



## The bituminous geomembrane

The bituminous geomembrane COLETANCHE® is manufactured by impregnating a non-woven polyester geotextile with hot Asphalt. COLETANCHE® provides the strength of a geotextile with the imperviousness of a geomembrane

This first issue of COLETANCHE® NEWS covers the application of COLETANCHE® as a liner for irrigation canals.

Used in Europe for over 40 years COLETANCHE® has proven to be a robust, durable, easy to install, repair, and maintain liner system for waterproofing water conveyance structures (canals, dams).

COLETANCHE® has now been used successfully in the Pacific Northwest since 2003 by irrigation districts eager to cancel water losses, and optimize their financial resources.

## Application in canals in Oregon and Washington

### Black Canyon, Idaho - 2003



COLETANCHE® was used to line this concrete canal on a side slope to provide a watertight lining and prevent water leakage that could lead to slope instability and failure. COLETANCHE® has been exposed year round in this canal since 2003. Including part of the year when no irrigation water is needed and the canal is empty. The low Manning coefficient allows for minimal head losses. Denser than water, COLETANCHE® lies flat against the wall and bottom of canal when it is full of water.

### Yakima, WA - 2003



COLETANCHE® can be bonded to any surface and to most materials to provide a watertight seal. It does not crack with time and can bridge openings and fissures up to one inch wide in concrete lining. Complex geometry and interfaces can be negotiated easily as shown at the connection between the concrete lined canal and the tunnel in take.

### Naches, WA - 2006



A heavy duty geomembrane with a strong resistance to puncture, COLETANCHE® can sustain vehicular traffic. Annual maintenance, prior to the irrigation season, is performed in this earthen canal lined with COLETANCHE®, using standard construction equipment. Note that adjacent segments of COLETANCHE® are shingled in the direction of flow.

### Naches, WA - 2009



Installation of COLETANCHE® over a damaged concrete-lined canal. COLETANCHE® was laid out and seamed by the water district maintenance crew using simple equipment. Seaming is performed with a standard roofing torch and a propane bottle. COLETANCHE® seams do not require curing so water can be let in the canal immediately after installation. COLETANCHE® can be installed in hot or cold weather and even under misty conditions. Training for deployment and seaming is provided on site by COLETANCHE® personnel. Easy installation allows for schedule and budget flexibility.

