

PDA
EUROPE

BASF
The Chemical Company

Sealing with Polyurea Spray-elastomer



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Where the problems start



The problems start by fueling cars and trucks.

The main reason for leakages are broken seals of the filling gun or is men made.

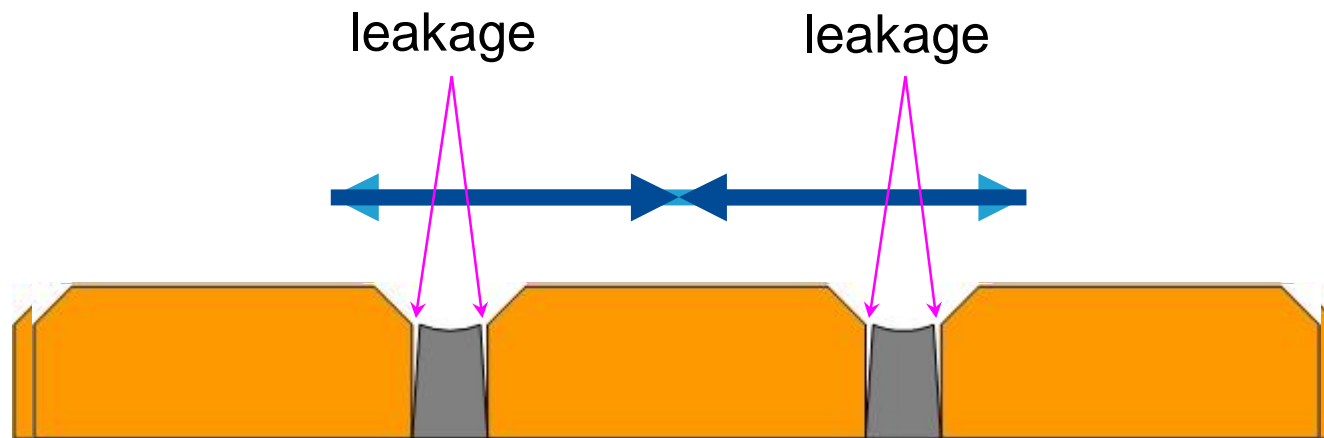
Where the problems start



The most severe problems of leaking into the soil starts by leaking of petrol as a result of refilling cars.

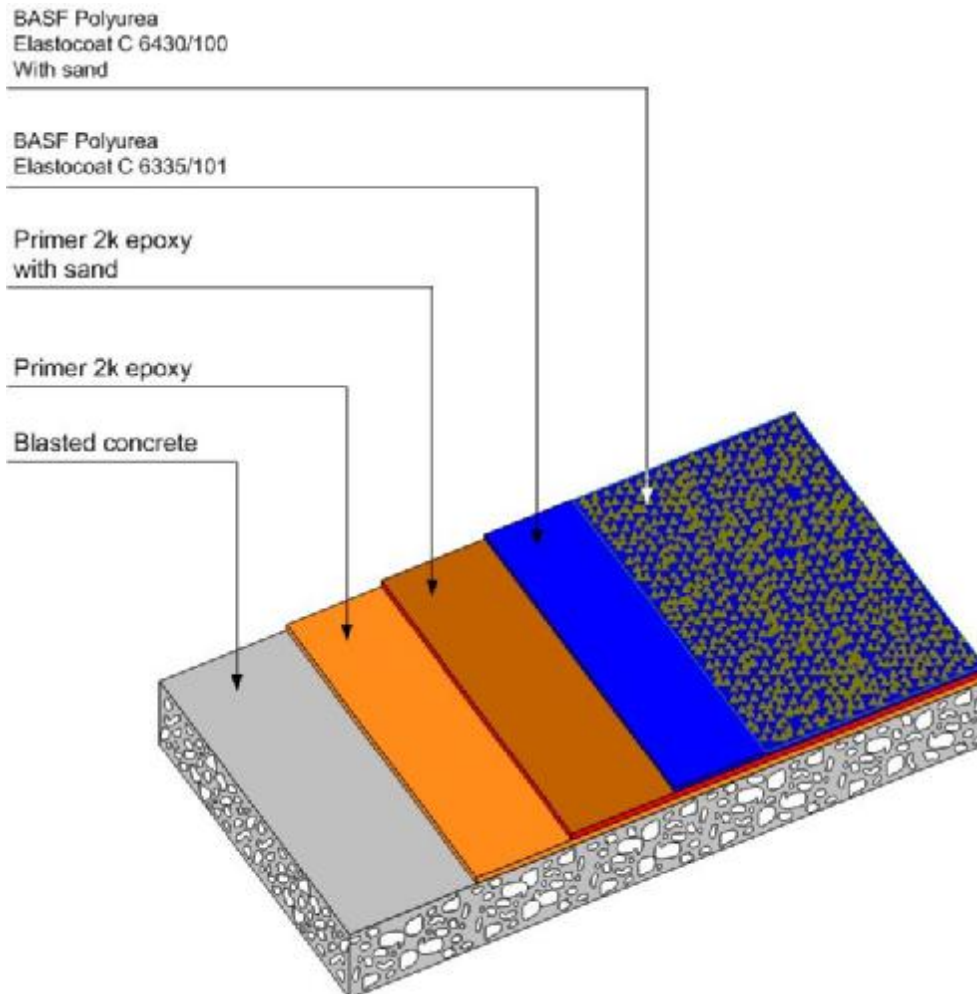
The petrol damages the elastic mass between the concrete slabs. The bonding to the concrete will fail and a gap occurs. After a certain time petrol will flow into the soil.

Where the problems start



Not only the chemical impact makes the floor start leaking, movement and vibrations in the concrete slabs also creates a heavy weight on the mastic sealer .

Build up of the Floor system



With the use of Polyurea a perfect solution is being created to protect the soil against the impact of these liquids.

One layer of a sprayed aromatic Polyurea in combination with a hand applied aliphatic Polyurea together with sandy material creates an anti-slip grit for protection.

The Preparation



The preparation of the concrete floor.

A cost effective and environmental friendly solution can be obtained by using dust free blasting equipment.



CPS 3

CPS 4

CPS 5

The result from cleaning (blasting) by following the classification in the guideline from the ICRI as a profile CPS 3 to 5.

Primer

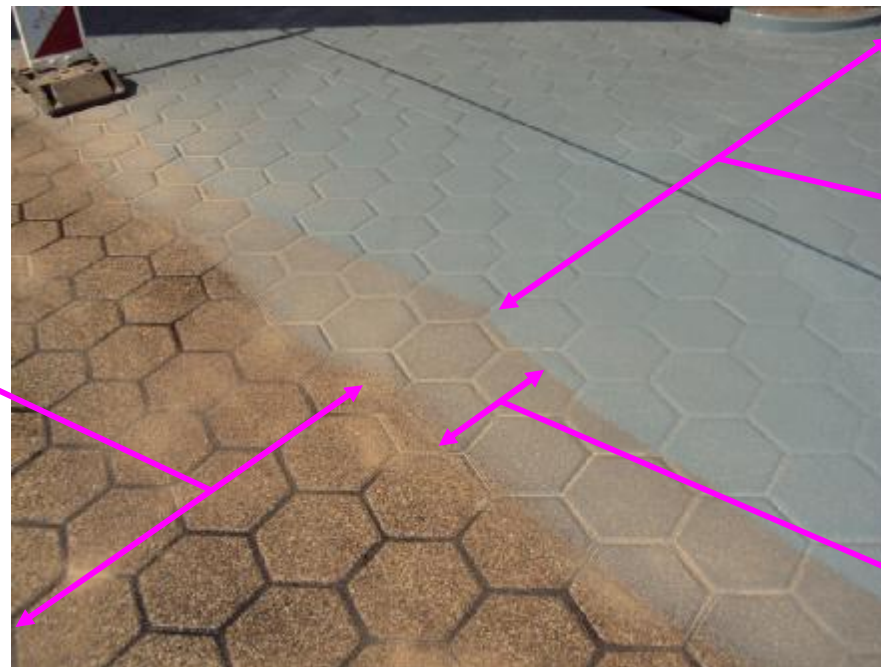


After the preparation by blasting the 2K Epoxy Primer is applied in two layers.
The second layer of 2K Epoxy Primer is filled with sandy material.

Primer Application



Blasted floor
with primer



Applied Polyurea
spray-elastomer

Primer with
sand

Primer Application



The floor is now coated with the Polyurea Spray-elastomer, the layer thickness is between 2 and 2,5 mm, the adhesion on the concrete is 2,9 N/mm² (average) according to the NEN-EN 1542.

This Polyurea Spray-elastomer system is approved by the NEN-EN 1504-2, table 1.



Topcoat Application



Hand-applied Aliphatic Polyurea.

This Aliphatic Polyurea is tested on the chemical resistance against petrol and diesel.

This Aliphatic Polyurea system is approved by NEN-EN-ISO 2812-1

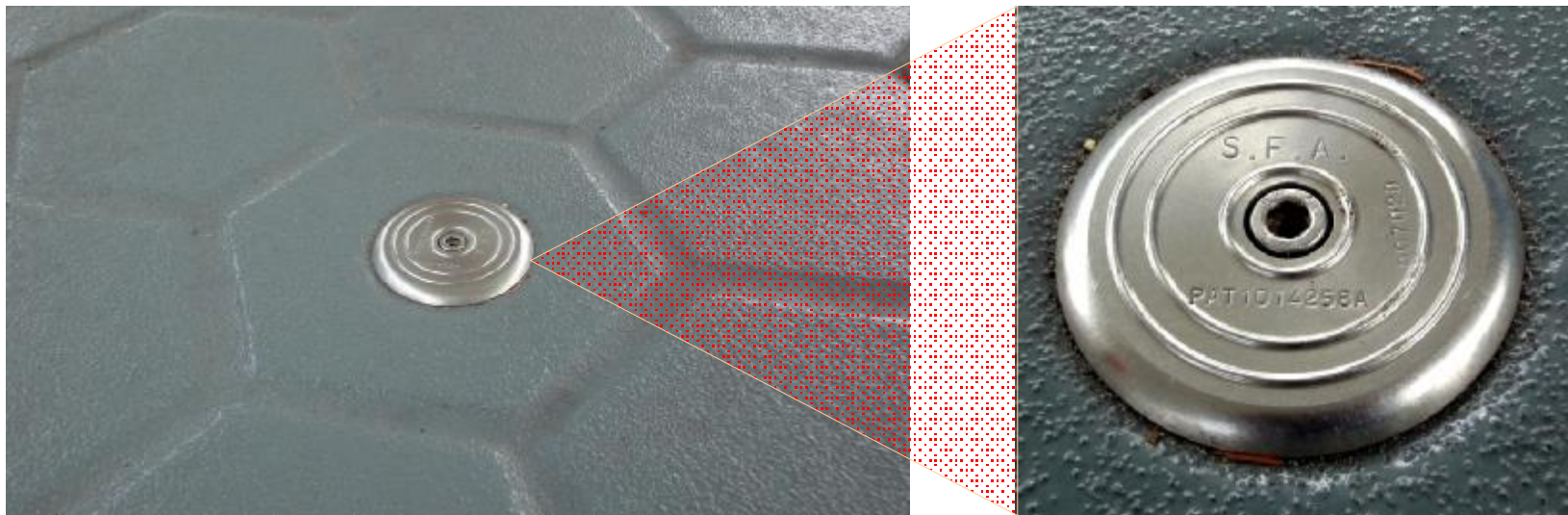
BP Unmanned Petrol Station Eindhoven (NL)



BP Unmanned Petrol Station (Details) Eindhoven (NL)



Inspection Point



In order to check if this Polyurea Spray-elastomer system is absolutely leakage-free, inspection points are being installed.

Polyurea for Flooring - Advantages



Very fast project turnaround

Sustainable chemical resistance and crack bridging

Durability (Mechanical)

Long life time





Thanks for your attention