

PROTECTIVE LINING SYSTEMS

SPRAY APPLIED POLYURETHANE TECHNOLOGY FOR
STRUCTURAL REHABILITATION, INFILTRATION
CONTROL, CORROSION MANAGEMENT & PEACE OF
MIND.



SPRAYWALL®

ABOUT SPRAYROQ

1990

Sprayroq's chemist and operations team jointly developed their core product known as SprayWall. This product was created to compliment the CIPP process, at the time known as the Insituform process.

By partnering with several trained contractors in the Southeastern United States, Sprayroq was able to successfully launch this unique infrastructure rehabilitation product, and change the game in how underground rehabilitation projections would be viewed in the future.

1995

Sprayroq relocated from its home in Jacksonville, Florida to their current base of operation in the Birmingham, Alabama area. The genesis of this move was the desire to be in the middle of one of the largest infrastructure rehabilitation projects in US history. During the following 10-year period, their contractors successfully rehabilitated over 14,000 structures with SprayWall. To this date, there are no application or product failures of SprayWall in this Jefferson County, Alabama rehabilitation program.

2001

Sprayroq was acquired by Signet, LLC of Akron, Ohio and was tasked to take the product line beyond the boundaries of the Southeastern United States to develop the rest of the North American market. Since that time, they have grown to 18 contractors in dedicated markets serving approximately 70% of the market. That number is still growing today.

2008

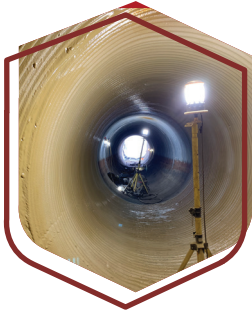
In late 2008, Sprayroq signed their first Asian contractor in Singapore. Since that time, they have established the Asian headquarters in Singapore under the name Sprayroq of Asia. The team's objective is to grow into the ASEAN country markets and provide support to their joint venture partners in China, Sprayroq Trading, and Beijing.

TODAY

Sprayroq's corporate head quarters has transformed into a state-of-the-art learning & innovation center where their network of SCPs can experience an enhanced curriculum, technical resources, and leadership training so that when they return to their markets, they are equipped with more confidence, passion, and energy.



A WORD ABOUT POLYURETHANES



While both epoxy and polyurethane are catalyzed, two-component coatings, polyurethanes cure much faster than epoxies, allowing them to be applied much more thickly in one application.

Typically, an epoxy must cure for 6-24 hours. Sprayroq's polyurethane products begin curing in about 10 seconds. They reach a tack-free state within 2 minutes and full cure-through within 4-6 hours.



Depending upon coating thickness, typical polyurethane applications allow a structure to return to water service within a few minutes or hours as opposed to dozens of hours or even days.

All this performance comes without any emission of volatile organic compounds (VOCs), making it safe for applicators and the environment. And different formulations allow varying degrees of elasticity and rigidity to match structural and protective performance needs.

APPLICATIONS

PROTECT, REHABILITATE AND IMPROVE A BROAD VARIETY OF INFRASTRUCTURE ASSETS

- [+] Manholes
- [+] Lift Stations
- [+] Wet Wells
- [+] Tanks
- [+] Grit Chambers
- [+] Clarifiers
- [+] Digesters
- [+] Junction Boxes
- [+] Pipelines (Man Entry Only)
- [+] Tunnels
- [+] Secondary Containment
- [+] Lagoons

Sprayroq polyurethanes are fast setting, tough, corrosion and abrasion resistant linings that can be spray applied at any desired thickness in a single mobilization.

Our products are ideally designed for applications on surfaces exposed to acids, corrosives and other caustic elements. Environmental and climatic factors such as freeze/thaw cycling, high humidity or shrinking and swelling soil conditions have minimal effect.

With a range of formulas that span applications requiring elastomeric, semi-rigid or rigid (structural) properties, Sprayroq is the source for structural rehabilitation and corrosion protection solutions that provide excellent Return On Investment (ROI) and extension of asset performance life.





SPRAYROQ CERTIFIED PARTNERS (SCP)

CERTIFIED PARTNER PROGRAM

Though Sprayroq is proud of its solid line of products that perform above expectations, we feel that's not enough.

To bring the most value to our contractor customers and their end users, we know it's critical to be able to rely on the ability of those applying our products to do the job right the first time, every time.

After all the testing and work it took for us to arrive at our ideal product formulations, we realized that coaxing optimum performance from each application would require a thorough understanding of the chemical properties of the products and their interaction with surrounding environments.

This meant developing a thorough training course that would encompass virtually every infrastructure substrate, atmospheric and moisture condition that may be encountered in the field.

TRAINING & CERTIFICATION

All contractors wishing to use Sprayroq products in their rehabilitation work must become Sprayroq Certified Partners (SCPs). Candidates are carefully selected and must pass an extensive training and certification course to earn SCP status.

[+] ONLY SCPs are authorized to apply Sprayroq products

[+] SCP candidates go through two weeks of rigorous training in product knowledge, performance theory and field application

[+] SCPs are personally certified by the President of Sprayroq

[+] SCPs must submit to annual skills review to maintain their certification

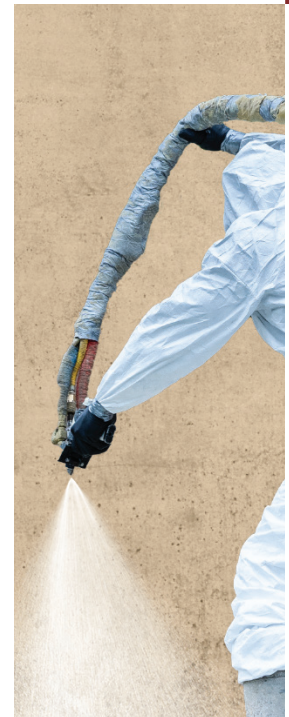
Upon successful completion of this course, applicators are prepared not just to correctly apply the material, but also to make fact-based judgments about real-world conditions that will ensure the integrity of every installation they do. And they will work with the confidence that they're supported with constantly updated manufacturer training and technological support.



THIRD PARTY TESTING

We appreciate that Sprayroq products' end-users are often spending taxpayer money, and so are held to a high level of accountability. We take responsibility for maintaining your high reputation as seriously as our own. That's why we're committed to an ongoing program of third-party testing for our products' performance.

We use only ASTM-accredited professional labs to test actual performance of our materials against industry standards. You can have confidence that what we claim our products can do, they'll do. So when you specify a Sprayroq product for your next infrastructure rehabilitation project, you're purchasing a long-term solution that will live up to your expectations. And you don't have to take our word for it. We even cross-test our lab results between independent testers. We have the confidence that our claims will stand up to the test, so you can too.



THINGS TO CONSIDER WHEN SELECTING A REHABILITATION OR PROTECTIVE METHOD

Your engineers have finalized the specifications on your upcoming project, and now it's time to decide how you're going to tackle the physical requirements of infrastructure rehabilitation or protection. A few considerations will help you weed out viable techniques from obvious non-starters among the plethora of options you have to choose from.



Certified to NSF/ANSI 61

TEST DESCRIPTION	METHOD	SPRAYWALL	SPRAYSHIELD GREEN II
Flexural Modulus	ASTM D790	>735,000 psi/5,067.6 Mpa	>75,000 psi / 517.1 Mpa
Tensile Strength, psi	ASTM D638	>7,450 psi / 51.4 Mpa	>2,900 psi / 20.0 Mpa
Elongation %	ASTM D638	<4%	43%
Tear Strength, pli	ASTM D624	N/A	593pli / 104 Kn/m
Compressive Strength	ASTM D695	>18,000 psi / 142.1 Mpa	N/A
Water Permeation g/day/m³	ASTM E96	1.65	1.49
Abrasion, mg loss / 1,000 cycles	ASTM D4060	17.7 mg loss	42.0 mg loss
Hardness, Shore D	ASTM D2240	85	62.68
Density, lbs./ft	ASTM D792	87 lbs./ft / 1394 Kg/m ³	67.5 lbs./ft/1081 Kg/m ³
Mannings "N" Factor		0.009	N/A
NSF	NSF 61	Yes	No
Biobased Content	ASTM D6866	N/A	34%

All third party test results documents are available at www.sprayroq.com



SPRAYWALL®

THE GOLD STANDARD.

WHAT IS SPRAYWALL?

SprayWall is a 100% VOC-free self-priming polyurethane lining that reinstates structural integrity, provides infiltration control and chemical resistance for concrete, steel, masonry, fiberglass and other surfaces.

Spraywall's quick curing time allows the newly protected structure to be returned to service shortly after the application is completed.

COLOR

Gold is the standard product color. SprayWall's color is derived from the natural coloration of our raw materials.

SOLIDS BY VOLUME & VOCS

100% VOC (Volatile Organic Compounds) free

COVERAGE

16 square feet per gallon at 1/10" (100 mil) thickness. .4 square meters per liter at 2.5 mm thickness.

APPLICATION METHOD

SprayWall is applied by utilizing a proprietary heated plural component spray system. Complete integrated spray system information is available by contacting Sprayroq technical support.

SURFACE TEMPERATURE

70 F / 21 C minimum recommended. 120 F / 49 C maximum recommended for optimum protection

COMPONENTS & MIX RATIO

Part A, Resin | Part B, Hardener | 1.00 : 1.54 by volume

PACKAGING

SprayWall is sold exclusively to Sprayroq Certified Partners in 1,500 lb. / 680.4 kg sets of material.

CURE & RECOAT TIME

After the A and B components are mixed, SprayWall is tack-free in about 8 seconds, with a full gel condition after one minute. Within 30 minutes, the initial cure is complete and the structure is capable of accepting flow while complete curing continues for the next 4-6 hours.

Note: Surfaces should be cleaned thoroughly to remove any contaminants between coats. In addition, all precaution should be taken to protect the application surfaces between coats.



PREPARATION

Surfaces to be treated must be cleaned of all oil, grease, rust, scale, deposits and other debris or contaminants. All resins, including SprayWall, require a clean and dry substrate for optimal technical performance of the product.

STEEL

Solvent Cleaning (SSPC-SP1) may be necessary for steel. Surfaces to be coated should be prepared in accordance with SSPC-SP10 or NACE No.2: "Near White Blast Cleaning."

When applicable, an alternate procedure may be employed using high (>5,000 psi / >34.5 MPa) or ultrahigh (>10,000 psi / >69.0 MPa) pressure water cleaning or water with sand injection and approved rust inhibitors. The surface profile must be a minimum of 2 mils / 0.05 mm.

CONCRETE AND MASONRY

Low (2,500 – 3,000 psi / 17.2-20.7 MPa) to high (>5,000 psi / >34.5 MPa) pressure water cleaning, shot blasting, abrasive blasting or combination acid etching and water cleaning can be used to prepare these surfaces.

FIBERGLASS

Prepare fiberglass by rinsing, neutralizing, scarifying and cleaning with water or a mixture of water and solvent. Be sure all dust and loose particles are removed. The surface should be thoroughly dry before application of SprayWall.

SHELF LIFE & STORAGE

Shelf Life: 1 year in sealed, unmixed containers. Store in a sheltered area between 50 F / 10 C and 95 F / 35 C.

