials and insure even coverage.

4. Allow material to self-level 10-15 minutes. Begin evenly broadcasting Color Paint Chips into wet resin much the same as grass seed is spread. Color Paint Chips should be broadcast in such a way that the chips falls lightly into resin without causing the resin to move. Continue broadcasting to excess until the floor appears completely dry, approximately 7 SF per pound.

5. Allow to cure for 90-120 minutes hours, sweep off excess color paint chips with a stiff bristled broom.

RS2785 Top Coat

Mixing and Application

1. Mechanically premix PART A (resin) with an appropriate slow speed drill equipped with a Jiffy Mixer, for 1 minute.

2. Slowly empty entire content of PART B into container holding PART A and continue to mix slowly for 3 minutes until uniform consistency in texture and color is achieved. Avoid unnecessary entrapment of air during mixing. Make sure to scrap e walls and bottom of container with straight edged trowel at least once to ensure homogeneous mix. Make sure to empty ALL contents of PART B into PART A to avoid system weakening or incomplete curing. **DO NOT MIX MORE MATERIAL THAN CAN BE APPLIED WITHIN WORKING TIME LIMITS.**

3. RS2785 85% Solids Polyaspartic should be applied with a rubber squeegee and back rolled with a 1/4"-3/8" lint-free nap roller (on smooth surfaces) to remove squeegee lines and smooth out coating.

4. Allow to cure 2-4 hours minimum before opening to light foot traffic.

5. If a second seal coat is required, lightly sand and solvent wipe clean prior to coating.

6. RS2785 85% Solids Polyaspartic topcoat may be put back into service after 24-48 hours. Full product characteristics are achieved after 72 hours. Curing times dependent upon ambient & surface conditions.

Cleanup

Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fi re and health precautions when handling or storing solvents.

Safety

Refer to the SDS sheet before use. federal, state, local and particular plant safety guidelines must be followed during the handling and installation and cure of these materials.

Safe and proper disposal of excess materials shall be done in accordance with applicable federal, state, and local codes.

Material Storage

Store materials in a temperature controlled environment (50ºF - 90ºF) (10ºC - 32ºC), and out of direct sunlight. Keep resins, hardeners, and solvents separated from each other and away from sources of ignition.

Maintenance

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact the Technical Service Department.

Disclaimer

The information and recommendations set forth in this document are based upon tests conducted by or on behalf of Resins Plus. Such information and recommendations set forth herein are subject to change and pertain to the product(s) offered at the time of publication. Published technical data and instructions are subject to change without notice.

Consult www.plexicoatresins.com to obtain the most recent Product Data information and Application instructions.

Warranty

The Resins Plus warrants our products to be free of manufacturing defects in accord with applicable Resins Plus Resin quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Resins Plus, NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY Resins Plus, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Resins Plus™

Resins Plus RS2750 Polyurea Basecoat

PRODUCT DESCRIPTION

Polyurea Basecoat is a two components Polyurea coating designed to maintain the integrity of concrete surfaces. It exhibits very good mechanical properties. Available Colors: Tan & Grey. Clear and others colors available by request.

APPLICATIONS

Polyurea Basecoat is formulated as a high solids system for industrial floor shops, car washes, mechanical rooms, areas of light manufacturing, or where concrete repair is needed.

ADVANTAGES

- Very good adhesion with various substrates
- Cure at low and high temperature
- Good chemical resistance
- Zero VOC

PACKAGING

Polyurea Basecoat is packaged in factory proportioned packaging for easy handling and mixing.
3 gallon kit and 15 gallon kit

STORAGE

All components should be stored in dry, temperature controlled areas between 12-28°C. Do not expose to freezing or excessive high heat

TECHNICAL DATA @ 75°F			
% SOLIDS BY WEIGHT	100%	VOC CONTENT	41.77 g/liter
GEL TIME 100G	30-60 Minutes	MIXING RATIO BY VOLUME	2:1
SUGGESTED # OF COATS	2-3	RECOAT TIME (MIN/MAX)	90-120 Minutes / 24 Hours
FOOT TRAFFIC	24 Hours	LIGHT TRAFFIC	3 Days
FULL CURE	7 Days	SHELF LIFE	12 Months unopened
COMPRESSIVE STRENGTH ASTM D695	6800 psi	BOND RESISTANCE ASTM D4541	268 psi
TENSILE STRENGTH ASTM D638	5500 psi	HARDNESS (SHORE D) ASTM D2240	85-90
PERMEABILITY ASTM D570	0.3%	ELONGATION D638	6.7%
ABRASION RESISTANCE ASTM D4060	0.10 g	MIXED VISCOSITY	1000-1200 cps

PRIOR TO USE APPLICATOR MUST ALWAYS READ AND FOLLOW WARNINGS AND INSTRUCTIONS. MOST UP TO DATE PRODUCT TECHNICAL DATA SHEETS, PRODUCT LABELS AND MATERIAL SAFETY DATA SHEETS WHICH ARE AVAILABLE UPON REQUEST BY CALLING TECHNICAL SUPPORT DEPARTMENT.

SURFACE PREPARATION

Surface must be clean, sound and dry. Prior to coating a floor all trowel marks and surface imperfections must be removed to produce a smooth & uniform surface. Proper surface preparation is critical to ensure an adequate chemical bond to substrate. Substrate must be dry and free of all wax, grease, oils, fats, soil, contaminants, loose or foreign matter and laitance. Concrete should be cleaned and prepared using a shot blast machine or adequate grinding equipment to achieve a CSP-3 to CSP-4 profile as per ICRI guidelines. Compressive strength of concrete should be at least 3,500 psi (24 Mpa) @ 28 days and at least 215 psi (1.5 Mpa) in tension at time of product application.

Polyurea Basecoat is supplied in factory proportioned quantities, greatly reducing the risk of applicator error during mixing.

Step 1 - Mechanically premix PART A (resin) with an appropriate slow speed drill equipped with a Jiffy Mixer, for 1 minute.

Step 2 - Slowly empty entire content of PART B into container holding PART A and continue to mix for minimum 3 minutes

DO NOT MIX MORE MATERIAL THAN CAN BE APPLIED WITHIN WORKING TIME LIMITS.

POTLIFE

After mixing, Polyurea Basecoat has a pot life of approximately 40 minutes at 75˚F. It is important to use it once mixed. Pot life depends on ambient and surface conditions.

APPLICATION

Pour the Polyurea Basecoat on the floors and spread the material with a squeegee, then roll back.

CURING

In broadcast system, Polyurea Basecoat sets in approximately 90-120 minutes at ambient temperature.

PRECAUTIONS & LIMITATIONS

Prior to application, measure and confirm Substrate Moisture Content, Ambient and Surface temperatures and Dew Point.

Substrate Moisture: Moisture within substrate must be ≤4% by mass as measured by Tramex® type concrete moisture meter on mechanically prepared surface.

Dew Point: AVOID CONDENSATION. The substrate must be at least 5˚F above Dew Point to reduce risk of condensation. Condensation may lead to failure in adhesion. Avoid situations where substrate temperature is considerably lower than ambient temperature.

Do not add thinners or solvents to mix. Do not add water. Dispose of waste materials in accordance with government regulations. The use of safety glasses and protective gloves is required. In case of contact, flush areas with abundance of water for 20 minutes and seek medical assistance. Wash skin with soap and water. Use only in well ventilated areas.

Resins Plus™

Resins Plus 85% Solids Polyaspartic

PRODUCTDESCRIPTION

RS2785 85% Solids Polyaspartic is a two-components, polyaspartic coating system designed to maintain the integrity of various surfaces such as concrete, wood, metal etc. It exhibits excellent UV stability as well as good mechanical properties, good chemical and solvent resistance, while showing a very good aesthetic appearance.

APPLICATIONS

RS278585% Solids Polyaspartic is very suitable to protect:

- Industrial flooring,
- Bridges,
- Maintenance facilities,
- Aircraft hangar
- Flooring,
- Car washes
- Areas needing a resistant flooring topcoat

ADVANTAGES

- Low odor
- UV stable
- Aesthetic finish
- Good chemical resistance
- Good mechanical properties
- Easy to clean,
- Bacteria and moisture resistant surface

PACKAGING

RS2785 85%Solids Polyaspartic is packaged in factory proportioned packaging for easy handling and mixing.
2 gallon kits and 10 gallon kits

STORAGE

All components should be stored in dry, temperature-controlled areas between 55-85˚F. Do not expose to freezing or excessive high heat

TECHNICAL DATA @ 75˚F			
% SOLIDS BY WEIGHT	85%	VOC CONTENT	200 g/L
POT LIFE 100G	40-50 Minutes	MIXING RATIO BY VOLUME	1:1
SUGGESTED # OF COATS	2-3	RECOAT TIME (8-12 MILS)	4 Hours / 6 Hours
THICKNESS BASE COAT	8 Mils/200 ft^2		
THICKNESS TOP COAT	8-12 Mils/135 ft^2		
FOOT TRAFFIC	12-24 Hours	LIGHT TRAFFIC	2 Days
FULL CURE	7 Days	SHELF LIFE	12 Months unopened
COMPRESSIVE STRENGTH ASTM D695	9000 psi	BOND RESISTANCE ASTM D4541	500psi
TENSILE STRENGTH ASTM D638	6000 psi	HARDNESS (SHORE D) ASTM D2240	70-75
WATER ABSORPTION ASTM D570	0.2%	ELONGATION D638	100%
ABRASION RESISTANCE ASTM D4060	0.3 g	MIXED VISCOSITY	200-300 cps

PRIOR TO USE APPLICATOR MUST ALWAYS READ AND FOLLOW WARNINGS AND INSTRUCTIONS . MOST UP TO DATE PRODUCT TECHNICAL DATA SHEETS, PRODUCT LABELS AND MATERIAL SAFETY DATA SHEETS WHICH ARE AVAILABLE UPON REQUEST BY CALLING SFC TECHNICAL SUPPORT DEPARTMENT.

SURFACE PREPARATION

Surface must be clean, sound and dry. Prior to coating a floor all trowel marks and surface imperfections must be removed to produce a smooth & uniform surface. Proper surface preparation is critical to ensure an adequate chemical bond to substrate. Substrate must be dry and free of all wax, grease, oils, fats, soil, contaminants, loose or foreign matter and laitance. Concrete should be cleaned and prepared using a shot blast machine or adequate grinding equipment to achieve a CSP-3 to CSP-4 profile as per ICRI guidelines. Compressive strength of concrete should be at least 3,500 psi (24 Mpa) @ 28 days and at least 215 psi (1.5 Mpa) in tension at time of product application.

MIXING: RS2785 85% Solids Polyaspartici s supplied in factory proportioned quantities, greatly reducing the risk of applicator error during mixing.
Step 1 - Mechanically premix PART A (resin) with an
appropriate slow speed drill equipped with a Jiffy Mixer, for 1 minute.
Step 2 - Slowly empty entire content of PART B into container holding PART A and continue to mix slowly for 3 minutes until uniform consistency in texture and color is achieved. Avoid unnecessary entrapment of air during mixing. Make sure to scrap e walls and bottom of container with straight edged trowel at least once to ensure homogeneous mix. Make sure to empty ALL contents of PART B into PART A to avoid system weakening or incomplete curing.
DO NOT MIX MORE MATERIAL THAT CAN BE APPLIED WITHIN WORKING TIMELINE.

POTLIFE

After mixing, **RS2785 85% Solids Polyaspartic** has a pot life of approximately 45-60 minutes at 75˚F. Pot life depends on ambient and surface conditions.

APPLICATION

RS2785 85% Solids Polyasparticshould be applied with a rubber squeegee and back rolled with a 10mm lint-free nap roller (on smooth surfaces) to remove squeegee lines and smooth out coating.

CURING

RS2785 85% Solids Polyaspartic topcoat may be put back into service after 48 hours. Full product characteristics are achieved after 72 hours. Curing times dependent upon ambient & surface conditions.

PRECAUTIONS & LIMITATIONS

Prior to application, measure and confirm Substrate Moisture Content, Ambient and Surface temperatures and Dew Point.

Substrate Moisture: Moisture within substrate must be ≤4% by mass as measured by Tramex® type concrete moisture meter on mechanically prepared surface.
Dew Point: AVOID CONDENSATION. The substrate must be at least 5˚F above Dew Point to reduce risk of condensation. Condensation may lead to failure in adhesion. Avoid situations where substrate temperature is considerably lower than ambient temperature.

Do not add thinners or solvents to mix. Do not add water. Dispose of waste materials in accordance with government regulations. The use of safety glasses and protective gloves is required. In case of contact, flush areas with abundance of water for 20 minutes and seek medical assistance. Wash skin with soap and water. Use only in well ventilated areas.