FEDERAL RESEARCH INSTITUTE OF VIENNA

PERMEABILITY STUDY OF XYPEX

XYPEX has now been tested by the prestigious Federal Higher Technical Education and Research Institute of Vienna, in Austria.

The subject of the test was "Testing of Sealing Effect re: Penetration of Water" and was performed according to Austrian Standard ONORM-B-3303 "Testing of Concrete", Point 5.10, and ONORM-B-3303, Point 5.4.

The results of the tests showed that **XYPEX-treated concrete specimens exhibited no measurable leakage whatsoever.**

In addition, "All test specimens were broken up in the middle and judged visually. The uncoated test specimens clearly showed a penetration of water to the depth of 15 mm.; **the coated specimens showed no penetration of water.**"

The compressive strength of the **XYPEX**-treated specimens was an average of **11% higher** than the untreated specimen.

Expert Opinion by Prof. Dr. Hugo Hubacek, Head of the Institute:

".... The sofar executed tests demonstrate that the concrete test specimens coated with **XYPEX** have an impermeability to water quite superior to the uncoated ones. "

Concrete Waterproofing by Crystallization™

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U.S. ARMY CORPS OF ENGINEERS PERMEABILITY TEST CRD C-48-73

XYPEX has now been tested by a major United States testing laboratory with excellent results. Some of the more important points are:

1) The test was performed strictly according to Army Corps of Engineers Specification CRD C-48-73.

2) The testing laboratory, Pacific Testing Laboratory is a major testing lab inspected regularly by U.S. Bureau of Standards. As an example of the scope of Pacific Testing Laboratories' work, they were responsible for concrete and steel quality control testing for Washington Public Power System's nuclear stations at Hanford, Washington.

3) **The results of the tests showed that the XYPEX-treated samples totally sealed themselves by the process of catalytic crystallization up to a pressure of 405 feet of water head** (175 PSI). This was the maximum working pressure of the testing apparatus not the failure point of the **XYPEX**, therefore it is logical to assume that the **XYPEX** treatment will waterproof concrete to a pressure even higher than the 175 PSIG limit of the testing apparatus.

4) The concrete specimens were only 2 inches thick, and had a design strength of only 2000 PSI. Obviously, in terms of quality and thickness, this is far below the porosity and density of concrete that **XYPEX** would normally be applied to.

5) Only 2 coats of **XYPEX** were applied to the concrete for a total thickness of 2 millimeters (1 mm per coat). This is significantly thinner than our competitors' materials.

6) "The **XYPEX** treated samples also exhibited leakage at each stage of increased pressure but consistently followed decreasing leakage patterns approaching zero." This is an indicator of the permanent catalytic action of the **XYPEX** materials.

Proof positive of the unique **Concrete Waterproofing by Crystallization™** effect of **XYPEX®**. We are not aware of any other product on the market today that can match these impressive results.

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