

SUBSCRIBE NOW

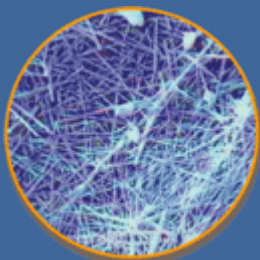
If you have received this from a friend you can click below to sign up for your own Penetron Newsletter: [SUBSCRIBE](#)

INSIDE THIS ISSUE

- [Product Feature: Peneseal FH – Concrete Densification Formula](#)
- [Penetron Crack Sealing Ability Demonstration](#)
- [Penetron Worldwide](#)
- [Clavalité River Hydroelectric Plant – Fenis \(Aosta\), Italy](#)
- [Water Power Plant Viaduct – Rotheau, Austria](#)
- [Town of Schroon Wastewater Plant Reconstruction – New York, USA](#)
- [The Sports Palace DIVS – Ekaterinburg, Russia](#)

FAST FACTS

Penetron crystals have been recorded to penetrate concrete 31 cm within 2 months.



An intricate web of insoluble crystals forms in the presence of Penetron and H₂O creating a permanent protective seal

[Home](#) | [Products](#) | [Projects](#) | [What is Penetron?](#)

www.penetron.com/en/

[DOWNLOAD PENETRON BROCHURE](#)

Penetron Industry Newsletter

December 2006

In response to a growing demand from our global distribution network, ICS Penetron International Ltd. developed PENESEAL FH. This water-based sealer penetrates through concrete floors and protects and strengthens it permanently. Read more below under “product feature”.

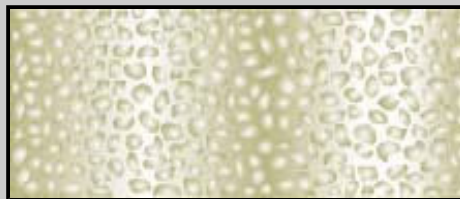


Product Feature: Peneseal FH – Concrete Densification Formula

Peneseal FH is a transparent, reactive, water-based sealer that penetrates concrete building materials, protecting, preserving and strengthening them permanently. It can be easily applied to both new and old concrete surfaces.

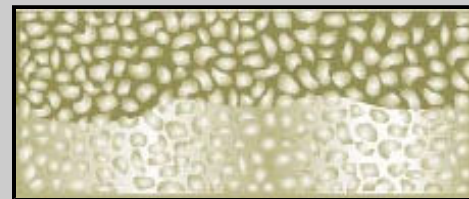
How it works

BEFORE TREATMENT



Pores and capillaries in the untreated concrete are subject to penetration by moisture, oils, acids, etc. and allow release of concrete dust.

AFTER TREATMENT



Peneseal FH penetrates into the concrete surface where it reacts with the free lime and alkali to form a solid mass that locks the pores and capillaries in the concrete, permanently sealing the concrete.

Advantages

- Improved, uniform curing
- Life-long sealing
- Effective hardening & impact resistance
- Chemical resistance
- Dustproofing
- Smooth surface finishing
- Bonding

[DOWNLOAD PENESEAL FH BROCHURE](#)



Penetron Crack Sealing Ability Demonstration

The photo on the right wonderfully illustrates the ability of the Penetron system to seal

ISO 9001 : 2000



Registered Company



TUV Rheinland of North America



cracks in concrete. While the cracked sample on the left remained untreated, the cracked sample on the right was coated with Penetron on the top surface only and then put in water with the Penetron coated surface remaining dry. After 28 days, it was taken out of the water and dried up. The Penetron crystals had penetrated the entire length of the crack in the sample and sealed it completely.



[\(Click here to enlarge image\)](#)

Penetron Worldwide

Clavalitè River Hydroelectric Plant – Fenis (Aosta), Italy

This hydroelectric plant is the biggest private hydroelectric plant under construction in Europe (it will start operation by the end of November 2006). Situated in the region of Valle d'Aosta (northwest of Italy) it uses the water of the "Clavalitè" river. The dam holds 20000 cubic meters of water and has a height of 525m. With its three turbines the dam produces a total of 21000 kilowatt/hour. The entire concrete structure was successfully treated with Penetron Admix. The compressive strength of the Penetron Admix treated concrete on this project was measured at $R_{ck} = 45\text{MPa}$ (after 60 days of curing in water) over the control sample with $R_{ck} = 35\text{MPa}$.



Water Power Plant Aquaduct – Rotheau, Austria

A water power plant was built in the 1920's in Lower Austria to supply the local industry with electricity. In order to feed the plant with water a concrete bridge had to be built over a small creek. About 80 years later, water leakage was reported in several areas of the bridge and a sealing against water penetration had to be undertaken to prevent any further loss of water on the one hand and to protect the embedded reinforcement steel from corrosion on the other. In order to carry out the repair works the water flow had been stopped and the inside of the bridge was repaired. Weak concrete areas had been renewed and the whole area was treated with two coats of Penetron. Shortly after, the bridge was filled with water again and the Penetron reaction started sealing the leaking areas. Within a few days all leaks had stopped. Finally the outside of the bridge was painted. The picture shows the completely waterproofed bridge after one year of use.



Town of Schroon Wastewater Plant Reconstruction –New York, USA

As a tourist destination in the Adirondacks, the hamlet of Schroon Lake sees a large increase in population during the summer months. As a result their wastewater system often experiences widely varying flows during the year. To improve the system to accommodate the summer influx and an increasing number of year-round residents, the Town has undertaken a \$6 Million Dollar reconstruction plan. This plan consists of the demolition and replacement of

existing structures and the construction of expanded facilities; aeration basins, clarifiers, a new process building and complete sludge removal system. "Penetron is pleased to have been approved as the concrete waterproofing material of choice by UW Marx Construction and AES Northeast", said Christopher Chen, Director of North American Sales and Marketing for Penetron, "We are proud to serve the Town of Schroon and to be a part of its continued growth."



The Sports Palace DIVS – Ekaterinburg, Russia

The Sports Palace is the practicing ground for leading teams of Ekaterinburg. It is also a place for different competitions, games, exhibitions, and shows. The Austrian contractor E. Fuhrmann Baugesellschaft, M.B.H., is working on the second stage of this project, which includes a hotel, gym, and rehabilitation center for sportsmen. The waterproofing section of the project was provided by Uralpromservice, a subdivision of Penetron-Russia. A team consisting of four

people treated 1500m² of foundation, shower rooms and saunas with Penetron. The Sports Palace is located near the Iset River and therefore is subject to water damage. To prevent water penetration into the concrete the foundation slabs were treated with Penetron. Further all bathrooms and saunas needed to be waterproofed to



prevent any damage from a possible water-pipe leak. All work was completed within the time limit of two weeks.

www.penetron.com/en/

Copyright ICS Penetron International Ltd. 45 Research Way, 203, East Setauket NY 11733