

SEWER COLLECTION LININGS

REHABILITATION SYSTEM GUIDE



COMPREHENSIVE CORROSION PROTECTION SOLUTIONS FOR WASTEWATER COLLECTION AND DISTRIBUTION APPLICATIONS

Sherwin-Williams offers a complete line of products that allow the specifier to select systems that address:

- Soil movement and potential damage from vehicular traffic loads
- Highly corrosive hydrogen sulfide environments using either epoxy or polyurethane linings
- Specific details around bench/invert repairs and ceiling of chimneys

Couple these systems with structural repair mortars and chemical grouting products distributed by Sherwin-Williams for a complete rehabilitation system for your wastewater infrastructure.

If you need additional information, please contact your local Sherwin-Williams representative or send us a message at swprotective@sherwin.com.

SERVICE THAT STANDS OUT

Products You Need Right Now

Get the products you need with the same or next-day delivery and access to local inventory at more than 5,000 company-owned distribution points.

Technical Service for Optimal Applications

Our technical service team brings extensive manufacturer equipment training to ensure proficiency throughout the entire coatings process.

FROM SPEC TO PROTECT

sherwin-williams.com/protective

8-25-22_acc [Accessibility Statement](#)

**SHERWIN
WILLIAMS®**

SEWER COLLECTION LININGS

REHABILITATION SYSTEM GUIDE



SHERWIN-WILLIAMS SEWER COLLECTION LININGS AND REHABILITATION SYSTEM

Dura-Plate® 6100 and Dura-Plate® 6000 (2:1 mix)

These 100% solids, high-build, high-performance epoxy linings can achieve film builds thicker than 125 mils in a single application. Designed to provide protection for severe wastewater environments with sulfuric acid formation generated by microbial induced corrosion, these linings are ideal for the rehabilitation of sewer collection and wastewater treatment structures, in both the municipal and industrial marketplace.

Dura-Plate 6100 Features

- Plural application
- 6-Hour return to service

Dura-Plate 6000 Features

- Glass-flake reinforced
- Single-leg or plural application
- 10-hour return to service

Poly-Cote™ 115

This 100% solids, aromatic polyurethane lining can be applied up to 250 mils in a single application. It is a tough, flexible, impact-resistant waterproof lining system designed to protect concrete and brick manhole structures in highly corrosive hydrogen sulfide environments associated with municipal wastewater application, including lift stations, wet wells and manholes. The flexibility of Poly-Cote 115 is ideal for manhole applications in unstable and moving soils. Poly-Cote 115 is designed to be applied over properly prepared primed concrete substrates.

Dura-Plate Chimney Seal

This is a premium grade, UV-stable, hybrid elastomeric product for chimney sealing that is both permanent and flexible. It provides a durable, weather-resistant seal with excellent adhesion to a variety of substrates. Dura-Plate Chimney Seal provides protection against water infiltration and is recommended when movement from temperature changes or other factors are possible.

Dura-Plate Quick Set Epoxy Invert and Bench Liner

This is a 100% solids, high-build, trowel-grade, amine-cured epoxy designed to provide corrosion protection of sewer collection concrete, brick or clay inverts and manhole benches, this liner allows for return to service in as quickly as thirty minutes.

SEWER COLLECTION LININGS

REHABILITATION SYSTEM GUIDE



CEMENTITIOUS REHABILITATION SYSTEM PRODUCTS DISTRIBUTED BY SHERWIN-WILLIAMS

Calcium Aluminate Mortars

A blend of quartz silica, fibers and calcium aluminate cement, calcium aluminate mortars can be hand- or spray-applied, usually from ½" to 1" in depth. Uses include repairing concrete walls and ceilings, lining brick or concrete manholes and lift stations, etc. Calcium aluminate mortars can be especially useful when coatings are required at early stages and may be coated in as little as 12 hours. (Always consult with the coating manufacturer.) The acid resistance of the calcium aluminate cement is particularly well-suited for the wastewater industry.

Microsilica Mortars

Microsilica mortars are a blend of Portland cement, graded silica sand, fibers and silica fume. The mortar may be hand- or spray-applied, usually from ½" to 1" in depth. Uses include repairing concrete walls, ceilings, lining brick or concrete manholes and lift stations, etc. Microsilica mortar provides an extremely dense matrix and will accept coatings at earlier stages than typical Portland cement repair products.

Vertical/Overhead Mortars

Vertical/overhead mortars are one-part, polymer-modified, fast-setting silica fume fiber-reinforced mortars designed for vertical and overhead repairs from ¼" to 3" in one application. The product may be applied by hand or sprayed with a low-pressure pump.

Manufacturer: A.W. Cook Cement Products



CHEMICAL GROUTING PRODUCT SOLUTIONS DISTRIBUTED BY SHERWIN-WILLIAMS

Hydrophilic Polyurethane

Hydrophilic polyurethane is designed to react with water and form a water-impermeable gel mass. When it comes into contact with water, the grout begins to foam or gel, and depending on the temperature and amount of water present, quickly cures to a flexible, impermeable foam or gel mass unaffected by mildly corrosive environments.

Hydrophobic Polyurethane Foam

Hydrophilic polyurethane resin is designed to form a flexible gasket or plug in joints and cracks in concrete. In its uncured form, it is a pale-yellow liquid. When it comes into contact with water, the grout expands quickly and cures to a tough, flexible, adhesive, closed-cell foam that is essentially unaffected by mildly corrosive environments.

Manufacturer: Avanti Grouts

SEWER COLLECTION LININGS

REHABILITATION SYSTEM GUIDE

SEWER COLLECTION LININGS AND REHABILITATION PRODUCT SELECTION GUIDE

LINING & REHABILITATION SYSTEM SOLUTIONS									
	Hydrophobic Polyurethane	Hydrophilic Polyurethane	Calcium Aluminate Mortar	Microsilica Mortar	Vertical/Overhead Mortar	Dura-Plate® 6100	Dura-Plate 6000 Epoxy or Epoxy Mortar	Poly-Cote™ 115 Elastomeric Polyurethane	Dura-Plate Chimney Seal
COMMON ISSUES									
Weeping Leaks	•	•							
Gushing Leaks	•								
Large Annular Voids	•								
Concrete Structures	•	•							
Brick Structures	•	•							
Leaking for Joints	•	•							
Leaking for Steps	•	•							
Bench Soil Stabilization	•								
CEMENTITIOUS REPAIR MATERIALS									
Mild H2S Environment				•					
Moderate H2S Environment			•						
Minor Concrete Repair Prior to Lining					•				
Faster Overcoat Time for Epoxies			•		•				
Radial Spray Applications			•	•					
CHEMICAL-RESISTANT LININGS									
Concrete/Mortar Attack from MIC or H2S						•	•	•	•
Substrate Cracking Due to Soil Movement								•	•
Expected Settlement Cracks in Substrate								•	•
Minor Surface Imperfections to Fill						•	•	•	
6-Hour Return to Immersion Service						•			
10-Hour Return to Immersion Service						•	•		
12-Hour Return to Immersion Service						•	•	•	
24-Hour Return to Immersion Service						•	•	•	•
Low Temperature Application							•	•	
Resistance to Severe Traffic Loading									•
Radial Spray Applications						•	•	•	
Overspray Concerns						•	•	•	•
Touch-Up/Repair Materials/Packaging						•	•	•	•
Chimney Seal									•
Primer Required								•	•
Color Options						•	•	•	
Chemical Resistant						•	•	•	•

THE SHERWIN-WILLIAMS DIFFERENCE

Sherwin-Williams Protective & Marine delivers world-class industry subject matter expertise, unparalleled technical and specification service, and unmatched regional commercial team support to our customers around the globe.

sherwin-williams.com/protective
swwater@sherwin.com

SHERWIN-WILLIAMS®

©2022 The Sherwin-Williams Company
Protective & Marine Coatings
PM-793413-03 8/22