GRAINFLOOR SYSTEM

Outdoor Decorative Flooring

Certified by Polymer Institute and CERECO S.A.

Decorative, innovative concrete flooring of exposed colored aggregates (pebbles or quartz). Applied on hardened concrete, creates economical, weather resistant, not-requiring maintenance, anti-slip flooring in a variety of patterns and a wide range of colors. It is ideal for indoor or outdoor surfaces such as surrounding areas in hotels or swimming pools, pavements, squares, corridors, villas etc.

Steps :

1. **GRAINFLOOR PRIMER 871.** Special cementitious bonding compound for the adhesion of GRAINFLOOR on set concrete.
2. **GRAINFLOOR MIX 877.** Concentrated, fiber-reinforced, colored mixture consisting of acrylic resins, selected quartz aggregates and special admixtures and improvers. It is mixed with cement (grey or white) and colored aggregates (pebbles or quartz) and combines with **GRAINFLOOR REVEAL 875** and **GRAINFLOOR PROTECT 876** for the creation of the final concrete surface of exposed aggregates of **GRAINFLOOR**.
3. **GRAINFLOOR REVEAL 875.** Water-based, surface-deactivator for the creation of the exposed aggregate, concrete surface of **GRAINFLOOR**. It is applied by airless spray onto the fresh concrete surface facilitating the expose of the aggregates of **GRAINFLOOR**.
4. **GRAINFLOOR PROTECT 876.** Clear, penetrating, sealing liquid, which is applied as the final coating for the system of **GRAINFLOOR.** It provides excellent water-proofing and long time protection.

Preparation – Application

- On strong reinforced concrete slab, application of the special cementitious bonding compound **GRAINFLOOR PRIMER 871** for the adhesion of **GRAINFLOOR MIX 877** on the concrete subfloor with consumption: 1,5-2 kg/m2 by brushes.
- Then wet on wet and before the **GRAINFLOOR PRIMER 871** gets dry, we apply the GRAINFLOOR MIX, which is a concentrated, fiber-reinforced, colored mixture consisting of acrylic resins, selected quartz

aggregates and special admixtures and improvers. It is mixed with cement (grey or white) and colored aggregates (pebbles or crushed stones) and is applied like normal concrete on the subfloor. The mixing ratio is 1 part **GRAINFLOOR MIX 877** with 2 parts cement and 4 parts of aggregates. Consumption for thickness 1cm: 2,5kg/m2 GRAINFLOOR MIX : 5 kg/m2 cement : 10 kg/m2 aggregates.

- Then follows the application the surface-deactivator **GRAINFLOOR REVEAL 875** for the creation of the exposed aggregate, concrete surface of **GRAINFLOOR**. It is applied by airless spray onto the fresh concrete surface facilitating the expose of the aggregates of **GRAINFLOOR** with the parallel use of a high pressure water jet.(over 220 bars).
- After the surface is completely exposed and without any remains or dirt, follows the application of **GRAINFLOOR PROTECT 876** (mat sealer,doesn't alter the surface colour) which is a clear, penetrating, sealing,certified resin applied as the final protective coating for the system of **GRAINFLOOR**. It provides excellent water-proofing and long time protection with consumption: 150-200 gr/m2.
- In case of glossy surface demand it is highly recommended the use of PU aliphatic resin to plasticize the decorative flooring and create a protective film instead of the use of the GRAINFLOOR PROTECT resin.

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KDF

Sports Flooring Systems & Building Materials

45 YEARS OF EXPERIENCE

GRAINFLOOR

Cast decorative flooring

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Color chart

GRAINFLOOR

Cast decorative flooring

Colors swatches shown above may vary in color due to printing.

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Φορέας Πιστοποίησης

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.

ΕΣΥΔ
CERTIFICATE NOS 193
QMS CERTIFICATION

EQA HELLAS S.A.
30,KALAMA P. Str., 152 33 CHALANDRI, Tel: 210 6834012, Fax: 210 6850985
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*Παρακαλούμε ενημερώστε μας για οποιαδήποτε παράπονο σχετικό με τον συγκεκριμένο πιστοποιημένο πελάτη

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

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ΚΕΡΑΜΙΚΩΝ ΚΑΙ ΠΥΡΙΜΑΧΩΝ
72ο χλμ. Εθνικής Οδού Αθηνών - Λαμίας
Τ.Θ. 18646, 341 00 ΧΑΛΚΙΔΑ
Τηλ.: 22620 71226, 71811-15 / Fax: 22620 71461,
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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.

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

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.: Ημερ. Έκδοσης: 15/01/2009 Date of issue : Σελίδα: 2 Από: 5 Sheet : Of :

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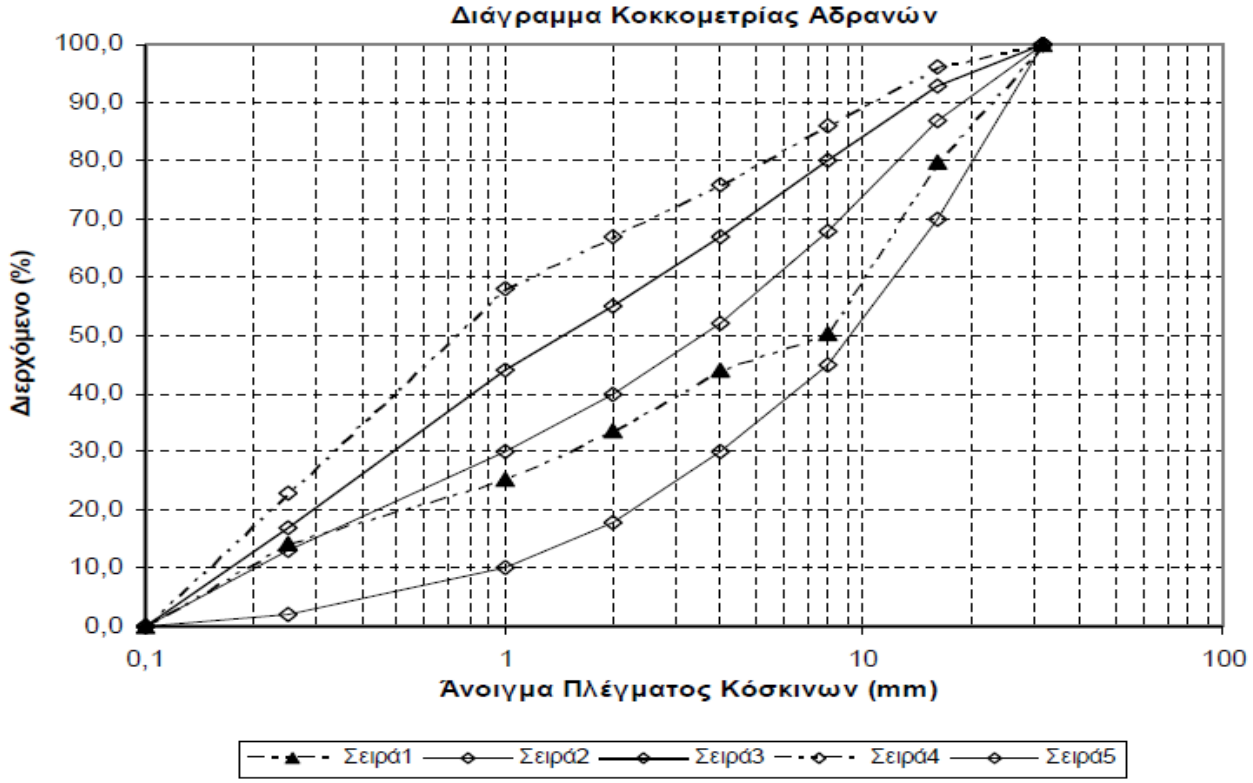
Κοκκομετρική Διαβάθμιση Αδρανών & Μίγματος Αδρανών

Άνοιγμα οπών κόσκινων (mm)	Άμμος Θραυστή 44,0%	Γαρμπίλι Θραυστό 7,0%	Χαλίκι Θραυστό 49,0%	Μίγμα 100%	Διαβάθμιση (Πίνακας 4.3.2.10α) ΚΤΣ'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	---	---	---



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Test report

P 5899-3-E

Testing order: **Waterproofing efficiency of "Polybeton Protect M 880" 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

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.

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

Polymer Institut Flörsheim-Wicker

The person in charge

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