

POLYBETON SYSTEM

Outdoor Decorative System

Concrete treatment system



Revolutionary system for concrete surface treatment. Transforms common concrete into a decorative, textured, uniform, extremely economical outdoor flooring. Applied on fresh concrete on horizontal and vertical surfaces, preferably on gravel concrete (aggregate granulometry up to 2.5cm).

Does not alter the composition of the concrete due to its action on the surface of the concrete, which eventually reveals the aggregates of the concrete, making it decorative in a couple of simple steps. Concrete quality has to be C 16/20 or C 20/25 at least. Recommended mainly for outdoor surfaces on grey, white or colored concrete

Retains the mechanical strength of the concrete slab, which depends on its composition, thickness and reinforcement and transforms its aesthetics without affecting its technical characteristics.

Therefore, **POLYBETON SYSTEM** provides easily a superior decorative look with simple, fast and extremely low-budget application. It is coated with **POLYBETON PROTECT M 880** special sealing resin for the creation of a mat surface or **POLYBETON PROTECT SH** special sealing resin for the creation of a shiny surface.

Recommended for indoor or outdoor concrete surfaces such as surrounding areas of hotels, residential areas, pools and inside them, restaurants and also for corridors, walkways, pavements, squares etc.

.Preparation – Application

- Application of **POLYBETON SYSTEM** is carried out on fresh concrete before it dries.
- The conventional thicknesses are recommended for the concrete substrate (15-20cm for new concrete slab or 8cm for concrete screed on top of existing reinforced concrete infrastructure). After the substrate is laid, **POLYBETON REVEAL 879** is sprayed on the whole surface with consumption 300-400 gr/m²
- Then the surface is thoroughly rinsed with water under pressure within the next 5-24 hours, depending on the ambient temperature and the type of concrete (C 16/20, C 20/25, grey or white concrete).
- After the surface dries out, **POLYBETON PROTECT M 880** is applied by brush or spraying device with consumption 200-300 gr/m² for plasticizing and waterproofing of the final surface.
- In case a shiny surface is required, **POLYBETON PROTECT SH 881** is applied after 30-40 days, to let the concrete dry out completely first
- It is necessary to form a grid of joints on the floor (with sides 5X4m or 5X5m), which are subsequently sealed with a special polyurethane mastic
- *** **POLYBETON SYSTEM** is not recommended for concrete class lower than C16/20

The **POLYBETON PROTECT M 880** and the **POLYBETON PROTECT SH 881**, are certified by **POLYMER Institute of Germany** according to **DIN EN 12390-8** for waterproofing efficiency.



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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 materials

Polybeton Protect M (Code 880)
on water permeable substrate.

The material submitted is described by the customer as follows:

Material	Description
Polybeton Protect M (Code 880)	Clear, sealing, impregnation 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 specimens

No.	Material	Container	Quantity [kg]
1	Polybeton Protect M (Code 880)	tin	1 x 0,9

The material is a ready-to-use penetrating solution.



3 PREPARATION OF THE COMPOSITE SPECIMENS

The substrate was coated on top 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	application
1 to 3	water-permeable concrete class C20/25 according to DIN EN 206 part 1 table 7	180 g/m ²

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.

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dated 2009-01-27



Polymer Institut

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 M (Code 880)

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.

ΕΚΕΠΥ Α.Ε. CERECO S.A.	ΕΚΘΕΣΗ ΔΟΚΙΜΩΝ TEST REPORT	Κωδικός: 1080 - 2 Code Nr.:
		Ημερ. Έκδοσης: 15 /01/2009 Date of issue :
		Σελίδα: 1 ΑΠΟ: 5 Sheet : Of :

ΕΜΠΙΣΤΕΥΤΙΚΟ - CONFIDENTIAL

<p>ΑΝΩΝΥΜΗ ΕΤΑΙΡΕΙΑ ΤΕΧΝΟΛΟΓΙΚΗΣ ΑΝΑΠΤΥΞΗΣ ΚΕΡΑΜΙΚΩΝ ΚΑΙ ΠΥΡΙΜΑΧΩΝ 72ο χλμ. Εθνικής Οδού Αθηνών - Λαμίας Τ.Θ. 18646, 341 00 ΧΑΛΚΙΔΑ Τηλ.: 22620 71226, 71811-15 / Fax: 22620 71461, Τιχ.: 299135 GER GR</p>	<p>CERAMICS AND REFRACTORIES TECHNOLOGICAL DEVELOPMENT COMPANY 72nd Km. of Athens - Lamia National Road P.O.Box 18646, 341 00 Chalkida, Greece Tel.: 22620 71226, 71811-15 / Fax: 22620 71461 TLX.: 299135 GER GR Registered No. 99098/96/B/86/003</p>
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ΠΡΟΕΙΔΟΠΟΙΗΣΗ - WARNING

Τα αποτελέσματα των Δοκιμών αφορούν μόνον τα δοκιμασθέντα δοκίμια
The test results relate only to the item(s) tested
Απαγορεύεται η τμηματική αναπαραγωγή της Έκθεσης Δοκιμών χωρίς την έγκριση του Εργαστηρίου
This test report shall not be reproduced except in full without the approval of the Laboratory.

<p>ΠΕΛΑΤΗΣ CLIENT</p> <p style="text-align: center;">ΠΟΛΑΤ Α.Ε.</p>	<p>ΥΠΗΡΕΣΙΑ ΑΝΑΤΕΘΕΙΣΑ ΣΤΟ ΕΡΓΑΣΤΗΡΙΟ SERVICE ORDERED TO THE LABORATORY</p> <p>➤ Μελέτη Σύνθεσης Σκυροδέματος κατηγορίας C16/20</p>
<p>ΠΕΡΙΓΡΑΦΗ ΕΛΕΓΧΟΜΕΝΟΥ ΥΛΙΚΟΥ TEST ITEM DESCRIPTION</p> <p style="text-align: center;">Αδρανή Υλικά (Άμμος Θραυστή, Γαρμπίλι Θραυστό, Χαλίκι θραυστό), Τσιμέντο, Πρόσθετα για Μελέτες Συνθέσεως</p>	<p>ΠΑΡΑΓΩΓΟΣ ΥΛΙΚΟΥ- ITEM MANUFACTURER</p> <p style="text-align: center;">ΑΔΡΑΝΗ, Τσιμέντο: CEM II 42.5N Ρευστοποιητής: POLYBETON REVEAL</p>
<p>ΕΠΙΣΗΜΑΝΣΗ ΔΕΙΓΜΑΤΟΣ TEST ITEM / IDENTIFICATION</p> <p style="text-align: center;">---</p>	<p>ΜΕΘΟΔΟΣ / ΔΙΑΔΙΚΑΣΙΑ ΔΕΙΓΜΑΤΟΛΗΨΙΑΣ SAMPLING METHOD / PROCEDURE</p> <p style="text-align: center;">ΑΠΟ ΤΟΝ ΠΕΛΑΤΗ</p>
<p>ΗΜΕΡΟΜ. ΠΑΡΑΛΑΒΗΣ ΔΕΙΓΜΑΤΟΣ TEST ITEM DATE OF RECEIPT</p> <p style="text-align: center;">13/11/2008</p>	<p>ΕΚΤΕΛΕΣΗ ΔΕΙΓΜΑΤΟΛΗΨΙΑΣ ΑΠΟ SAMPLING PERFORMED BY</p> <p style="text-align: center;">ΤΟΝ ΠΕΛΑΤΗ</p>
<p>ΜΕΓΕΘΟΣ ΔΕΙΓΜΑΤΟΣ SAMPLE SIZE</p> <p style="text-align: center;">~150Kgr Υλικών</p>	

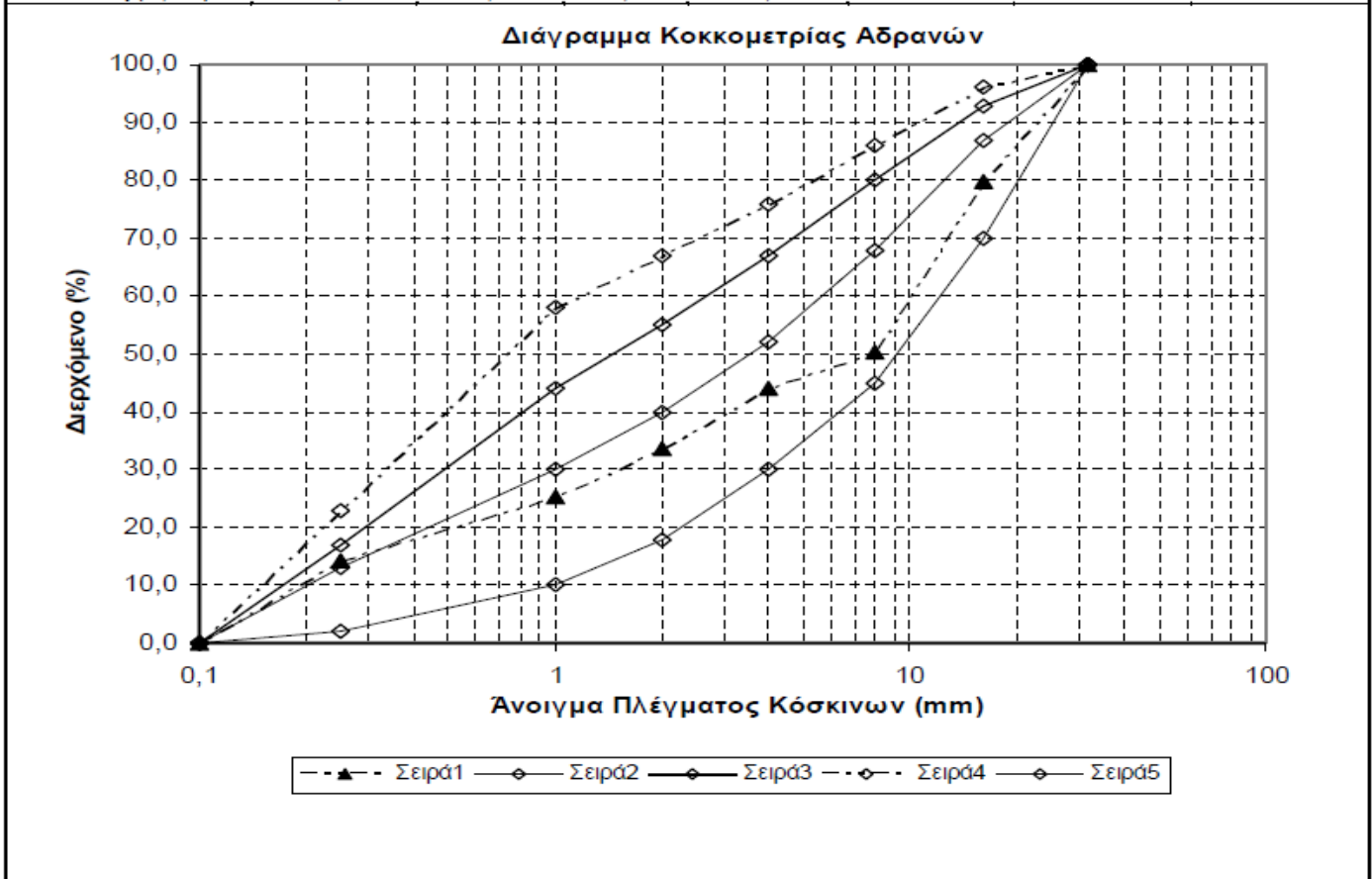
ΠΑΡΑΤΗΡΗΣΕΙΣ - REMARKS:

ΟΝΟΜΑΤΕΠΩΝΥΜΟ / NAME	Δρ. Κ. ΣΤΟΥΡΝΑΡΑΣ	ΑΝ. ΓΕΡΑΛΗΣ
ΤΙΤΛΟΣ / TITLE	Γενικός Διευθυντής	Προϊστάμενος Υπηρεσίας Συμβατικών Κεραμικών - Τεχνικός Υπεύθυνος
ΥΠΟΓΡΑΦΗ / SIGNATURE		

ΕΚΕΠΥ Α.Ε. CERECO S.A.	ΕΚΘΕΣΗ ΔΟΚΙΜΩΝ TEST REPORT	Κωδικός: 1080 - 2 Code Nr.:
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ΕΜΠΙΣΤΕΥΤΙΚΟ - CONFIDENTIAL

Κοκκομετρική Διαβάθμιση Αδρανών & Μίγματος Αδρανών							
Ανοίγμα οπών κόσκινων (mm)	Άμμος Θραυστή 44,0%	Γαρμπίλι Θραυστό 7,0%	Χαλίκι Θραυστό 49,0%	Μίγμα 100%	Διαβάθμιση (Πίνακας 4.3.2.10α) ΚΥΣ'97 Αδρανή μέγιστου κόκκου 31,5mm		
					Υποζώνη Δ	Υποζώνη Ε	Υποζώνη Ζ
31,5	—	—	100	100	100	100	100
16	—	100	59	80	70 - 87	87 - 93	93 - 96
8	100	78	2	50	45 - 68	68 - 80	80 - 86
4	98	7	1	44	30 - 52	52 - 67	67 - 76
2	75	3	1	34	18 - 40	40 - 55	55 - 67
1	56	3	1	25	10 - 30	30 - 44	44 - 58
0,5	42	3	1	19	—	—	—
0,25	31	3	1	14	2 - 13	13 - 17	17 - 23
0,125	22	2	1	10	—	—	—
Παιπάλη (-0,063)	18,7	1,7	0,9	8,8	—	—	—





CERTIFICATE

The certification Body
EQA HELLAS
certifies that

KATASKEVES DAPEDON L.T.D.

HEADQUARTERS: 5 KOROMILA Str., GR 546 45 THESSALONIKI
PRODUCTION UNIT: LAKKOMA, GR 546 45 CHALKIDIKI

has established and applies a Quality Management System which is in conformance with

ELOT EN ISO 9001:2008
(Quality Management System)

PRODUCTION & SALES OF CHEMICAL BUILDING MATERIALS &
SYSTEMS. INSTALLATION OF ATHLETIC & INDUSTRIAL
WATERPROOFING FLOORS

FOR THE COMPANY
CHARALAMBOS GALATSANOS

This Certificate of Conformity Number **QMS 3817/14** first issued on the **29th July 2014** is valid until the **28th July 2017** and is subject to all applicable regulations within the accredited scope of EQA Hellas S.A. and under the condition of the issuing CB conducting required annual surveillance assessment visits.



CERTIFICATE NOS 193
QMS CERTIFICATION

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*Προσκόμιση ενυδατώσεως ως και οποιαδήποτε πρόσθετο σχετικό με τον συγκεκριμένο πιστοποιημένο πελάτη

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