

Permanent Leak Repair on Aging Lead and Oakum Pipe Joint

ID: 9902

Industry: Buildings & Structures

Customer Location: North Bay, Ontario

Application: VPF-Valves, Pipes and Fittings

Application Date: July 2025

Substrate: Other

Products: Belzona 1984, Belzona 4141 (Magma-Build), Belzona 4911 (Magma TX Conditioner)

Problem

During the refurbishment of an old piping system within a commercial building, the customer discovered an active leak at a lead and oakum joint. These joints, common in older plumbing systems, had degraded over time, compromising the seal and allowing water to escape.



Leak through the hydraulic cement



Hydraulic cement removed and pipe cleaned with power tools to bare metal



Belzona 4141 to smooth out transition area



Full system wrapped and seal with Belzona SWII

Application Situation

Due to the age of the system and the joint's location, a full pipe replacement would have been costly and disruptive. The customer needed a reliable, long-lasting repair that could be done quickly without dismantling the existing pipework. They initially attempted to seal the leak with hydraulic cement, but the leak persisted, so a more robust solution was required.

Application Method

The failed hydraulic cement was first removed, and the area was cleaned and roughened using power tools to eliminate rust and create a suitable surface profile for bonding. Once the substrate was properly prepared, Belzona 4141 was applied to rebuild and level the surface around the joint. This created a solid and uniform base for the application of the Belzona SuperWrap II system, which was installed using three layers of reinforcing wrap to fully seal and strengthen the joint.

Belzona Facts

Replacing the pipe would have involved significant demolition, higher material and labor costs, and extended downtime. Instead, the Belzona solution offered a fast, non-invasive repair that avoided those disruptions. The application was completed on a Saturday morning, and the pipe was back in service by Sunday. The contractor was very pleased with how straightforward the system was to apply, especially compared to more complex or invasive alternatives. Belzona provided a durable, long-term repair with substantial

For more examples of Belzona Know - How In Action, please visit <https://khia.belzona.com>

ISO 9001:2015

Belzona products are

FS 695214

manufactured under an ISO

ISO 14001:2015

9000 Registered Quality

EMS 695213

Management System.

www.belzona.com



time and cost savings.

For more examples of Belzona Know - How In Action, please visit <https://khia.belzona.com>

ISO 9001:2015
FS 695214
ISO 14001:2015
EMS 695213

Belzona products are
manufactured under an ISO
9000 Registered Quality
Management System.

www.belzona.com

