

# Chemical floor drains

ID: 8994

Industry: Chemical & Petrochemical

Application: FPA-Floor Problem Areas

Substrate: Concrete

Products: Belzona 4181 (AHR Magma-Quartz), Belzona 4331 (Magma CR3)

Customer Location: Loughborough

Application Date: September 2020

## Problem

A network of floor drains had found to be compromised by age, wear and harsh chemical attack. The chemicals included were Sulphuric, Hydrochloric, Nitric, Methanol and Acetone, amongst a cocktail of others. Percentages varied, but could reach as high as 50%, though only on very rare occasions.

Concerns were that the chemicals were escaping into the ground through damaged drains, causing serious environmental concerns



Loose grates and crack shoulders, requiring rebuilding using 4181



Work ongoing



Completed 4181 concrete repairs and 4331 coating



Completed 4181 concrete repairs and 4331 coating

## Application Situation

The company looked for solutions throughout the industry, but had used Belzona many times in the past. Knowing that we could supply, apply and perform in the most difficult of situations, Belzona were appointed to undertake the repair and protection work. A key consideration in the selection process was downtime and the client could not afford to have to carry out this process more than once. A wise choice, saving the company additional contractor costs and avoiding further unnecessary applications and downtime

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  
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## Application Method

Carry out surface preparation to the required standard, removing surface contamination and loose concrete/repair material.

Mix and apply Belzona® 4911 surface conditioner to areas within drain channel for repair.

Mix and apply Belzona® 4181 to drain channel profile. This will be done by trowel but may also be aided with form work.

Next cut to size formwork for drain cover channels and apply Belzona® 9411 release agent.

Mix and apply Belzona® 4911 surface conditioner to the remaining repair areas.

Install formwork.

Mix and apply Belzona® 4181 to remaining areas leaving a smooth profile.

Mix and apply the first coat of Belzona® 4331.

Once dust free and taped up a second coat of Belzona® 4331 will be applied completing this system.

## Belzona Facts

The correct application, using the correct products proved to be a big saving on costs, mainly to take away the need to repeat the application, which could well have been the case using other products. Belzona was a proven solution to this problem

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