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## Test report

### P 5899a-2-E

Testing order:

**Waterproofing efficiency of  
“POLYBETON PROTECT SH 881”  
according to DIN EN 12390-8**

Customer:

**Polat S.A.  
34, 25th Martiou Str  
N. Efkarpia  
56429 Thessaloniki  
Greece**

Person in charge:

**J. Magner  
Dipl.-Ing. W. Jung**

Date of the test report:

**2009-01-27**

This test report comprises:

**5 pages**



## **C O N T E N T S**

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## 1 SUBJECT

The Polymer Institut was charged by Polat S.A., Thessaloniki, to test the waterproofing efficiency according to DIN EN 12390 part 8 of the material

### **POLYBETON PROTECT SH 881**

on water permeable substrate.

The material submitted is described by the customer as follows:

Material	Description
<i>Polybeton Protect SH 881</i>	clear sealing two component resin

### **Extent of testing**

The testing programme subsequently listed has been agreed with the customer.

Test	Standard	Method
Water tightness	DIN EN 12390-8	Testing hardened concrete Part 8: Depth of penetration of water under pressure;

## 2 RECEIPT OF SPECIMENS

On 2009-01-15 the following material were received at the Polymer Institut:

*Table 1: Receipt of specimen*

No.	Material	Comp.	Container	Quantity [kg]
1	<i>Polybeton Protect SH 881</i>	A	tin	2x 0,75
2	<i>Polybeton Protect SH 881</i>	B	tin	2x 0,25

## 3 PREPARATION OF THE COMPOSITE SPECIMENS

### 3.1 Preparation of the mixture

Material	Mixing proportion in parts by mass	
	Component A	Component B
<i>Polybeton Protect SH 881</i>	75	25

The material was mixed to homogeneity (about 3 min), using a drill with a twist stirrer.

### 3.2 Preparation of the composite specimens

The substrate was coated by a co-worker of the Polymer Institut at standard atmosphere DIN 50014-23/50-2 in accordance with the guideline of the customer.

Table 2: System of the composite specimens

Specimen No.	Substrate	1 <sup>st</sup> application	2 <sup>nd</sup> application
1 to 3	water-permeable concrete class C20/25 according to DIN EN 206 part 1 table 7	190 g/m <sup>2</sup>	200 g/m <sup>2</sup>

The waiting time between the 1<sup>st</sup> and 2<sup>nd</sup> application with *Polybeton Protect SH 881* was 16 h.

The waiting period until the beginning of the exposure was 3 days acc. to the customers guideline.

One reference substrate without treatment was exposed in the testing device too.

## 4 TEST

The water tightness was determined following the test method specified in DIN EN 12390-8 by application of water to the specimens submitted.

Test duration: 72 hours

Pressure: 0.5 MPa

### Assessment:

After an exposure time of 72 hours the test specimens were cut centrally, and the penetration depth of the water was evaluated at the broken areas.

### Result:

1. No water penetrated into the test specimens.
2. The reference concrete specimen without organic treatment was totally soaked with water.

## 5 SUMMARY

The Polymer Institut was charged by Polat S.A., Thessaloniki, to test the waterproofing efficiency according to DIN EN 12390 part 8 of

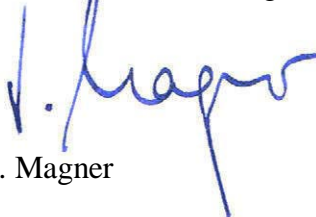
*Polybeton Protect SH 881*

on water permeable substrate.

The results are to be taken from the previous chapter.

Flörsheim-Wicker, 2009-01-27

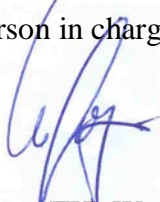
The head of the testing facility



J. Magner



The person in charge



Dipl.-Ing. (FH) W. Jung M.Eng.