



ElastoSeal

EPDM Geomembranes for demanding and professional applications





Durable waterproofing for professionals

ElastoSeal EPDM Geomembranes have consistently proven to be secure, flexible and easy to install. Our ElastoSeal Geomembranes have high durability and are highly resistant to UV radiation, ozone, root penetration and algae growth.

Water reservoir



ElastoSeal is highly resistant against UV and ozone radiation

Retention water reservoir

ElastoSeal EPDM Geomembrane

ElastoSeal EPDM Geomembranes remain elastic regardless of age and temperature and offers high resistance to root penetration. Rubber membranes have no yield point under elongation. Our ElastoSeal EPDM Geomembrane can be strained in all directions at the same time (multiaxial response) and are not subject to "stress cracking". Therefore ElastoSeal EPDM can be installed in cold and humid weather conditions, left exposed or covered with soil.

Elasticity and service life remain unaffected by mechanical stresses, high and low temperatures, chemical and biological influences. The rubber membrane is tailor-made or prefabricated in large panels normally 500-1500 m². The dimensions are limited by weight and ease of use. Pipes and other types of protrusions can also be prefabricated for an easy, fast and secure installation.

ElastoSeal EPDM Pondliner

SealEco also offers ElastoSeal pondliners for smaller applications like ponds, landscaping and other ecosystems. You can find more information in our separate ElastoSeal pondliner brochure.

The facts about EPDM-rubber

Elastoseal EPDM Geomembrane is a vulcanised rubber sheet that belongs to the product group elastomers. Its strength and elasticity are not affected by high or low temperatures and its physical properties remain virtually unchanged for decades, without becoming brittle, cracking or shrinking. EPDM was introduced in the early sixties and over the years has found increasing applications as a waterproofing membrane for the entire construction industry, rubber is the geomembrane that has been used the longest in the marketplace, and the product has already proven its suitability as waterproofing for decades.

Safe Installations

ElastoSeal EPDM Geomembrane is a completely engineered system in which products, seams, details, installation technology and QAS (Quality Assurance System) offer maximum safety and performance. Traceability from production to prefabrication and finally to installation is always available upon request.

SealEco's Quality Assurance System (QAS), provides full documentation. SealEco also certifies quality control from production to installation of the ElastoSeal Geomembranes. Only trained and authorised installers may install ElastoSeal Geomembranes.



Retention water, closed tank



Waste water reservoir, landfill

Why ElastoSeal

- ✓ Tailor-made solutions
- ✓ Fast, easy and secure installation
- ✓ Highly UV- and ozone resistant
- ✓ Elasticity > 300%
- ✓ Multidirectional strain, superior to absorb settlements and movements
- ✓ Puncture resistance with full flexibility up to maximum tensile strain
- ✓ Resistant to root penetration
- ✓ Flexible, adapts to any substrate or shape
- ✓ Installation possible in both cold and humid conditions
- ✓ Can easily be adhered to substrates
- ✓ High-temperature resistance (-40°C up to 150°C)
- ✓ Prefabricated pipe boots available
- ✓ Maintenance-friendly and recyclable
- ✓ Environmentally friendly (products and systems)
- ✓ A lifespan of more than 50 years
- ✓ QAS (Quality Assurance System) available upon request including air channel QC testing on site
- ✓ We provide full support to professionals

Applications with ElastoSeal

ElastoSeal EPDM Geomembranes are often used in different types of water containments; as geomembrane to the industry, agriculture, civil engineering and infrastructure or as pond liner in gardening, landscaping and other types of aquatic ecosystems.



Waste water pond

Industrial waste water reservoirs and hazardous waste containment

Handling and treatment of waste water, sludge, ashes, contaminated soils and other type solid materials are key for protecting our environment and essential for maintaining the quality of our ground water. The ElastoSeal EPDM Geomembrane creates a barrier that will keep contaminations and hazardous chemicals safely stored for decades. It can be done either in open reservoirs or closed cells, in last case

the dumping of the hazardous waste takes place in an open reservoir with a bottom liner of ElastoSeal EPDM Geomembranes.

When the landfill is filled, it is eventually covered with a new lining of ElastoSeal EPDM Geomembranes. After the final capping, the hazardous waste is completely encapsulated into a few pipelines, which eventually lead away leachate.

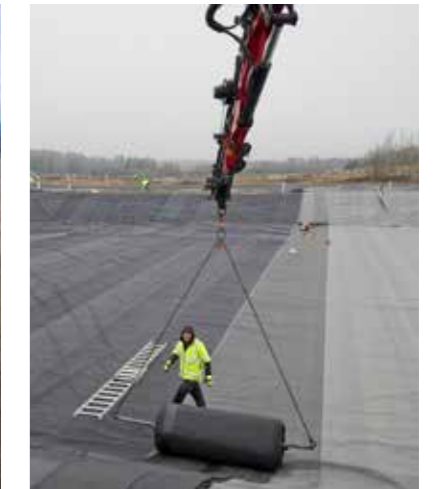


Landfills – capping and waste water reservoirs

Many landfills or waste deposits continuous a lot of different waste from industry, construction/demolition, households and digested sludge. As the landfills contains a great many different types of waste which are deteriorating, there will be major movements and settlements for many years to come. Many other types of synthetic geomembranes or GCL would crack and leak with lost surface water runoff as a consequence, but not the ElastoSeal EPDM

Geomembrane. The ElastoSeal EPDM Geomembrane has a multidirectional strain, superior to absorb movements and settlements and should therefore be the obvious choice.

The separated surface water could then efficiently be stored in separate retention water reservoirs and contaminated water from the inside could through pipe conduits be led away for storage in waste water reservoirs.



Retention water reservoirs and closed tanks

During periods of heavy rainfall, drains are often unable to cope with the sheer amount of excess water and this can lead to flooding. Increasing built-up areas only contribute to this pressure. Providing a way to retain or buffer water is one solution to this rapidly

growing problem. Rainwater is collected and gradually dispersed in a controlled manner, thereby greatly reducing the risk of flood. The ElastoSeal EPDM Geomembrane is the right choice for water retention projects.





Irrigation water reservoirs

Due to climate changes, irrigation water becomes more and more precious and totally vital for agriculture and human beings' survival. The weatherability of the ElastoSeal EPDM Geomembrane makes it suitable in all types of climates from the cold north to the warm south. If the project is not larger than 1.000 to 1.500 m² the ElastoSeal EPDM Geomembrane can be tailor-made and supplied in one piece, which reduce the installation cost significantly and is very handy for the contractor or the owner.

Canals and ditches

Transportation and steering of waterflow is sometimes an important factor in projects or certain regions. The ElastoSeal EPDM Geomembrane can be tailor-made to desired width without wastage and with reduced need of splicing on site, which will keeping the costs as low as possible.



Agriculture reservoirs

The ElastoSeal EPDM Geomembrane has been used successfully for decades for storage of manure, urine and other aggressive substances related to farming.



Biogas and tank liner applications

There are several ways to contain water in which the most popular are tanks, silos or basins. In addition to the large EPDM panels offered by SealEco, in many situations it is possible to join membranes on site to provide one watertight solution. The ElastoSeal EPDM liners for tanks or silos are prefabricated in 3D in any size or shape, providing complete and secure containment with a long service life.

ElastoSeal biogas membrane is a high-quality rubber membrane suitable for biogas applications. The membrane is highly elastic, has high permeability and is resistant to UV and ozone radiation. Due to the excellent elasticity, ElastoSeal biogas membrane can easily expand and adapt to varying gas pressures. As the pressure drops, it returns to its original shape.



Swimming ponds

Swimming ponds can offer an additional benefit to the standard private ponds. Whether you prefer a modern, sleek, angular design, or shaped with natural lines and curves. ElastoSeal EPDM Pondliner is perfect for prefabricating a variety of shapes. Not only flat 2D liners, but completely 3D, tailor-made can be prefabricated by SealEco.

Pond and creeks

A pond can be a stunning centerpiece and focal point for your garden. Not only visually beautiful to your family and friends. Frogs, birds and dragonflies are just some of the regular visitors that can be attracted to your garden. A pond can be an extension of your lifestyle and enhance the features that you create for your home. ElastoSeal EPDM Pondliner can be made from standard panels tailor-made in 2D or 3D membrane.





Industrial pond

References

ElastoSeal has built up many references all over the world in the last decades.



Waste water reservoir



Waste water basin



Golf course



Swimming Pond



Public park



Water reservoir



Biogas installation



Industrial pond and planters



Private pond



Closed manure basin



Private pond

Other Applications

Landscaping and leisure

- Parks and gardens
- Golf courses
- Zoological park
- Cemetery ponds
- Wetlands
- Sports arenas
- Lagoons for artificial snow

Agriculture

- Irrigation reservoirs
- Irrigation water tanks
- Manure ponds
- Fish farming
- Anaerobic Digestion
- Ensilage covers
- Irrigation water canals
- Floating covers

Environment

- Ground water protection
- Biological water purification
- Hazardous waste containment
- Spill and secondary containment
- Landfills
- Radon- and lead protection
- Green gardens on terraces and decks

Infrastructure

- Highway turnoff ponds
- Ditch linings
- Dams and embankments
- Water conveyance
- Hydroelectric dams
- De-icing areas at air fields
- Solar energy tanks

Industry

- Portable water tanks
- Process water tanks
- Storage of sludge, ash, waste
- Storage of polluted water
- Fire fighting ponds
- Floating covers
- Cooling water ponds
- Mining waste lagoons
- Secondary protection liners



Environmentally friendly

The environmental impact of ElastoSeal is minimal, during both production and application. The membranes do not release any toxic substances, which means that the rainwater run-off is perfectly suitable for irrigation. ElastoSeal EPDM is also 100% recyclable. Using the latest techniques, we can split the ingredients and reuse them in our mixtures for new membranes. That is why EPDM is classified as the most environmentally friendly product.



QAS - Quality Assurance System

- **Organization on the construction site**
Installers are always certified. A quality manager is authorised in each installation team.
- **Supply logistics**
Deliveries to the site are controlled and documented for quality by ensuring packaging, transportation and proper storage on site.
- **Control of earth works**
Before the start of a lining installation the soil and surface quality as well as compaction are checked and approved by the installer.
- **Installers quality control records**
Include drawings, marking of all panels, documentation of testing and final report to ensure that all materials can be traced back to manufacture.

Certificates and approvals

Our operations are conducted in accordance with ISO 9001 and ISO 14000. Products and systems are tested in accordance with applicable standards, supervised by independent laboratories, authorities and certified in accordance with local building codes in all the markets where we are active.





We make waterproofing easy

SealEco is a manufacturer of EPDM rubber membranes for waterproofing. With more than 50 years of experience and product knowledge, we offer the best solution for every situation. With an extensive portfolio of projects, SealEco products are successfully installed in extreme climates worldwide and, even decades later, the quality of products remains consistent throughout their lives.

In addition to providing waterproofing to buildings, when ponds, reservoirs, covers, or basins for industrial or agricultural use are required, SealEco's innovative products and skills mean that we can offer customized solutions to meet your requirements. SealEco supports you throughout the entire process of your projects. We do not only offer the right watertight systems and solutions, we also make it easy for you!

SealEco sets high standards and values for daily operations. Embedded in our company, our goal is to burden the environment as little as possible with our products and methods. By working effectively, we support our partners both inside and outside the organization. We strive to deliver quality in everything we do.

SealEco is part of the Nordic Waterproofing Group and our more than 1,000 employees have the responsibility, integrity and ambition to meet and exceed your expectations.

For more information, visit www.sealeco.com



Your ElastoSeal dealer: