

AKS™ CPL

CONCRETE CORROSION PROTECTION SOLUTIONS

THE CHALLENGE

Concrete has been used as a key structural material for over 2000 years, allowing for the construction of large and complex infrastructure projects, both above or below ground. In most applications, concrete offers exceptional long-term durability. In applications such as the conveyance or storage of aggressive liquids, in pipelines or tunnels, WWTW or in Mining, concrete as a construction material still offers one of the most cost-effective solutions, but is limited by its poor chemical resistance. The use of Paint-on or Paste-on applications such as epoxies or acid tiles offer concrete some degree of protection, however being rigid in nature, lack of flexibility or just general low adhesion strength, can limit their long-term performance in the overall protection of the host concrete structure.

HDPE AND PP LINER SOLUTION

AKS™ uses the robust qualities of High-Density Polyethylene (HDPE) or Polypropylene (PP) to produce a lining system which forms an integral part of the concrete structure. AKS™ is unique in its design, having 1230 anchors per m^2, ensuring that AKS™ is cast-in and locked firmly into the concrete structure. The high level of flexibility of the HDPE or PP, which can comfortably bridge small cracks or imperfections in the concrete, means that the structural concrete component remains permanently isolated from any aggressive medium.

The HDPE or PP inner surface not only offers exceptional broad chemical resistance but in conveyance structures like Pipelines, Tunnels or Canals, offers additional design benefits such as high abrasion resistance, high flow velocities and overall low maintenance for vastly extended lifetime of the structure.

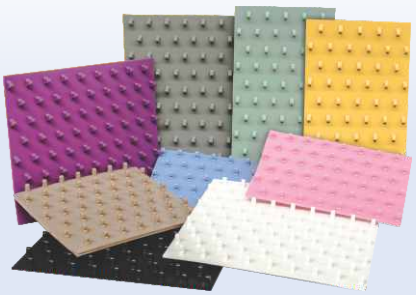
SINGLE HOMOGENEOUS BARRIER

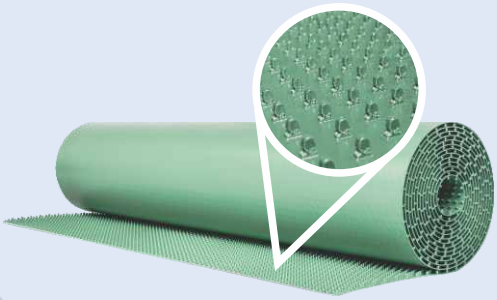
The manufacturing process ensures that a continuous liner is produced in wide sheets, up to 3.2m in width. The anchors are formed during this extrusion process which creates a single, homogeneous product. All joints are sealed using modern heat welding technology, and detailed testing systems, ensuring a single, fully sealed, chemically inert and corrosion resistant barrier.

With product thickness from 2.0mm up to 8.0mm and various colour options available, all project and long-term performance designs can be met.

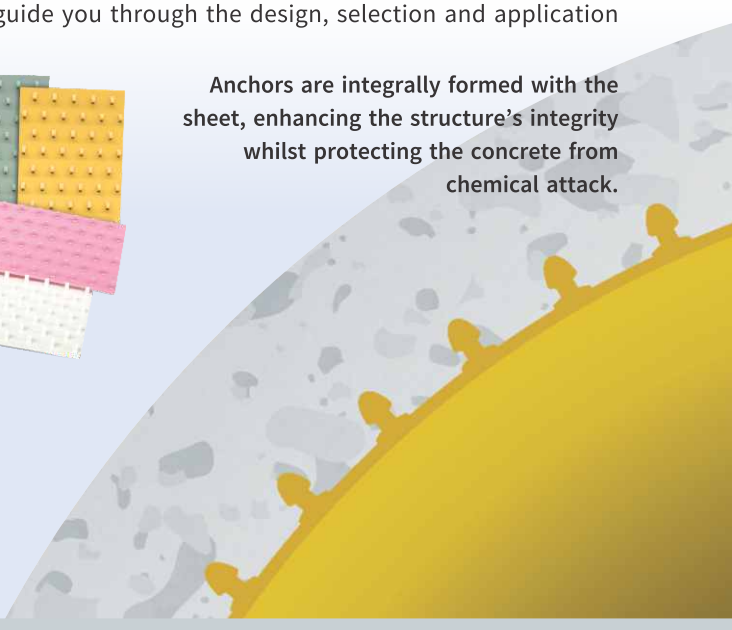
AKS™ is used extensively in new projects but can also be used to rehabilitate existing or ageing concrete structures. AKS Lining Systems have a specialist team who are available to guide you through the design, selection and application aspects of your project.

AKS™ is available in a range of colours. Colour-code your project to make on-site quality assurance easier.





Anchors are integrally formed with the sheet, enhancing the structure's integrity whilst protecting the concrete from chemical attack.



AKS Lining Systems (Pty) Ltd
aksmarketing@aks.co.za +27 (0)21 983 2700 www.aks.co.za

TYPICAL APPLICATIONS

MINING AND BUND AREAS





WATER RESERVOIR



EXTERNAL WATERPROOFING



WASTE WATER TREATMENT WORKS



AKS™ ANTISLIP



DIGESTERS





REHABILITATION OF EXISTING STRUCTURES

LARGE DIAMETER SEWERAGE TUNNELS













18 London Circle, Brackengate Business Park
Brackenfell, Cape Town, South Africa

AKS Lining Systems (Pty) Ltd

SPECIALIST MANUFACTURER
OF THERMOPLASTIC LINERS