# XR® Geomembranes

from Seaman Corporation are the strongest, most durable geomembranes in use today. Specified worldwide for projects including floating covers, tank farms, wastewater impoundments, landfill liners and potable water applications, each XR Geomembrane is capable of performing in the harshest possible environments. Whether used in very hot or extremely cold climates, or on a project with challenging containment needs involving chemicals, oil or environmental hazards, XR Geomembranes retain their flexibility and perform better than any other membrane available.

#### Track Record

For over 25 years, XR technology has set the industry standard for geomembrane strength, durability and performance. Plus our long record of successful installations containing a variety of harsh liquids has given Seaman Corporation a recognized position of leadership in this very specialized field. XR technology is used in all types of applications including pond liners, secondary containment, floating covers, wastewater baffles and potable water containment.

#### **Comparisons**

Our basic technology, manufacturing processes and fabrication systems meet the industry's most stringent performance demands. Our membranes are highly resistant and non-degradable with extreme puncture and tear resistance, as well as dimensional stability under high loads and temperature fluctuations. You're not paying for the liner engineering lessons and possible containment failures of the less experienced. More often than not, we insist on delivering levels of performance that far exceed specified requirements. This, however, does not mean added expense. You pay for our containment assurance. Nothing more and never less.

#### **Installation Techniques**

Field-proven installation techniques are the result of combining our 55-plus years' experience in manufacturing high-performance membranes with the experience of some of the best engineers, contractors and installation experts in the world. Prefabrication allows quicker installation, allowing as few as two seams per acre. Field quality is excellent and our record for reliability sets the industry standard. We would be pleased to hear from you if you have a question about any of our installation methods. Send us an email to scinfo@seamancorp.com or call toll-free

#### The Art of Over-Engineering - Description of Illustration

[1]

Impressive dimensional stability, tensile strength and puncture resistance are a function of the base fabric of XR-5®. This Seaman Corporation proprietary weave design of DuPont Dacron® polyester fibers also provides maximum strength to weight ratios, and flexibility for ease of handling.

[2]

Exclusive molecular primers saturate the woven fibers in the second step of manufacture. This saturation makes possible the bonding of substrate and coating compound into a single system. There is no delamination possible and no edge coating required.

[3] & [4]

XR-5 one-side coated per pass assures bonding process and high quality finished product. The exclusive coating

compound contains DuPont Elvaloy®, and is essentially noncrystalline and therefore not susceptible to environmental stress cracking.

Seaman XR Technology fabric is designed with the strength and durability necessary for secondary containment of spills for a short period, even under catastrophic circumstances. XR-5® geomembranes are designed to resist puncture, withstand long term contact with leaked commercial jet fuel and successfully handle thermal expansion-contraction. Read about actual examples of this application below.

### **Examples of Actual Geomembrane Usage for Secondary Containment**

- XR-5 Geomembranes Line Pearl Harbor Storage Tanks
- Seaman Geomembrane Installed as Part of Secondary Containment System for Containment Tank at Craney Island
- XR-5 Geomembranes Line Above Ground Crude Oil Storage Tanks
- XR-5 Geomembranes Line Jet Fuel Tank Farm
- XR-5 Geomembranes Line Railroad Fueling Facility and Secondary Containment
- XR-5 Geomembrane Liners Used for Secondary Containment at Electrical Substations
- XR-5 Geomembranes Flexible Solution for Substation Liners

Choose XR-5® grade geomembranes for broad chemical resistant applications requiring high-strength membranes. XR-3® grade geomembranes are best suited for moderate chemical resistant requirements. We also offer a family of potable water contact products and other specialty products.

View our Product Application Chart and Overview to help determine which Seaman geomembrane product is right for your application.

To learn more about specific Seaman geomembrane products, click on the product name in the index below.

### **XR-5** Grade Geomembranes

Seaman's XR-5 grade geomembranes are high-strength, chemically resistant membranes that are best suited for high temperatures, and broad chemical resistance applications, including acids, oils and methane.

- 8130 XR-5
- 8138 XR-5
- 6730 XR-5

#### **XR-3** Grade Geomembranes

These are best suited for moderate chemical resistant requirements in applications such as stormwater and domestic wastewater.

• 8228 XR-3

#### XR-3 PW (Potable Water) Grade Geomembranes

Our XR-3 PW geomembranes are NSF 61 approved for potable water contact.

- 8228 XR-3 PW
- 8130 XR-3 PW

## • Geomembrane Chemical Resistance Comparison

- **Superior chemical resistance**
- Seaman XR® Geomembranes are the strongest, most durable geomembranes in use today. See how XR Geomembranes compare to other options when exposed to a wide range of tough contaminants.

	XR-5®	HDPE	PVC	Hypalon	Polypropylene
Kerosene	A	В	С	С	С
Diesel Fuel	A	A	С	С	С
Acids (General)	A	A	A	В	A
Naphtha	A	A	С	В	С
Jet Fuels	A	A	С	В	С
Saltwater 160° F	A	A	С	В	A
Crude Oil	A	В	С	В	С
Gasoline	В	В	С	С	С

A = Excellent

B = Moderate C = Poor

NF = Not Found in Published Chart

Source: Manufacturer's Literature