

Full specifications training and support



Extensive third-party testing & certification

NSF
CERTIFIED



TreePeople Center Underground Cistern, Los Angeles CA USA

Problem

TreePeople, is a non-profit organization that provides sustainable solutions to urban ecosystem problems. TreePeople created the Center for Community Forestry as a public education facility and meeting place. Designed to achieve the US Green Building Council's Leadership in Energy and Environmental Design (LEED) Platinum Rating, the center features a 250,000-gallon underground concrete cistern. The largest of its kind in the continental United States, this tank was designed to capture rain water to irrigate the center's gardens and forests. The cistern will be covered with landscaping, making access for maintenance and repairs next to impossible.

Solution

Because conventional waterproofing membranes deteriorate over time the center's owners opted to use Kryton's Krystol Internal Membrane (KIM) and the Krystol Waterstop System for joints. When added to the concrete mix, KIM cures to form crystals that fill the space between concrete particles, permanently waterproofing the structure. KIM also reacts with incoming water to self-seal any small concrete cracks, providing lasting protection against leakage from any direction. By eliminating costly repairs and maintenance, KIM provides worry-free waterproofing for the life of the cistern.



Annacis Island Wastewater Treatment Plant, Vancouver BC Canada

Problem

Annacis Island Wastewater Treatment Plant (WWTP) is the largest WWTP in the Greater Vancouver area and provides secondary wastewater treatment to approximately 1 million people. Initial construction of four huge DAFT tanks, several meters in height and 400mm (15in) thick did not utilize Kryton's KIM admixture. Cracking and leaking resulted, especially at the tapered tie holes and cracked locations. Subsequent ground settling contributed to the poor performance by creating new cracks. Some voids were full depth and as much as 400mm (15in) in diameter.

Solution

Kryton was consulted and Kryton approved applicators were contracted to provide repairs to leaking tanks and other walls at the facility. Krystol Bari-Cote was used to repair the tapered tie holds. Krystol T1 and T2 were applied to the inside surfaces of the tanks. Subsequent inspections over several years after the Krystol treatment was applied showed that many cracks continued to develop in the huge tanks. However the cracking quickly self-healed and did not leak. The Krystol materials continue to perform beyond expectation.

As Annacis Island expanded their facilities, the KIM admixture was used for waterproofing base slabs and walls in place of a membrane and Bentonite at the deepest locations on site – 3 stories below the water table.

*Krystol will keep your structure watertight.
Krystol will extend the life of your structure!*

- **Higher resistance to water pressure**
Tested up to 140m (460ft) of head pressure
- **Better self-sealing capabilities**
Protect against hairline cracks of up to 0.5mm (0.02in)
- **The solution is permanent**
Pore blocking crystals cannot be damaged or worn away
- **Deeper penetration**
Crystals grow wherever water is available, throughout the concrete



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Krystol Solutions for Water Containment



Product	Type	Consumption	New Construction				Repair Work						
			Slab	Construction Joint	Walls	Pipe Penetrations	Tie holes	Slab	Construction Joint	Walls	Pipe Penetrations	Patch	
Krystol Internal Membrane™ (KIM®)	Chemical admixture for creating waterproof concrete.	6-8kg/m³ (10.1 – 13.5lb/y³)	●		●								
Krystol Broadcast™	Dry shake waterproofing treatment	1kg/m² (2lb/yd²)	●										
Krystol Waterstop Treatment™	Construction joint waterproofing system.	1kg/m² (2lb/yd²)		●				●					
Krystol Waterstop Grout™- External	Protects against moisture transmission, chemical attack, and corrosion of reinforcing steel.	25kg/7.5m (55lb/25ft)		●	●			●					
Krystol Waterstop Grout™- Internal	To waterproof pipe penetrations.	25kg/15m (55lb/50ft)		●				●			●		
Krystol T1®	Cementitious concrete waterproofing.	Slurry: 0.8kg/m² (1.5lb/y²)	●		●			●	●	●			
Krystol T2®	Cementitious concrete waterproofing.	Slurry: 0.8kg/m² (1.5lb/y²) Crack Repair: 25kg/30m (55lb/100ft)	●		●			●	●	●			
Krystol Bari-cote™	Water barrier.	Grout: 1kg/500cm² (1 lb/14in²) Crack Repair: 25kg/30m (55lb/100ft) Purge Coat – 3mm (1/8 inch) Thickness: 7.14kg/m² (13.17lb/y²)	●		●	●	●	●	●	●	●	●	●
Krystol Plug™	Construction joint waterproofing system. Rapid-setting hydraulic cement.	Grout: 1kg/500cm² (1lb/14in²) Crack Repair: 25kg/30m (55lb/100ft)	●	●	●			●	●	●			●

CONSTRUCTION AND REPAIR OF CONCRETE WATER CONTAINMENT STRUCTURES

Using Krystol® Technology



*At the Lab. In the Field.
By Your Side.*

Protecting a city's water supply from leakage and contamination is critical, as is the durability of a wastewater tank that is exposed to the harsh chemicals that are by-products of treating sewage or industrial waste.

Left untreated, concrete environmental structures are prone to deterioration due to cracking, leaking and corrosion.

Specifying Kryton's Krystol concrete waterproofing systems provides a durable and leak-free solution that will last for the life of your structure.

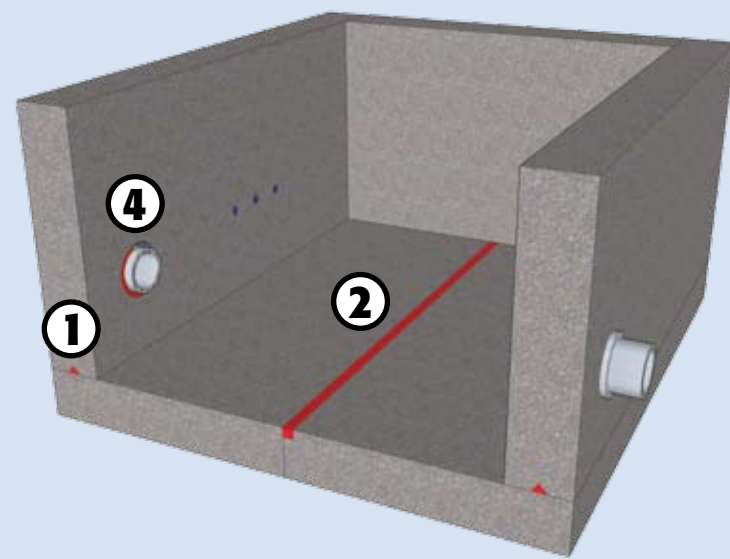
Krystol technology provides:

- Proven waterproofing performance since 1973
- 35+ years of extensive third-party testing and certification
- The longest warranties in the industry
- Regional technical support and training
- The "lowest total cost" waterproofing system



"This is how concrete waterproofing is done today!"

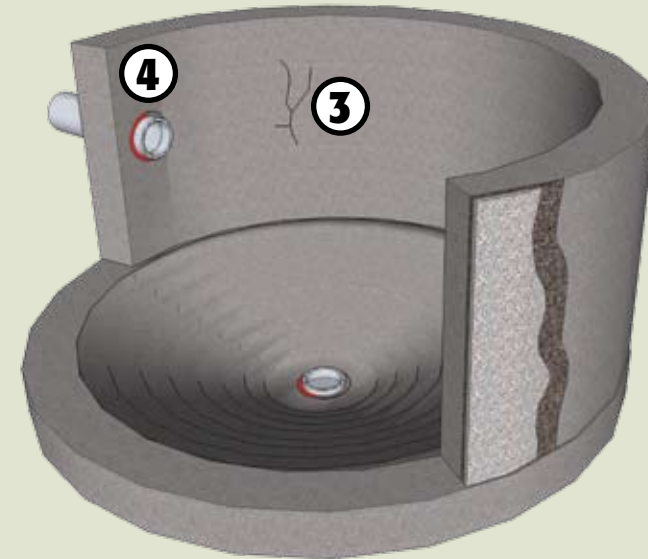
Construct Watertight Structures



Create a watertight tank from the start using Kryton's KIM admixture and joint system. Waterproofing is built right in to the concrete, eliminating the need for membranes. Crystals grow to fill the pores and micro-cracks within the concrete to form an impenetrable barrier to liquids. Kryton's Krystol technology provides excellent resistance to harmful caustic effects of contact with sewage, wastewater and waterborne chemicals such as sulphates, chlorides and acids.

- Transform walls and slabs into impenetrable barriers using KIM or Krystol Broadcast
- Create watertight construction joints and pipe penetrations using the Krystol Waterstop System
- Plug tie holes with Krystol Bari-Cote

Repair & Waterproof Existing Structures

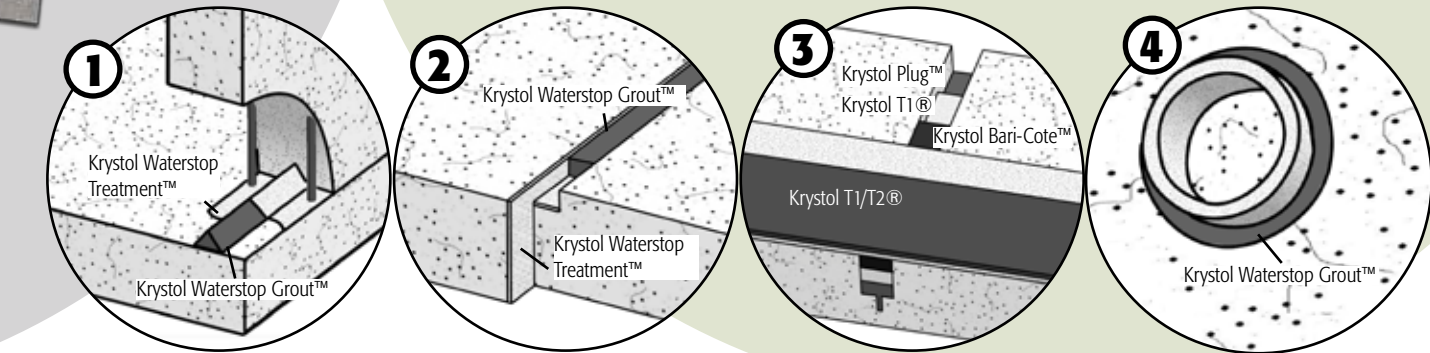
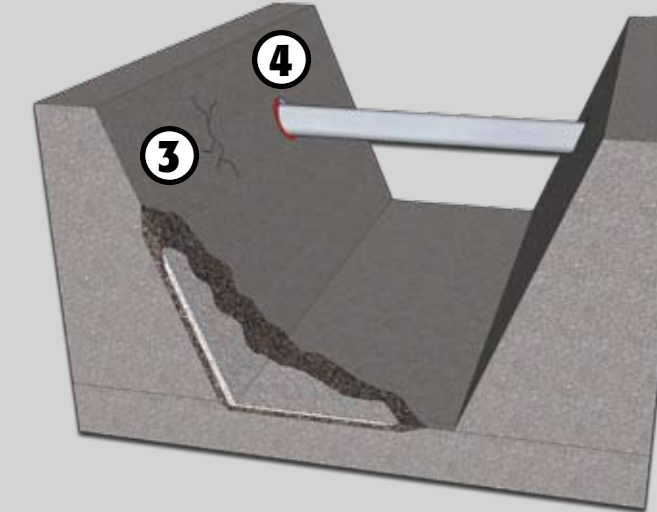


Waterproof where existing membranes have failed or where there was no initial waterproofing. Kryton's waterproofing and repair system is the only system that is as strong as concrete and works 100% of the time.

- Seal cracks and stop leaks using the Krystol Crack Repair System
- Use Krystol Plug, Krystol T1 and Krystol Bari-Cote to treat leaking pipe penetrations
- Prevent further water ingress by applying Krystol T1 and T2 to walls and slabs subject to hydrostatic pressure

For application instructions and technical data visit www.kryton.com

Repair & Waterproof Channels



Ensure watertight construction joints with the Krystol® Waterstop System

Repair leaking cracks with the Krystol® Crack Repair System

Prevent leaks at pipe penetrations with Krystol® products

Sustainable Solutions for Water Containment

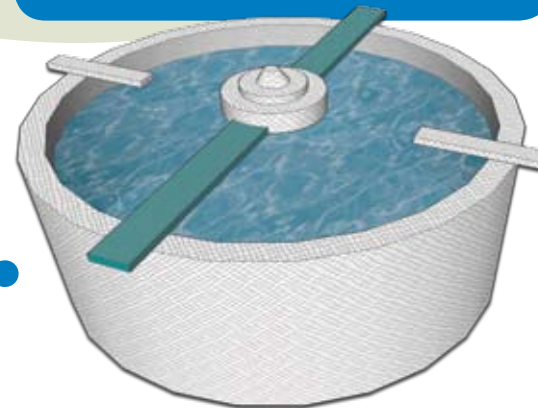
Kryton's line of Krystol products provide an environmentally friendly alternative to traditional membrane-based waterproofing systems for water containment in the potable and wastewater industries. The Krystol line of products is safe for potable water (certified to NSF/ANSI std. 61), eliminates the need for petroleum based coatings and has zero VOCs.

Krystol Technology increases the life span of concrete structures by making concrete more durable, self-sealing potential leaks and protecting rebar from corrosion. Because Kryton's Krystol Internal Membrane is incorporated right in the concrete there is less jobsite waste and the concrete is 100% recyclable at the end of its life.

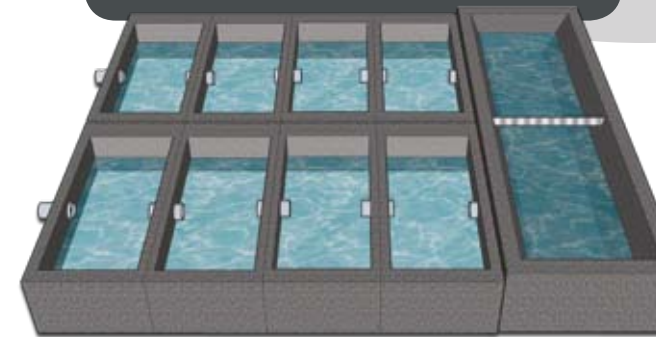
Other areas of use for Kryton's concrete waterproofing products:

- Basements
- Inlets
- Sand filters
- Screeners
- Sewers
- Sump pits
- Waterways

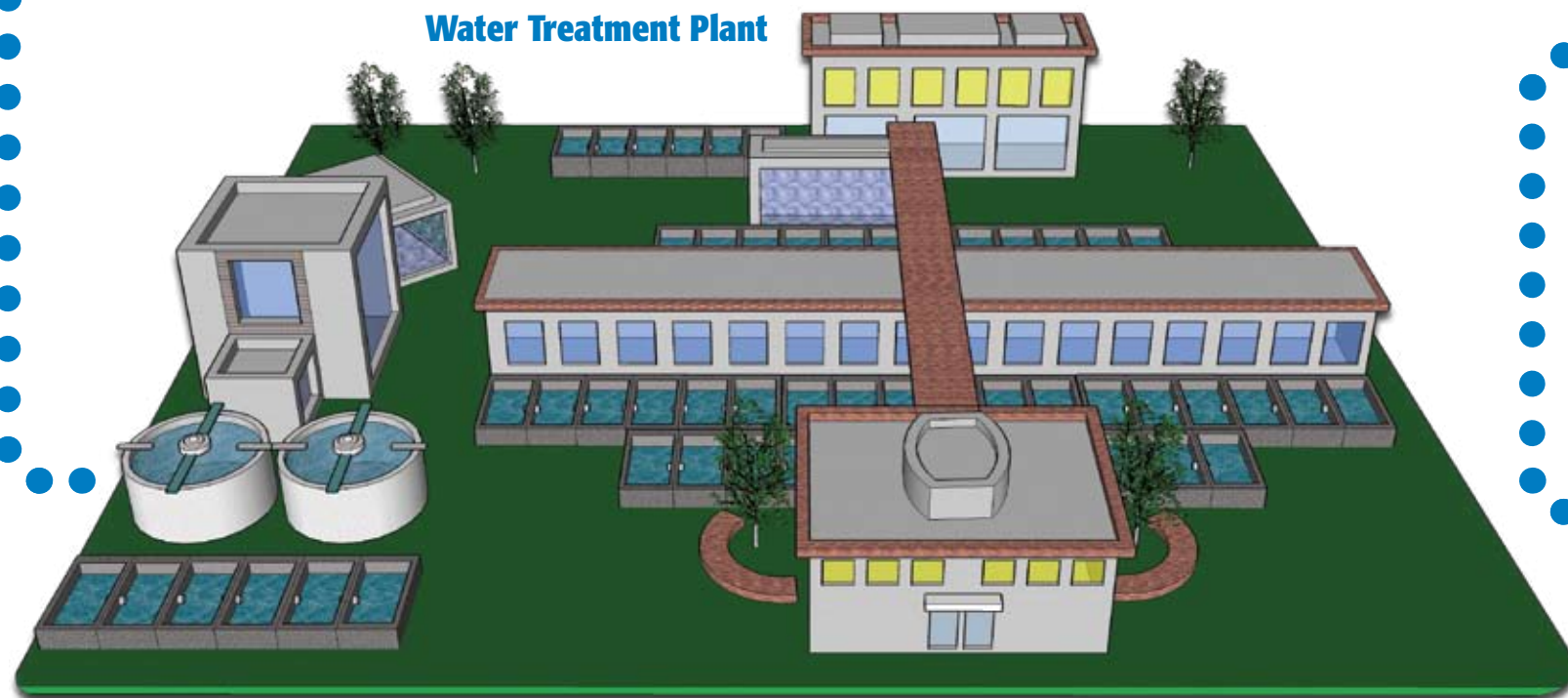
Water Tank



Wastewater Tank



Water Treatment Plant



Wastewater Treatment Plant

