



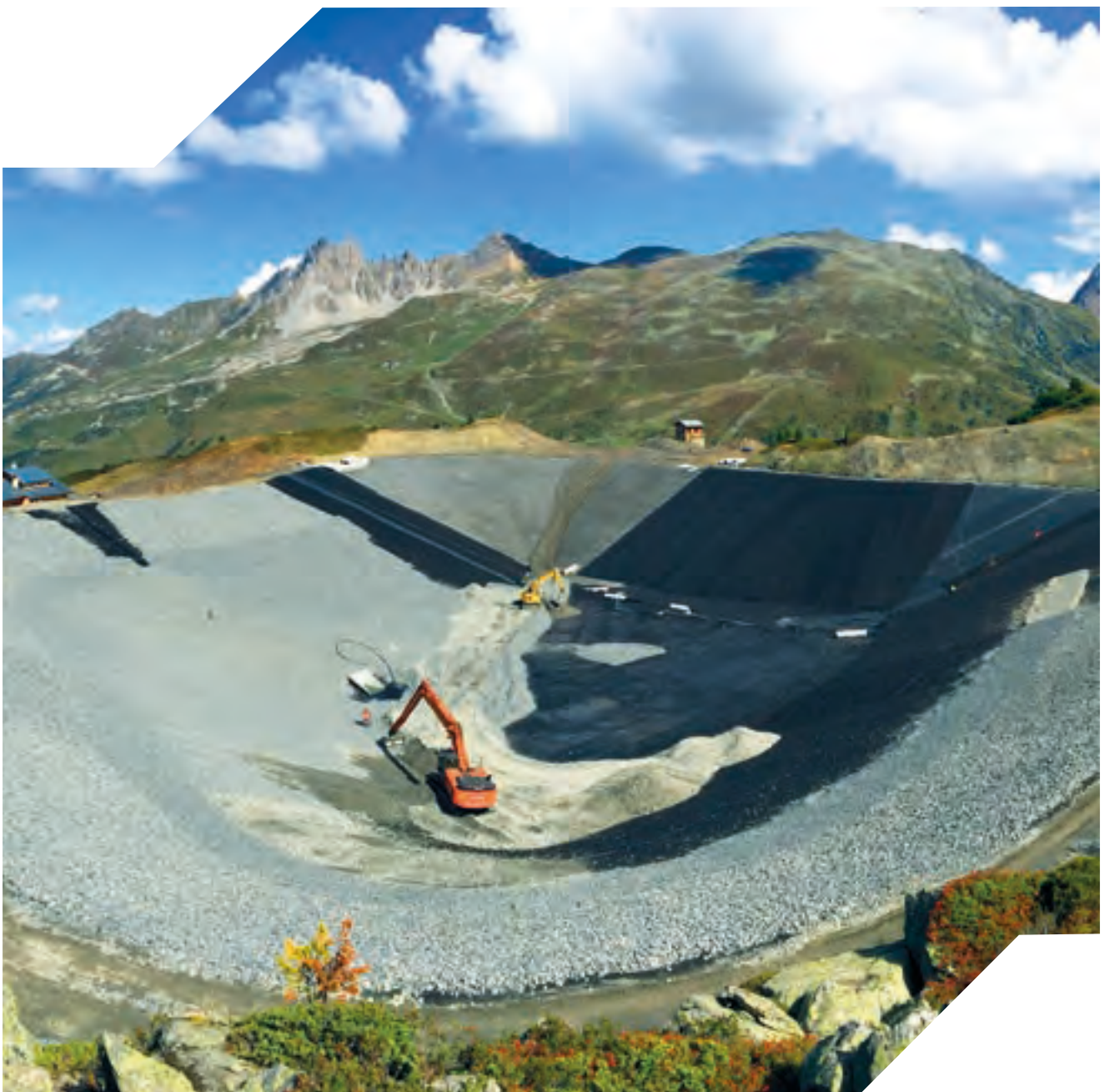
# GEOGARD™ EPDM

**DEPENDABLE PERFORMANCE IN DEMANDING ENVIRONMENTS**



# OUTSTANDING PERFORMANCE

Elevate™ GeoGard EPDM is a rubber geomembrane specially designed for demanding applications where failure is not an option. It offers a durable, reliable and efficient water containment solution for a wide variety of applications related to environmental protection, agriculture and industry.





### Exceptional durability

GeoGard EPDM has an unmatched resistance to UV, heat, ozone, microorganisms and extreme weather conditions. It does not contain any plasticizers or antioxidants likely to degrade or migrate and cause the geomembrane to age prematurely. Some projects installed in the early 1970s are still in operation today.



### Flexible and elastic

GeoGard EPDM is highly flexible, even at temperatures as low as  $-45^{\circ}\text{C}$ . It can be folded without causing damages and can be elongated over 300% in all directions and return to its initial form afterwards (no yield point). This allows it to absorb substrate movements and mechanical stresses even at low temperatures without its physical properties being affected.



### High puncture resistance

Because of its high elasticity and flexibility, GeoGard EPDM offers excellent puncture resistance. It withstands the mechanical stresses during installation and service and consequently guarantees the long-term watertightness of the lining system.



### Quick and easy installation

GeoGard EPDM is available in large panels of up to 15.25 m wide x 61 m long (930 m<sup>2</sup>), which significantly reduces the need for on-site seams. This, in combination with its exceptional flexibility and seaming method make it quick and easy to install, which represents a major advantage.



### Seam testing

The quality of on-site seams can be effectively tested by destructive and non-destructive methods (visual inspection, vacuum chamber, air lance, etc.).



### Quick and easy to repair

Given its inert nature, the composition of GeoGard EPDM does not vary over time. Consequently, it can still be assembled and/or repaired several years after being installed and having been exposed to the elements.



### Environmentally friendly

Due to its very stable chemical composition, GeoGard EPDM has no effect on air or water quality and does not release any pollutants into the environment. Third-party tests demonstrate that it can be safely used for the storage of irrigation water. Its exceptional durability, easy maintenance and suitability for recycling, further contribute towards a sustainable environment.



### High friction angle

GeoGard EPDM has a very high friction angle ( $27.5^{\circ}$  with ground). This makes it easier to install, as workers do not slide and the membrane stays in place. Eventual covers are also more stable on the slopes and therefore do not require the use of a textured membrane.



### Low thermal expansion coefficient

EPDM geomembranes have a very low thermal expansion/retraction factor compared to thermoplastic ones. This significantly reduces waving during installation (important for seaming) and the risk of tensions on details at cold temperatures. The risk of folds obstructing the water drainage on top of the membrane are also reduced.



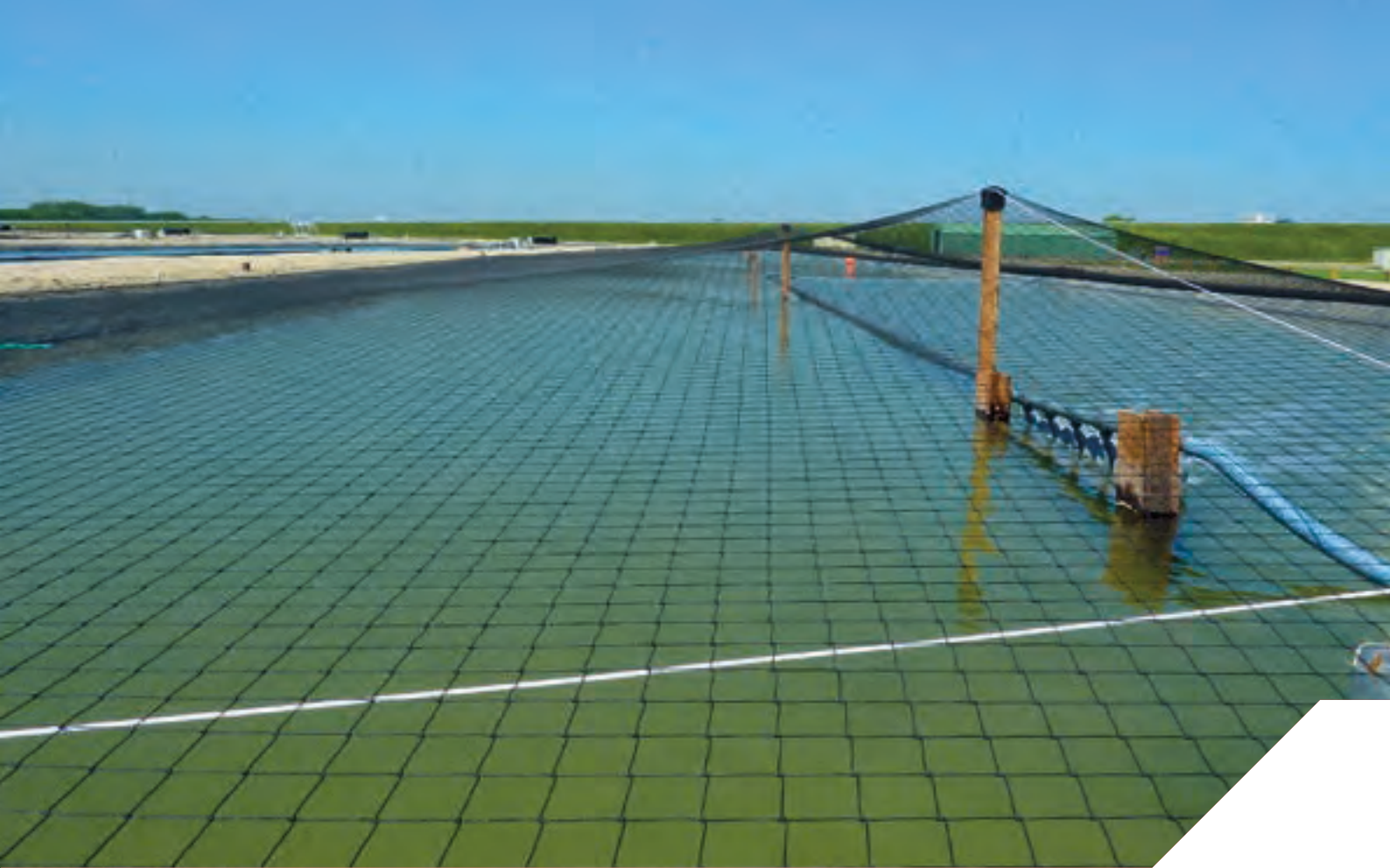
### Self-extinguishing

GeoGard EPDM has a high ignition temperature and stops burning when the heat source is removed. This is a major advantage for applications such as canals and landfill covers.

# Irrigation reservoirs and canals

Water is vital to grow crops. Farmers around the globe have been trusting our EPDM geomembranes since the 1970s to store and convey this precious resource.





# Aquaculture and algae ponds

Fish and algae are very sensitive to pollution. GeoGard EPDM membranes are inert and do not release chemicals that could affect the fauna and flora's health and farm productivity.

# Stormwater reservoirs

Open or underground stormwater reservoirs are an interesting answer to the increased risk of floods due to climate change and the growth of impermeable surfaces.



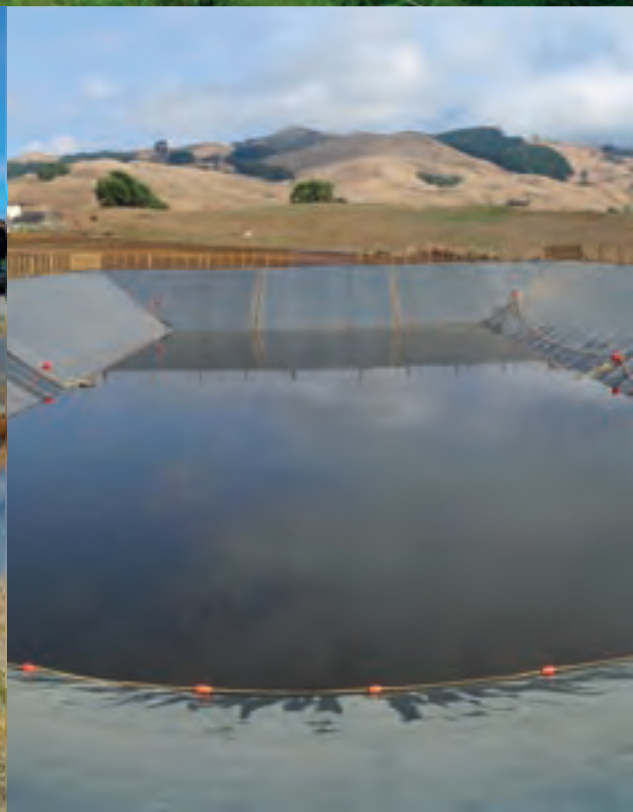


# Fire reservoirs

These reservoirs are used to store water for fire protection when more water is demanded than the normal grid can supply.

# Dung pits

Animal slurry is a valuable fertilizer that needs to be stored with care to avoid ground and water pollution by nitrates. GeoGard EPDM provides excellent protection in this aggressive environment.

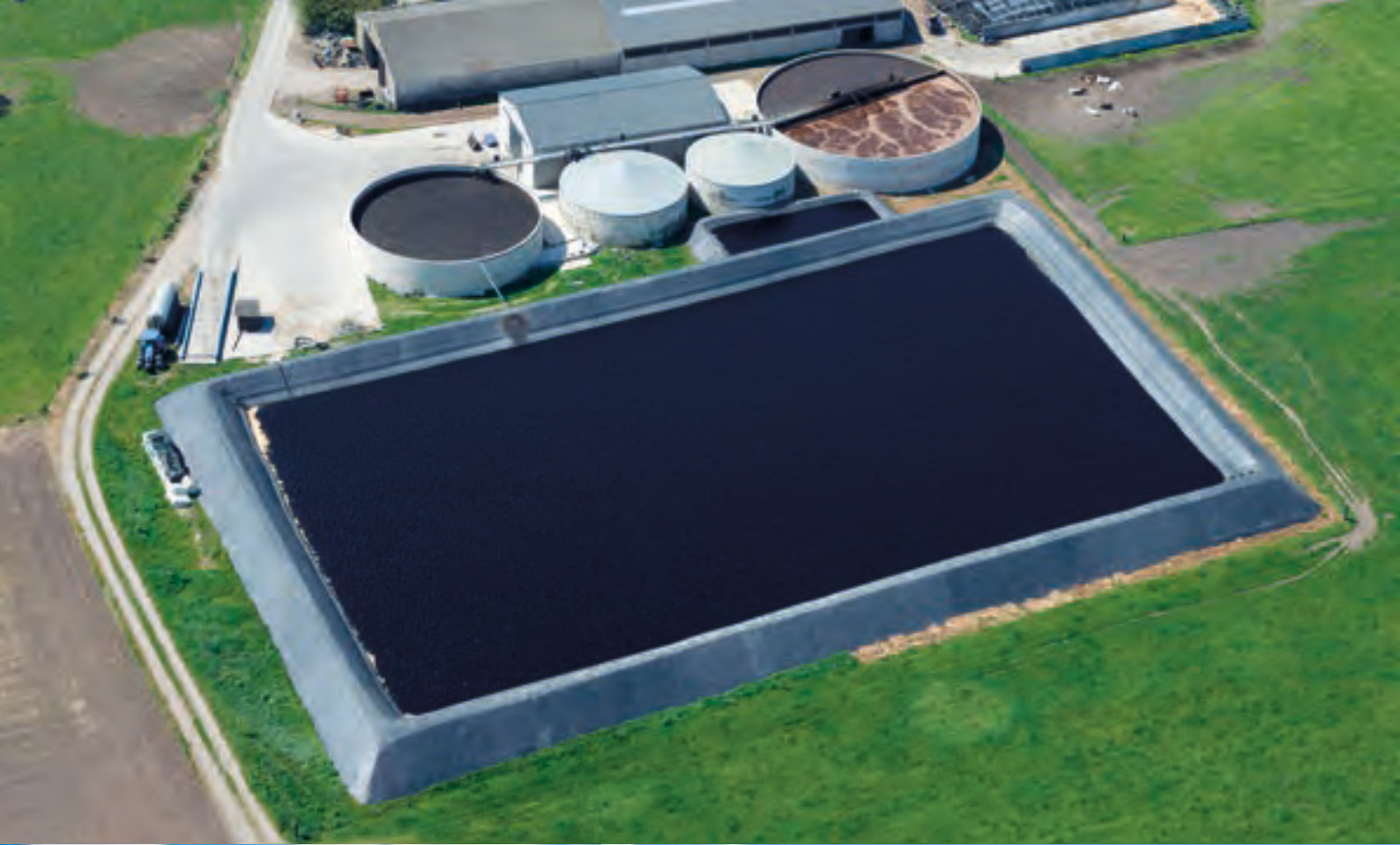






# Secondary containment

Some stored substances can be harmful to the environment in case of accidental leakage. A secondary containment system prevents the spill to propagate and facilitates the remediation process.



# Waste water reservoirs and wetlands

Storing waste water produced by human activities and cleaning it in a natural process before sending it back to the environment is made easy and durable with GeoGard EPDM.

# Landfill covers

High elasticity (accepts differential settlement), large panels (fast installation), high friction angle (stable cover), excellent puncture resistance, self-extinguishing nature, cold vulcanization (no heat source) ... GeoGard EPDM offers an endless list of advantages for this sensitive application.





# Hydroelectric reservoirs and canals

Water power is an unlimited source of energy with a minimal carbon footprint. Hydroelectric infrastructures cannot afford any breakdown and rely on GeoGard EPDM's high performance and quality.

# Snow reservoirs

Artificial snow has become mandatory to prepare the skiing slopes before the first snowfall. The excellent puncture resistance and cold bending ability of GeoGard EPDM make it the perfect liner to safely store water in a very demanding environment.





# Artificial lakes and ponds

Decorative lakes and large ponds can be very technical and require a high-quality geomembrane and a professional installation system.







# A fully engineered system

## RELIABLE SEAMING METHOD

GeoGard EPDM panels can be assembled on site using Elevate's QuickSeam™ Tape system. This seaming technique is quick and easy, does not require any special tools that require the use of electricity or could damage the liner and provides high and consistent seam strength. Seaming is independent of membrane thickness.

## QUALITY INSTALLATION

The performance of a lining system is directly linked to the quality of its installation. For this reason, Elevate's GeoGard EPDM is exclusively installed by trained and approved contractors.

Our technical department offers first class support, including assistance with specification development, theoretical and practical training, field support and inspection of finished installations.

## INSTALLATION DETAILS

The flashing of pipes, penetrations and corners can be carried out in a quick and easy way with Elevate's QuickSeam™ FormFlash, an uncured EPDM flashing laminated to QuickSeam™ Tape. It can be easily molded to adapt to any shape and will progressively cure after installation.

We also offer accessories to waterproof mechanical connections on concrete structures and adhesives which allow the membrane to be adhered to any type of surface (concrete, wood, steel, etc.).





# Technical specifications

The detailed technical properties of the GeoGard EPDM membrane are described in the Technical Information Sheets (TIS) and Safety Data Sheets (SDS) that are available on [www.holcimelevate.com](http://www.holcimelevate.com)

THICKNESS (mm)	WIDTH (m) (up to 4 folds on a core)	LENGTH (m)
1.1	3.05 - 6.10 - 7.62 - 9.15 - 12.20 - 15.25	30.05 - 61.0
1.5	3.05 - 6.10 - 7.62 - 9.15 - 12.20 - 15.25	30.05 - 45.75 - 61.0

Note: not all standard widths are available in all lengths.

# Product certification

Our EPDM manufacturing facilities are certified according to ISO 9001. GeoGard EPDM has obtained the CE marking, meeting current European requirements for health, safety, consumer protection and environment. GeoGard EPDM is also certified by national and international bodies (e.g. French ASQUAL certification). Within the context of these certifications, regular audits are conducted at our EPDM factories to monitor the production process and quality control, as well as the quality of the finished product.



[www.asqual.com](http://www.asqual.com)





# ELEVATE

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**Your local Elevate representative:**

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