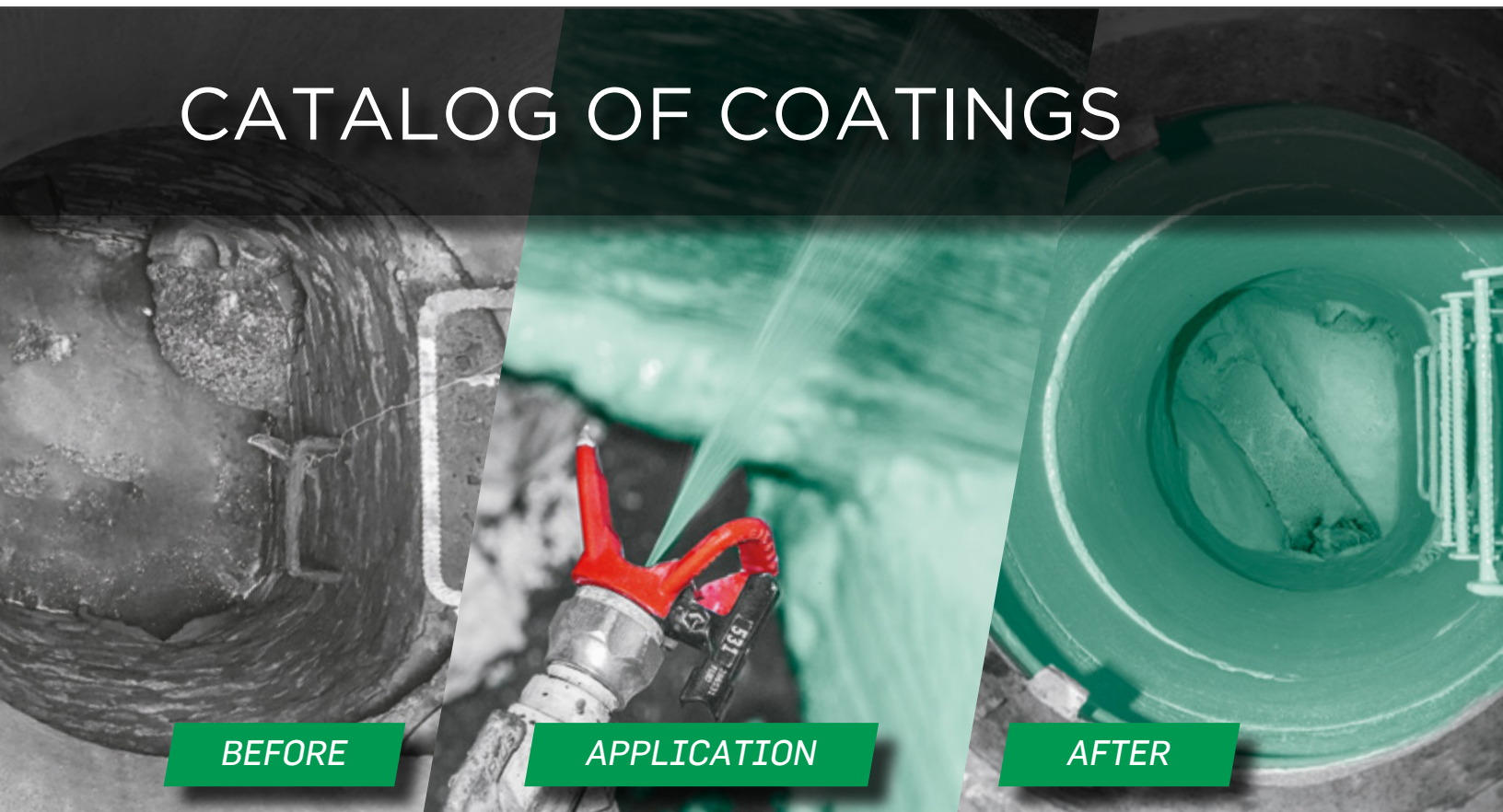


UNDERGROUND INFRASTRUCTURE REHABILITATION BY EPOXY OR POLYUREA SPRAYINGS

CATALOG OF COATINGS



BEFORE

APPLICATION

AFTER

REHABILITATION OF
MANHOLES AND CATCH
BASINS

REHABILITATION OF
LARGE-DIAMETER PIPES

REHABILITATION OF TANKS
AND BASINS

REHABILITATION OF
PUMPING STATIONS

SURFACES PROTECTION

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DATA SHEET

SSR-130 EPOXY PRIMER

PRODUCT DESCRIPTION : Red anti-corrosion, flexible epoxy primer.

FUNCTION : Priming of steel or iron surfaces to be rehabilitated or protected before the coating is applied, where corrosion resistance is needed. Its use allows a better adhesion of the epoxy coating and minimizes its absorption by sealing the surface and reducing degassing.

COMPOSITION : Mechanical mixing of component A (clear epoxy resin) and component B (amber hardener), separately. Then, combination of the mixture of component A and component B in a ratio of 1:1.

METHOD OF USE : Can be applied with a synthetic nap roller, a brush or by airless spraying. The best dosages and mixtures are obtained by using a multi-component airless spraying system or any other suitable method approved by Soleno Service.

TEMPERATURE OF USE : The temperature of the surface to be rehabilitated must be between 4.4°C and 48.9°C (40°F and 120°F), and at least -15°C (5°F) above the dew point. For optimal performance?

RECOMMENDED THICKNESS : The thickness of the primer coat will depend on the porosity of the substrate to be rehabilitated. It generally varies from 4.5 to 8 mils. If necessary, SSR-130 epoxy primer can be applied in several coats, provided the overlap range is respected.

DRYING AND RECOATING TIME : Drying time varies depending on layer thickness and weather conditions. The epoxy primer is generally dry to the touch after 7 hours, and completely dry after 18 hours.

Minimum recoating time : As soon as the surface becomes sticky, but does not transfer to touch, from 7 to 18 hours.

Maximum recoating time : 7 days at a substrate temperature of 22.2°C (72°F). This interval is reduced at higher temperatures.

MIXTURE SHELF LIFE : 3.78 litres (1 gallon) or 18.92 litres (5 gallons) can be stored for 30 minutes at 22.2°C (72°F). A longer shelf life can be achieved by mixing smaller quantities or by cooling components A and B before mixing them.

STORAGE TEMPERATURE : The acceptable storage temperature range is 15.6°C to 26.7°C (60°F to 80°F).

Safety : Material Safety Data Sheets for components A and B are available on request.

TECHNICAL DATA TABLE

	PROPERTIES	TEST METHOD	VALUES	
			Metric	Imperial
PHYSIQUES	Resistance to salt spray and to rust	ASTM B117, 720 hours	No rust or swelling	
	Flexural strength	ASTM D522 (Mandrin test)	Passes	
	Hardness (Shore D)	ASTM D2240	70	
	Adhesion to steel (SSPCSP 5)	ASTM D4541	> 10342 kPa	> 1500 psi

APPLICATIONS : Rehabilitation of tanks, clarifiers and basins
 Rehabilitation of pumping stations and wastewater treatment facilities

DATA SHEET

SSR-155 EPOXY PRIMER AND SEALER

PRODUCT DESCRIPTION : Transparent ater-based, flexible and superfluid, epoxy primer and sealer.

FUNCTION : Priming and sealing of concrete surfaces to be rehabilitated or protected before the coating is applied. Its use allows a better adhesion of the epoxy coating and minimizes its absorption by sealing the surface and reducing degassing. Used as a polymer additive with repair mortars.

COMPOSITION : Mechanical mixing of omponent A (clear epoxy resin) and component B (amber hardener), in a ratio of 1:1.

METHOD OF USE : Can be applied with a synthetic nap roller, a brush or by airless spraying. The best dosages and mixtures are obtained by using a multi-component airless spraying system or any other suitable method approved by Soleno Service.

TEMPERATURE OF USE : The temperature of the surface to be rehabilitated must be between 4.4°C and 48.9°C (40°F and 120°F).

RECOMMENDED THICKNESS : The thickness of the primer coat will depend on the porosity of the substrate to be rehabilitated. It generally varies from 3 to 8 mils. If necessary, SSR-155 epoxy primer can be applied in one or two coats, until the substrate is saturated, provided the overlap range is respected.

DRYING AND RECOATING TIME : Drying time varies depending on layer thickness and weather conditions. The epoxy primer is generally dry to the touch after 1 hour, and completely dry after 4 hours.

Minimum recoating time : As soon as the surface becomes sticky, but does not transfer to touch, from 2 to 4 hours.

Maximum recoating time : 72 hours at a substrate temperature of 22.2°C (72°F). This interval is reduced at higher temperatures.

MIXTURE SHELF LIFE : 3.78 litres (1 gallon) can be stored for 45 minutes at 22.2°C (72°F). A longer shelf life can be achieved by mixing smaller quantities or by cooling components A and B before mixing them.

STORAGE TEMPERATURE : The acceptable storage temperature range is 15.6°C to 26.7°C (60°F to 80°F).

SAFETY : Material Safety Data Sheets for components A and B are available on request.

TECHNICAL DATA TABLE

	PROPERTIES	TEST METHOD	VALUES	
			Metric	Imperial
PHYSICAL	Hardness (Shore D)	ASTM D2240		70
	Adhesion to concrete	ASTM D7234	Substrate failure	
	Solids by volume, as supplied	Calculated	76.0% (in water)	

APPLICATIONS : Rehabilitation of manholes and catch basins
 Rehabilitation of large-diameter pipes
 Rehabilitation of tanks and basins

Rehabilitation of pumping stations
 Surface protection

DATA SHEET

SSR-171 FS EPOXY PRIMER

PRODUCT DESCRIPTION : Transparent epoxy primer without volatile organic compounds (VOCs).

FUNCTION : Priming of brick, concrete or masonry surfaces to be rehabilitated or protected before the coating is applied. Its use allows a better adhesion of the epoxy coating and minimizes its absorption by sealing the surface and reducing degassing.

COMPOSITION : Mechanical mixing of component A (clear epoxy resin) and component B (amber hardener), in a ratio of 1:1.

METHOD OF USE : Can be applied with a synthetic nap roller or by airless spraying. The best dosages and mixtures are obtained by using a multi-component airless spraying system approved by Soleno Service. Use of a paintbrush is not recommended.

TEMPERATURE OF USE : The temperature of the surface to be rehabilitated must be between 4.4°C and 26.7°C (40°F and 80°F).

RECOMMENDED THICKNESS : The thickness of the primer coat will depend on the porosity of the substrate to be rehabilitated. It generally varies from 5 to 10 mils. If necessary, SSR-171 FS epoxy primer can be applied in several coats, provided the overlap range is respected.

DRYING AND RECOATING TIME : Drying time varies depending on layer thickness and weather conditions. The epoxy primer is generally dry to the touch after 4 hours, and completely dry after 7 hours.

Minimum recoating time : As soon as the surface becomes sticky, but does not transfer to touch, from 2 to 4 hours.

Maximum recoating time : 48 hours at a substrate temperature of 12.8°C (55°F). This interval is reduced at higher temperatures.

TEMPERATURE RESISTANCE : The SSR-171 FS can be used for a substrate temperature of up to 93.3°C (200°F).

MIXTURE SHELF LIFE : 3.78 litres (1 gallon) can be stored for 40 minutes at 12.8°C (55°F). A longer shelf life can be achieved by mixing smaller quantities or by cooling components A and B before mixing them.

STORAGE TEMPERATURE : The acceptable storage temperature range is 15.6°C to 26.7°C (60°F to 80°F).

Safety : Material Safety Data Sheets for components A and B are available on request.

TECHNICAL DATA TABLE

	PROPERTIES	TEST METHOD	VALUES	
			Metric	Imperial
PHYSICAL	Tensile Strength	ASTM D638	33789 kPa	4900 psi
	Elongation	ASTM D638	12.0%	
	Hardness (Shore D)	ASTM D2240	74	
	Adhesion to concrete	ASTM D7234	Substrate failure	
	VOC	Calculated	0.0 kg/l	0.0 lb/gal

APPLICATIONS : Rehabilitation of manholes and catch basins
 Rehabilitation of large-diameter pipes
 Rehabilitation of tanks and basins

Rehabilitation of pumping stations
 Surface protection

DATA SHEET

SSR-175 EPOXY PRIMER AND SEALER

PRODUCT DESCRIPTION : White epoxy primer and sealer without volatile organic compounds (VOCs).

FUNCTION : Priming and sealing of brick, concrete or masonry surfaces to be rehabilitated or protected before the coating is applied. Its use allows a better adhesion of the epoxy coating and minimizes its absorption by sealing the surface and reducing degassing. When used on wet concrete, it minimizes the transmission of water vapour.

COMPOSITION : Mechanical mixing of component A (white epoxy resin) and component B (amber hardener), separately. Then, combination of the mixture of component A and component B in a ratio of 1.5:1.

METHOD OF USE : Can be applied with a synthetic short nap roller or by airless spraying. The best dosages and mixtures are obtained by using a multi-component airless spraying system approved by Soleno Service. Use of a paintbrush is not recommended.

TEMPERATURE OF USE : The temperature of the surface to be rehabilitated must be between 0°C and 60°C (32°F and 140°F), and at least -15°C (5°F) above the dew point. For optimal performance, it should be at 15.6°C (60°F) and a maximum relative humidity of 85%.

RECOMMENDED THICKNESS : The thickness of the primer coat will depend on the porosity of the substrate to be rehabilitated. It generally varies from 5 to 10 mils. If necessary, SSR-175 FS epoxy primer can be applied in several coats, provided the overlap range is respected.

DRYING AND RECOATING TIME : Drying time varies depending on layer thickness and weather conditions. The epoxy primer is generally dry to the touch after 6 hours, and completely dry after 8 hours.

Minimum recoating time : As soon as the surface becomes sticky, but does not transfer to touch, from 6 to 8 hours.

Maximum recoating time : 7 days at a substrate temperature of 22.2°C (72°F). This interval is reduced at higher temperatures.

MIXTURE SHELF LIFE : 9.5 litres (2.5 gallons) can be stored for 52 minutes at 22.2°C (72°F). A longer shelf life can be achieved by mixing smaller quantities or by cooling components A and B before mixing them.

STORAGE TEMPERATURE : The acceptable storage temperature range is 10°C to 37.8°C (50°F to 100°F).

SAFETY : Material Safety Data Sheets for components A and B are available on request.

TECHNICAL DATA TABLE

	PROPERTIES	TEST METHOD	VALUES	
			Metric	Imperial
PHYSICAL	Adhesion to concrete	ASTM D7234	Substrate failure	
	VOC	Calculated	0.0 kg/l	0.0 lb/gal
	Solid matter content	By volume	100.0%	

APPLICATIONS : Rehabilitation of manholes and catch basins
Rehabilitation of large-diameter pipes
Rehabilitation of tanks and basins

Rehabilitation of pumping stations
Surface protection

DATA SHEET

SSR-405 EPOXY COATING

PRODUCT DESCRIPTION : Green solvent-free epoxy coating, composed of 100% solids (no shrinkage).

FUNCTION : Rehabilitation or protection of existing structures. Allows for the improvement of the structural integrity of structures and/or the extension of their service life in the face of exposure to various acid and caustic agents, as well as abrasion and corrosion.

COMPOSITION : Combination of component A (white epoxy resin) and component B (green hardener), in a ratio of 3:1.

METHOD OF USE : Can be applied by paintbrush, roller or airless spraying. The best dosages and mixtures are obtained by using a Graco XP50 multi-component airless spraying system approved by Soleno Service.

TEMPERATURE OF USE : The temperature of the surface to be rehabilitated must be between 4.4°C and 48.9°C (40°F and 120°F).

RECOMMENDED THICKNESS : The thickness of the epoxy coating can vary from 40 to 200 mils. If necessary, SSR-405 epoxy coating can be applied in several coats, provided that the overlap range is respected.

DRYING AND RECOATING TIME : Drying time varies depending on layer thickness and weather conditions. The epoxy coating is generally dry to the touch after 3.5 hours, and completely dry after 5 hours.

Minimum recoating time : As soon as the surface becomes sticky, but does not transfer to touch, from 3 to 5 hours.

Maximum recoating time : 12 hours at a substrate temperature of 22.2°C (72°F). This interval is reduced at higher temperatures.

TEMPERATURE RESISTANCE : The SSR-405 can be used for a substrate temperature up to 65.6°C (150°F). However, it can also be used in environments up to 93.3°C (200°F) by undergoing post-cure heat treatment.

MIXTURE SHELF LIFE : 3.78 litres (1 gallon) can be stored for 20 minutes at 22.2°C (72°F). A longer shelf life can be achieved by mixing smaller quantities or by cooling components A and B before mixing them.

STORAGE TEMPERATURE : The acceptable storage temperature range is 15.6°C to 26.7°C (60°F to 80°F).

SAFETY : Material Safety Data Sheets for components A and B are available on request.

TECHNICAL DATA TABLE

	PROPERTIES	TEST METHOD	VALUES	
			Metric	Imperial
PHYSICAL	Tensile Strength	ASTM D638	52400 kPa	7600 psi
	Elongation	ASTM D638	3.5%	
	Compressive strength	ASTM D695	124106 kPa	18000 psi
	Flexural strength	ASTM D790	89632 kPa	13000 psi
	Hardness (Shore D)	ASTM D2240	88	
	Abrasion resistance (Taber Test, CS-17 grinding wheel)	ASTM D4060 (1 load of 1kg -1000 cycles)	Loss of < 112 mg	
	Adhesion to steel (SSPC-10)	ASTM D4541	> 9653 kPa	> 1400 psi
	Adhesion to concrete	ASTM D7234	Substrate failure	
	60-day cathodic detachment : diameter of detachment	Spec. Con-Ed G8189-4	0.7 cm	0.276 po
	VOC	Calculated	0.0 kg/l	0.0 lb/gal

APPLICATIONS : Rehabilitation of manholes and catch basins
Rehabilitation of large-diameter pipes
Rehabilitation of tanks and basins

Rehabilitation of pumping stations
Surface protection

DATA SHEET

SSR-405T EPOXY COATING - TROWEL APPLICATION

PRODUCT DESCRIPTION : Blue solvent-free epoxy coating, composed of 100% solids (no shrinkage).

FUNCTION : Rehabilitation or protection of existing structures. Trowel application is recommended. Allows for the improvement of the structural integrity of structures and/or the extension of their service life in the face of exposure to various acid and caustic agents, as well as abrasion and corrosion.

COMPOSITION : Combination of component A (white epoxy resin) and component B (blue hardener), in a ratio of 3:1.

METHOD OF USE : Can be applied by paintbrush, roller, trowel or any other suitable method approved by Soleno Service.

TEMPERATURE OF USE : The temperature of the surface to be rehabilitated must be between 10°C and 48.9°C (50°F and 120°F).

RECOMMENDED THICKNESS : The thickness of the epoxy coating can vary from 40 to 125 mils. A "C" component can be added to the mixture to reduce subsidence and reach a layer of 200 mils. If necessary, SSR-405T epoxy coating can be applied in several coats, as long as the overlap range is respected.

DRYING AND RECOATING TIME : Drying time varies depending on layer thickness and weather conditions. The epoxy coating is generally dry to the touch after 3.5 hours, and completely dry after 5 hours.

Minimum recoating time : As soon as the surface becomes sticky, but does not transfer to touch, from 3 to 5 hours.

Maximum recoating time : 12 hours at a substrate temperature of 22.2°C (72°F). This interval is reduced at higher temperatures.

TEMPERATURE RESISTANCE : The SSR-405 FS can be used for a substrate temperature of up to 93.3°C (200°F).

MIXTURE SHELF LIFE : 1.89 litres (0.5 gallons) can be stored for 20 minutes at 22.2°C (72°F). A longer shelf life can be achieved by mixing smaller quantities or by cooling components A and B before mixing them.

STORAGE TEMPERATURE : The acceptable storage temperature range is 15.6°C to 26.7°C (60°F to 80°F).

SAFETY : Material Safety Data Sheets for components A and B are available on request.

TECHNICAL DATA TABLE

	PROPERTIES	TEST METHOD	VALUES	
			Metric	Imperial
PHYSICAL	Tensile Strength	ASTM D638	33784 kPa	4900 psi
	Elongation	ASTM D638	0.7%	
	Compressive strength	ASTM D695	128242 kPa	18600 psi
	Flexural strength	ASTM D790	69637 kPa	10100 psi
	Hardness (Shore D)	ASTM D2240	85	
	Adhesion to concrete	ASTM D7234	Substrate failure	
	VOC	Calculated	0.0 kg/l	0.0 lb/gal

APPLICATIONS : Rehabilitation of manholes and catch basins
 Rehabilitation of pipes
 Rehabilitation of tanks, clarifiers and basins

Rehabilitation of pumping stations and wastewater treatment facilities
 Surface protection

SPECIFICATIONS

STRUCTURE REHABILITATION WITH SSR EPOXY COATING

SCOPE

These specifications apply to the application, components, and methods of using of SSR epoxy coating for structure rehabilitation.

APPLICATIONS

The SSR epoxy coating is recommended for the improvement of the structural integrity of structures, and/or to prolong their life against exposure to various acidic and caustic agents, as well as abrasion and corrosion. This epoxy is used for the rehabilitation of existing structures, such as underground pipes (concrete, steel, cast iron, bricks, PVC and HDPE), manholes and catch basins made of concrete or bricks, wastewater treatment facilities, steel or concrete structures, various tanks and basins, and reinforcing cables.

METHOD OF USE

Surface preparation

The performance of the coating is directly linked to the level of preparation of the surface, which must be free of all contaminants such as sediment, dust, oils, greases, chemical contaminants, etc.

1. Cleaning the surface

To obtain a uniform surface, the preparation of the substrate can be made with a solvent, jet of high-pressure water at 5 000 psi or Very High Pressure 10 000 psi (depending on the degradation of the existing structure), sand blast or steam, depending on the nature and the level of contamination.

2. Sealing of cracks (when required)

If needed, cracks must be sealed with a method approved by Soleno Service.

3. Application of a cement product for repairing the profile (when required)

When rehabilitating a concrete structure, the unevenness of the profile can be corrected with a cement product approved by Soleno Service

4. Primer layer application

In order to ensure the proper adhesion of SSR epoxy coating, it is recommended to apply a layer of primer on the surface to rehabilitate. The selection of the primer layer, approved by Soleno Service, will depend on the type of structure to be rehabilitated.

Application of epoxy coating

The epoxy coating can be applied with a brush, roller or by airless spray. The best dosing and mixtures can be obtained by the use of an airless spray multi-components system Graco XP50 type approved by Soleno Service. The product must be applied at stable or declining temperatures. The thickness of the coating applied is validated by the technician with the help of a gauge certified by the manufacturer. If needed, the SSR epoxy coating can be applied in several layers, provided that any additional layer is applied within the recommended application time range indicated on the technical sheets. Before each new layer, the surface should be inspected, cleaned and dried thoroughly. If the interval between two layers is elapsed, the surface must be sanded and cleaned before applying a new layer.

Testing (optional)

In order to ensure the proper execution of the work, an electrical conductivity test (spark test) must be performed. This test consists in passing an electric arc on the entire surface of the rehabilitated surface using a metal brush, to detect the possible weaknesses or the lack of consistency of the surface after a drying time of five (5) hours. If needed, the technician will perform the required touch ups and will confirm the good quality and consistency of the coating application.

* For more information on the range of chemicals offered, consult your Soleno Service representative.

DATA SHEET

SSR-581 POLYUREA COATING

PRODUCT DESCRIPTION : Yellow solvent-free, flexible polyurea coating composed of 100% solids.

FUNCTION : Rehabilitation or protection of existing structures, in steel, aluminium, HDPE, PVC, wood or concrete. Its elongation up to 614% restores watertightness to the structures while maintaining its flexibility. Among other things, it allows for the rehabilitation of manhole chimneys subjected to the freeze-thaw cycle. Its use extends the service life of structures in the face of exposure to various acid and caustic agents, as well as abrasion and corrosion.

COMPOSITION : Combination of two single-use cartridges (750 ml each), in a 1:1 ratio.

METHOD OF USE : Application by pneumatic spraying capable of maintaining a constant force, approved by Soleno Service.

TEMPERATURE OF USE : The temperature of the surface to be rehabilitated must be between -17.8°C and 65.6°C (0°F and 150°F).

RECOMMENDED THICKNESS : The recommended polyurea layer thickness is achieved when the colour is opaque and uniform.

DRYING AND RECOATING TIME : Drying time varies depending on layer thickness and weather conditions. The polyurea coating is generally dry to the touch after 10 seconds, and completely dry after 1 hour.

Minimum recoating time : As soon as the surface becomes sticky, but does not transfer to touch, 10 seconds.

Maximum recoating time : 1 hour at a substrate temperature of 22.2°C (72°F). This interval is reduced at higher temperatures.

TEMPERATURE RESISTANCE : The SSR-581 FS can be used for a substrate temperature of up to 65.6°C (150°F).

MIXTURE SHELF LIFE : Settles in 10 seconds at 22.2°C (72°F).

STORAGE TEMPERATURE : The acceptable storage temperature range is 15.6°C to 26.7°C (60°F to 80°F).

SAFETY : Material Safety Data Sheets for components A and B are available on request.

TECHNICAL DATA TABLE

	PROPERTIES	TEST METHOD	VALUES	
			Metric	Imperial
PHYSICAL	Tensile Strength	ASTM D638	18815 kPa	2729 psi
	Elongation	ASTM D638	614.0%	
	Hardness (Shore A)	ASTM D2240	80	
	Hardness (Shore D)	ASTM D2240	30	
	Abrasion resistance (Taber Test, CS-17 grinding wheel)	ASTM D4060 (1 load of 1kg -1000 cycles)	Loss of < 1.8 mg	
	Recommended pH range	Do not exceed the application range	3 to 12	
	Shrinkage,% (80 mils DFT)	Internal	0.02 mm	0.8 mils

APPLICATIONS : Rehabilitation of manholes and catch basins
 Rehabilitation of large-diameter pipes
 Rehabilitation of tanks and basins

Rehabilitation of pumping stations
 Surface protection

SPECIFICATIONS

STRUCTURE REHABILITATION WITH SSR POLYUREA COATING

SCOPE

These specifications apply to the application, components, and methods of using of SSR polyurea coating for structure rehabilitation.

APPLICATIONS

The SSR polyurea coating is recommended for the improvement of concrete, aluminum, wood and other structures sealing, and/or to prolong their life against exposure to various acidic, oily and caustic agents, as well as abrasion and corrosion. This polyurea is used for the rehabilitation of existing structures, such as manholes and catch basins made of concrete or bricks. It is used for waterproofing concrete structures and steel or aluminum industrial facilities.

METHOD OF USE

Surface preparation

The performance of the coating is directly linked to the level of preparation of the surface, which must be free of all contaminants such as sediment, dust, oils, greases, chemical contaminants, etc.

1. Cleaning the surface

To obtain a uniform surface, the preparation of the substrate can be made with a solvent, jet of high-pressure water at 5 000 psi or Very High Pressure 10 000 psi (depending on the degradation of the existing structure), sand blast or steam, depending on the nature and the level of contamination.

2. Sealing of cracks (when required)

If needed, cracks must be sealed with a method approved by Soleno Service.

3. Application of a cement product for repairing the profile (when required)

When rehabilitating a concrete structure, the unevenness of the profile can be corrected with a cement product approved by Soleno Service

4. Primer layer application

In order to ensure the proper adhesion of SSR polyurea coating, it is recommended to apply a layer of primer on the surface to rehabilitate. The selection of the primer layer, approved by Soleno Service, will depend on the type of structure to be rehabilitated.

Application of polyurea coating

The polyurea coating can be applied by using a pneumatic device equipped with a 90° spray nozzle at the end of the compressor pipe. The best dosing and mixtures can be obtained by the use of an airless spray multi-components system approved by Soleno Service. The product must be applied at stable or declining temperatures. The thickness of the coating applied is validated by the technician with the help of a gauge certified by the manufacturer. If needed, the SSR polyurea coating can be applied in several layers, provided that any additional layer is applied within the recommended application time range indicated on the technical sheets. Before each new layer, the surface should be inspected, cleaned and dried thoroughly. If the interval between two layers is elapsed, the surface must be sanded and cleaned before applying a new layer.

Testing

If needed, the technician will perform the required touch ups and will confirm the good quality and consistency of the coating application.

* For more information on the range of chemicals offered, consult your Soleno Service representative.

DATA SHEET

SSR-A-6 AQUATAPOXY COATING

PRODUCT DESCRIPTION : White, solvent-free, anti-corrosion epoxy coating, composed of 100% solids.

FUNCTION : Rehabilitation or protection of food and drinking water structures with anti-corrosive and water-repellent epoxy coating.

COMPOSITION : Combination of component A (white epoxy resin) and component B (brown hardener), in a ratio of 1:1.

METHOD OF USE : Can be applied by paintbrush, roller or airless spraying. The best dosages and mixtures are obtained by using a Graco XP50 multi-component airless spraying system approved by Soleno Service.

TEMPERATURE OF USE : The temperature of the surface to be rehabilitated must be between 4.4°C and 48.9°C (40°F and 120°F).

RECOMMENDED THICKNESS : The thickness of the epoxy coating can vary from 60 to 120 mils. If necessary, SSR-A-6 epoxy coating can be applied in several coats, provided that the overlap range is respected.

DRYING AND RECOATING TIME : Drying time varies depending on layer thickness and weather conditions. The epoxy coating is generally dry to the touch after 4 hours, and completely dry after 9 hours.

Minimum recoating time : As soon as the surface becomes sticky, but does not transfer to touch, 4 hours.

Maximum recoating time : 18 hours at a substrate temperature of 22.2°C (72°F). This interval is reduced at higher temperatures. The recommended cure time before return to service is 3 days at 25°C (77°F).

TEMPERATURE RESISTANCE : The SSR-6 can be used for a substrate temperature up to 65.6°C (150°F). However, it can also be used in environments up to 93.3°C (200°F) by undergoing post-cure heat treatment.

MIXTURE SHELF LIFE : 3.78 litres (1 gallons) can be stored for 30 minutes at 22.2°C (72°F). A longer shelf life can be achieved by mixing smaller quantities or by cooling components A and B before mixing them.

STORAGE TEMPERATURE : The acceptable storage temperature range is 15.6°C to 26.7°C (60°F to 80°F).

SAFETY : Material Safety Data Sheets for components A and B are available on request.

TECHNICAL DATA TABLE

	PROPERTIES	TEST METHOD	VALUES	
			Metric	Imperial
PHYSICAL	Tensile Strength	ASTM D638	41368 kPa	6000 psi
	Elongation	ASTM D638	1.3%	
	Compressive strength	ASTM D695	68940 kPa	10000 psi
	Flexural strength	ASTM D790	64810 kPa	9400 psi
	Hardness (Shore D)	ASTM D2240	87	
	Abrasion resistance (Taber Test, CS-17 grinding wheel)	ASTM D4060 (1 load of 1kg -1000 cycles)	Loss of < 40 mg	
	Adhesion to concrete	ASTM D7234	Substrate failure	
	VOC	Calculated	0.0 kg/l	0.0 lb/gal

APPLICATIONS : Rehabilitation of manholes and catch basins
Rehabilitation of large-diameter pipes
Rehabilitation of tanks and basins

Rehabilitation of food and drinking water installations
Surface protection

OPTIONS : Choice of coating colours available on request.

SPECIFICATIONS

STRUCTURE REHABILITATION WITH SSR AQUATAPOXY COATING

PORTÉE

These specifications apply to the application, components, and methods of using of AquataPoxy SSR epoxy coating for structure rehabilitation.

APPLICATIONS

The AquataPoxy SSR epoxy coating is recommended for the improvement of the structural integrity of structures, and/or to prolong their life against exposure to various acidic and caustic agents, as well as abrasion and corrosion. This epoxy is used for the rehabilitation of existing structures, such as underground pipes (concrete, steel, cast iron, bricks, PVC and HDPE of more than 750 mm (30 in) in diameter), manholes and catch basins made of concrete or bricks, water treatment facilities, steel or concrete structures, various tanks and basins of 189 litres (50 gallons) or more, and pharmaceutical facilities.

METHOD OF USE

Surface preparation

The performance of the coating is directly linked to the level of preparation of the surface, which must be free of all contaminants such as sediment, dust, oils, greases, chemical contaminants, etc.

1. Cleaning the surface

To obtain a uniform surface, the preparation of the substrate can be made with a solvent, jet of high-pressure water at 5 000 psi or Very High Pressure 10 000 psi (depending on the degradation of the existing structure), sand blast or steam, depending on the nature and the level of contamination.

2. Sealing of cracks (when required)

If needed, cracks must be sealed with a method approved by Soleno Service.

3. Application of a cement product for repairing the profile (when required)

When rehabilitating a concrete structure, the unevenness of the profile can be corrected with a cement product approved by Soleno Service

4. Primer layer application

In order to ensure the proper adhesion of AquataPoxy SSR epoxy coating, it is recommended to apply a layer of primer on the surface to rehabilitate. The selection of the primer layer, approved by Soleno Service, will depend on the type of structure to be rehabilitated.

Application of epoxy coating

The epoxy coating can be applied with a brush, roller or by airless spray. The best dosing and mixtures can be obtained by the use of an airless spray multi-components system Graco XP50 type approved by Soleno Service. The product must be applied at stable or declining temperatures. The thickness of the coating applied is validated by the technician with the help of a gauge certified by the manufacturer. If needed, the AquataPoxy SSR-A-6 epoxy coating can be applied in several layers, provided that any additional layer is applied within the recommended application time range indicated on the technical sheets. Recoating interval is reduced at higher temperatures. Before each new layer, the surface should be inspected, cleaned and dried thoroughly. If the interval between two layers is elapsed, the surface must be sanded and cleaned before applying a new layer.

Testing

In order to ensure the proper execution of the work, an electrical conductivity test (spark test) must be performed. This test consists in passing an electric arc on the entire surface of the rehabilitated surface using a metal brush, to detect the possible weaknesses or the lack of consistency of the surface after a drying time of five (5) hours. If needed, the technician will perform the required touch ups and will confirm the good quality and consistency of the coating application.

* For more information on the range of chemicals offered, consult your Soleno Service representative.