

Atlas Chempruf™ Coating and Lining Systems



atlas

Protecting INDUSTRY
from CORROSION



CHEMPRUF COATING AND LINING SYSTEMS — ***DESIGNED TO LAST!***

Atlas Chempruf Coatings and Linings are designed to protect metal and concrete from corrosive attack. These systems use the latest resin technology to shield substrates from a broad range of chemicals. Chempruf systems can be used in immersion service to 275° F (135° C) and vapor or dry heat service to 350° F (177° C). Several of the systems are compliant with current FDA regulations. Chempruf Coatings and Linings are available in three different series, each configured to provide unsurpassed performance.

CHEMPRUF 100 SERIES

The Chempruf 100 series was developed to combine chemical resistance with ease of application. Available in a variety of base resins, the 100 series coatings are reinforced with flake fiberglass. They can be easily applied to steel or concrete by brush, roller or spray. Chempruf 100 series coatings are typically applied to a dried film thickness of 20 to 60 mils.

Chempruf 120 – Bisphenol A Epoxy

Chempruf 121 – Novolac Epoxy

Chempruf 130 – Chlorendic Polyester

Chempruf 140 – Vinyl Ester

Chempruf 141 – Epoxy Novolac Vinyl Ester

Chempruf 142 – Epoxy Vinyl Ester (FDA compliant)

Refer to Chemical Resistance Chart 4-100.

Typical Applications

- Containment Dikes
- Tank Exteriors
- Walls
- Clarifiers
- Ceilings
- Structural Steel
- Ductwork
- Floors



Chempruf 140 protects containment pit in chemical plant.



Chempruf 141 protects containment dike.

CHEMPRUF 1000 SERIES

The Chempruf 1000 series linings are intended for use in applications where frequent or continual chemical immersion is likely. The reinforcing matrix of the 1000 series linings uses two layers of interlocking fiberglass flakes to achieve an impermeable barrier. The Chempruf 1000 series linings are typically trowel-applied to a finished thickness of 80 to 100 mils.

Chempruf 1300 – Chlorendic Polyester

Chempruf 1400 – Vinyl Ester

Chempruf 1410 – Epoxy Novolac Vinyl Ester

Chempruf 1420 – Epoxy Vinyl Ester (FDA compliant)

Refer to Chemical Resistance Chart 4 –1000.

Typical Applications

- Trenches
- Scrubbers
- Sumps
- Pump Pads
- Tank Interiors
- Absorbers



Chempruf lining installed in a waste treatment collection tank.



Chempruf lining in trenches at fastener manufacturing plant.

CHEMPRUF 2000/2001 SERIES

The Chempruf 2000 series linings can handle the most demanding environments. The 2000 series linings are installed where chemical exposure is severe and physical requirements are high. These linings can be applied in two configurations: a multiple mat composite (2000 series) that provides the ultimate in strength; or a fabric-reinforced composite (2001 series) that is less labor intensive to install. These linings are typically trowel-applied to finished thicknesses of 1/8" (125 mils).

Chempruf 2101 – Furan

Chempruf 2201 – Bisphenol A Epoxy

Chempruf 2211 – Novolac Epoxy

Chempruf 2300 & 2301 – Chlorendic Polyester

Chempruf 2400 & 2401 – Vinyl Ester

Chempruf 2410 & 2411 – Epoxy Novolac Vinyl Ester

Chempruf 2420 & 2421 – Epoxy Vinyl Ester (FDA compliant)

Refer to Chemical Resistance Chart 4-2000.

Typical Applications

- Process Vessels
- Trenches
- Sumps
- Floors
- Containment Areas
- Tanks



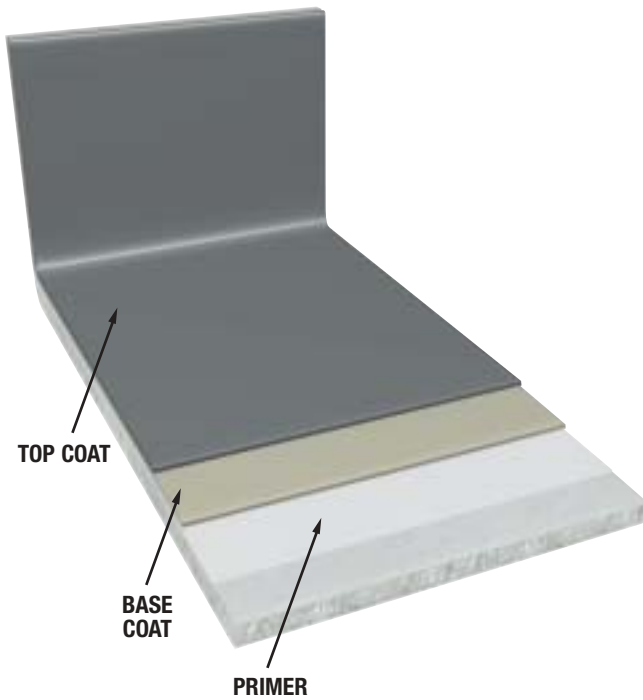
Chempruf vinyl ester lining protects pit and tank supports under automatic plating line at medical instrument manufacturing plant.



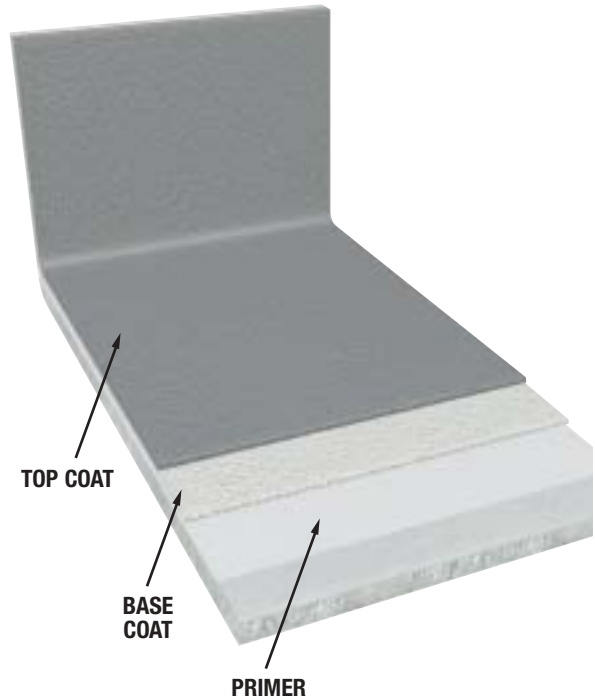
Chempruf 2300 lining system protects chemical storage containment area.

CHEMPRUF SERIES COMPOSITION DETAILS

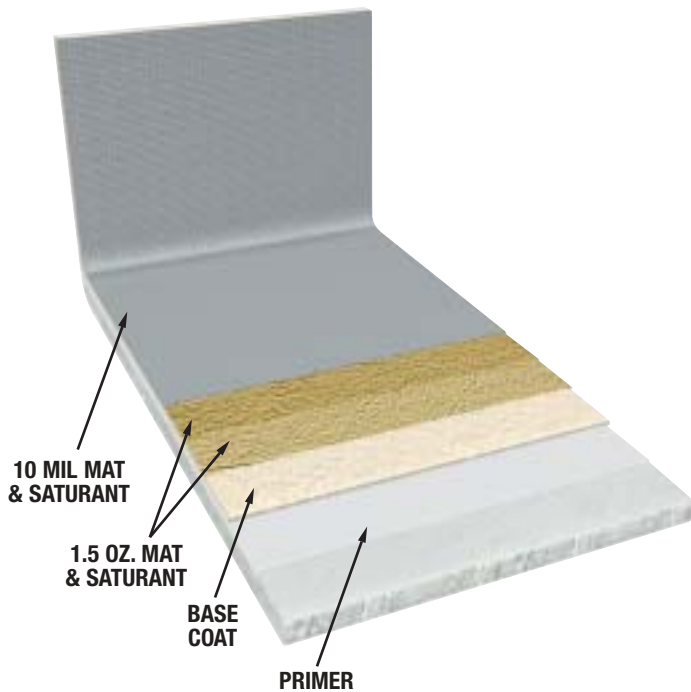
CHEMPRUF 100 SERIES



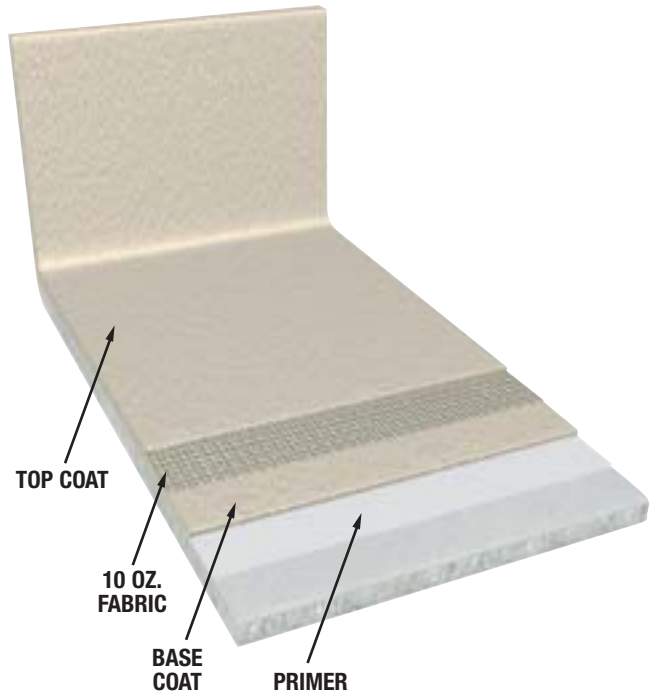
CHEMPRUF 1000 SERIES



CHEMPRUF 2000 SERIES



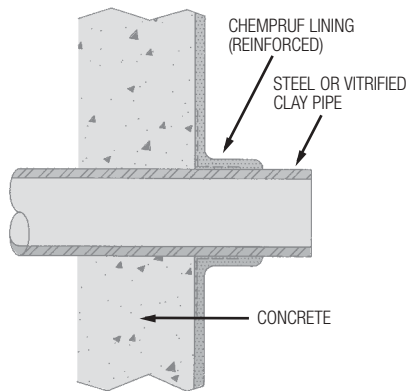
CHEMPRUF 2001 SERIES



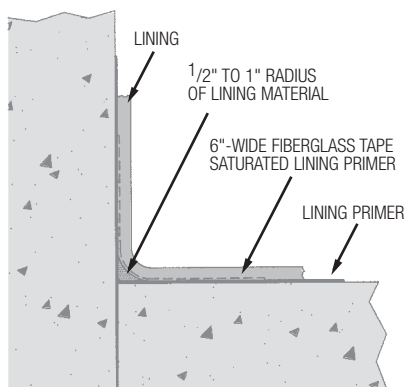
TYPICAL CHEMPRUF LINING CONSTRUCTION DETAILS

It is not possible to anticipate all the various conditions encountered on site. These typical installation details, therefore, are presented only as a guide to good installation practices. Atlas field and home office representatives are available to assist you on your specific project.

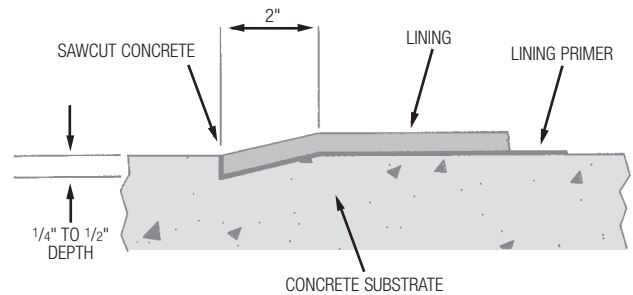
DETAIL FOR IN-PLACE OUTLETS



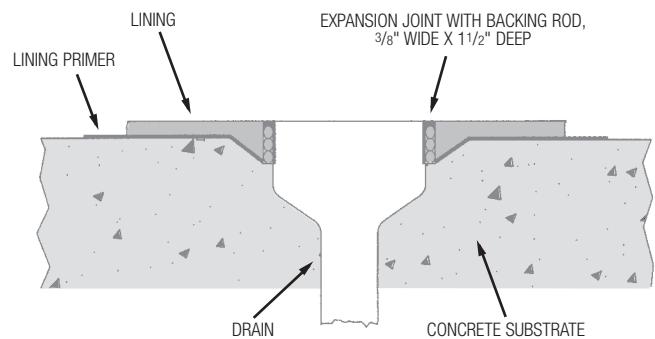
TRANSITION DETAIL



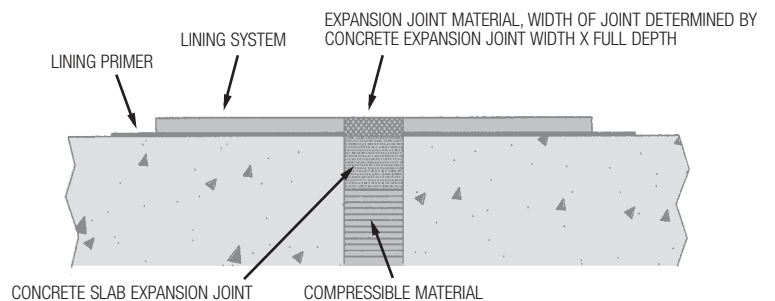
LINING SYSTEM TERMINATION



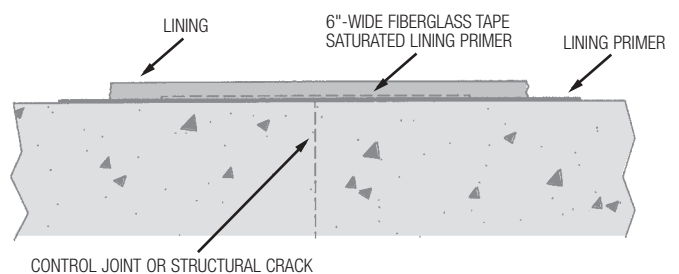
LINING SYSTEM TERMINATION AT DRAIN



EXPANSION JOINT




HORIZONTAL & VERTICAL CONTROL JOINT OR STRUCTURAL CRACK



PHYSICAL PROPERTIES AND USES

The chart below represents typical corrosive environments and other factors suitable for Chempruf linings. More specific recommendations can be obtained by referring to our comprehensive Chempruf data sheets and chemical resistance charts or by contacting your Atlas sales representative

	Formulation Type		2000/2001 SERIES																						
	Immersion	Splash/Spill/Secondary Containment	Concentrated Inorganic	Inorganic Acids - Diluted	Organic Acids	Alkalies	Aromatic Solvents	Chlorinated Solvents	Aliphatic Solvents	Petroleum Oils/Fuels	Abrasive Slurry/Immersion	Heavy Mechanical/Truck Traffic	Cart Traffic/Heavy Foot Traffic	Foot Traffic	Severe	Moderate	Mild	Primary Containment	Secondary Containment	Process Floors	Trenches/Pits	Ducts	Exposed/Structural Steel		
	TEMP LIMITS (°F)				CHEMICAL EXPOSURE								WEAR				THERMAL SHOCK				TYPICAL USE				
	CHEMPRUF 2101	F	275	—	R+	R	R	R	R	NR	R	R	R ¹	R	R	R	R	R	R	R	R	R	R	R	NR
	CHEMPRUF 2201	E	160	180	R	R	NR	R	NR	NR	NR	R	R ¹	R	R	R	R	R	R	R	R	R	R	R	NR
	CHEMPRUF 2211	NE	160	180	R	R	NR	R	R	R	R	R	R ¹	R	R	R	R	R	R	R	R	R	R	R	NR
	CHEMPRUF 2300	PE	180	212	R	R	R	NR	R	R	R	R	R ¹	R	R	R	R	R	R	R	R	R	R	R	NR
	CHEMPRUF 2301	PE	180	212	R	R	R	NR	R	R	R	R	R ¹	R	R	R	R	R	R	R	R	R	R	R	NR
	CHEMPRUF 2400	VE	160	180	R	R	R	R	R	R	R	R	R ¹	R	R	R	R	R	R	R	R	R	R	R	NR
	CHEMPRUF 2401	VE	160	180	R	R	R	R	R	R	R	R	R ¹	R	R	R	R	R	R	R	R	R	R	R	NR
CHEMPRUF 2410	NVE	180	212	R	R	R	R	R	R	R	R	R ¹	R	R	R	R	R	R	R	R	R	R	R	NR	
CHEMPRUF 2411	NVE	180	212	R	R	R	R	R	R	R	R	R ¹	R	R	R	R	R	R	R	R	R	R	R	NR	
CHEMPRUF 2420	EVE	180	212	R	R	R	R	R	R	R	R	R ¹	R	R	R	R	R	R	R	R	R	R	R	NR	
CHEMPRUF 2421	EVE	180	212	R	R	R	R	R	R	R	R	R ¹	R	R	R	R	R	R	R	R	R	R	R	NR	
1000 SERIES																									
CHEMPRUF 1300	PE	180	212	R	R	R	NR	R	R	R	R	NR	NR	R	R	NR	R	R	R	R	R	R	R	R	NR
CHEMPRUF 1400	VE	160	180	R	R	R	R	R	R	R	R	NR	NR	R	R	NR	R	R	R	R	R	R	R	R	NR
CHEMPRUF 1410	NVE	180	212	R	R	R	R	R	R	R	R	NR	NR	R	R	NR	R	R	R	R	R	R	R	R	NR
CHEMPRUF 1420	EVE	180	212	R	R	R	R	R	R	R	R	NR	NR	R	R	NR	R	R	R	R	R	R	R	R	NR
100 SERIES																									
CHEMPRUF 120	E	120	150	R	R	NR	R	NR	NR	NR	R	NR	NR	R	R	NR	NR	R	R	R	R	R	R	R	R
CHEMPRUF 121	NE	120	150	R	R	NR	R	R	R	R	R	NR	NR	R	R	NR	NR	R	R	R	R	R	R	R	R
CHEMPRUF 130	PE	130	160	R	R	R	NR	R	R	R	R	NR	NR	R	R	NR	NR	R	R	R	R	R	R	R	R
CHEMPRUF 140	VE	130	150	R	R	R	R	R	R	R	R	NR	NR	R	R	NR	NR	R	R	R	R	R	R	R	R
CHEMPRUF 141	NVE	130	160	R	R	R	R	R	R	R	R	NR	NR	R	R	NR	NR	R	R	R	R	R	R	R	R
CHEMPRUF 142	EVE	130	160	R	R	R	R	R	R	R	R	NR	NR	R	R	NR	NR	R	R	R	R	R	R	R	R

F - Furan
PE - Polyester
VE - Vinyl Ester
E - Epoxy

NE - Novolac Epoxy
NVE - Novolac Vinyl Ester
EVE - Epoxy Vinyl Ester
R - Recommended
NB - Not Recommended

* - with brick
R+ - not when oxidizing
1 - use finishers

PLANT-WIDE PROTECTION AGAINST CORROSION

Since 1892, Atlas has played a pioneering role in the development and manufacture of chemical-resistant construction materials. Improvement is an ongoing process at Atlas. Our research personnel continually search for new ways to enhance our product line. By employing a wide variety of resin technologies, we are able to offer protection for just about any application. Atlas also maintains an extensive network of salespeople and technicians trained to consult on your projects.

If you have corrosion problems, you don't have to look any further than Atlas for a solution.



From its headquarters in Mertztown, Pa., Atlas supplies industry with a full range of corrosion-resistant materials and services such as mortars, grouts, polymer flooring materials, membranes and linings, process and storage tanks, plastic fabrications, coatings and specialty brick.



Cell test for permeability and chemical resistance is performed in Atlas laboratory.



Atlas sales engineer discusses proper Chempruf lining for protection of containment pit.



Represented by:

For qualified and objective
recommendations to solve
your corrosion problems ...

ask Atlas,



**we have a world
of answers.**

atlas

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