

POLEPOX FLOOR 817

HARDFLOOR SYSTEM



POLEPOX FLOOR 817 (POLEPOX PR 824 plus POLEPOX FLOOR 817) is **epoxy-based, self-leveling, three-component flooring**.

Colored, industrial hard flooring suitable for indoor dry floors with heavy traffic.

- Creates colored, easy-to-clean flooring without joints, not requiring maintenance and meeting health standards.
- Resistant to acid solutions, alkalis, oil, grease, wastes.
- Prevents floorings from creating dust, strengthening their durability and resistance.
- Resistant to mechanical stresses, wearing from friction and chemical effects.
- It is ideal for covering floorings, mosaics, cement surfaces, decks, bio-cleanings, water baths, silos etc.

Recommended for food industries, car workshops, parking areas, bio-cleanings, production plants, hospitals for antibacterial use, warehouses, supermarkets, labs etc.

Preparation – Application

Applied only on dry, smooth concrete surfaces(over 1 month old),protected from arising humidity and free of materials that might prevent bonding e.g. dust, loose particles, grease etc. The success in the application depends on the right preparation of the underlay and use of the material.

- ✓ Treatment of the surface with a mosaic machine, with sandblast or rotor machine, depending on the thickness of the final coating
- ✓ **Good, dry** cleaning of the surface from dust and residues with vacuum cleaner and squeegees.
- ✓ Priming of the surface with **POLEPOX-PR 824**.It is suggested the application of the **POLEPOX-PR 824** in two or 3 layers until the surface is saturated and a film is created. Consumption: 250-600 gr/m², depending on the absorption and the type of the underlay (smooth power-troweled concrete or other type).
- ✓ After hardening of the primer (2-12 hours depending on the ambient temperature) and within 24 hours, follows the application of **POLEPOX FLOOR 817**.

- ✓ Good mixing of components A (resin) & B (hardener) packed into separate containers in fixed weight proportions and then the whole quantity of component C (quartz sand) is gradually added into the mixture under continuous stirring until a uniform epoxy mortar is formed.
- ✓ The epoxy mortar is poured on the floor and spread on the desired thickness using a notched trowel or special rolls and following the application of the **POLEPOX FLOOR 817**, the self-leveling layer should be rolled using a special spiky-roller in order to release any possibly entrapped air and avoid the formation of bubbles.

Important Remarks

For the creation of a completely non-slip surface, it is recommended on a still fresh layer of epoxy selfleveling coating the dredging of dry, quartz sand with a particle size 0,1-0,4 mm or 0,4-0,8 mm or 0,8-1,25 mm depending on the desired anti-slipping effect. Consumption of quartz sand: approx. 4 kg/m². After hardening of **POLEPOX FLOOR 817**, any loose grains are being removed using a high suction vacuum cleaner. Then a finishing layer of **POLEPOX COAT 814** is applied for the creation of an acid proof, easy to clean, non-slip surface with consumption: 0,8-1 kg/m².

Colors : RAL 7035, RAL 7036, RAL 7046, RAL 7032, RAL 9016, RAL 9011, RAL 3013, RAL 5015, RAL 6032, RAL 6034, RAL 1015, RAL 1001 and on request in other RAL colors.



RAL 7035



RAL 7036



RAL 7046



RAL 7032



RAL 9016



RAL 9011



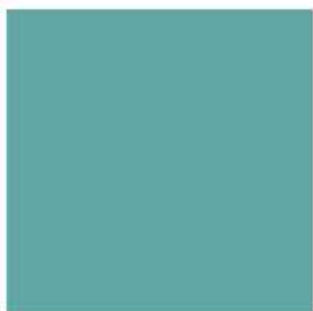
RAL 3013



RAL 5015



RAL 6032



RAL 6034



RAL 1015



RAL 1001

On request in other RAL colors

NEW AGE



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.



CERTIFICATE NOS 193
QMS CERTIFICATION

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*Παρακολούθητε την εξέλιξη της ως αναφερόμενης διαδικασίας σχετικά με τον συγκεκριμένο πιστοποιημένο πελάτη

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Akkreditiertes Prüflaboratorium nach DIN EN ISO 17025 - DAP-PL-01.004-00

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Notified body under Construction Products Directive (89/105/EEC) - Ident.-no. 1119



Test report

P 4730-3-e

Testing order:

Testing of plastic material

Polat High Resistant Floor (817)

Customer:

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

Persons in charge:

J. Magner
Dipl.-Ing. (FH) N. Treichel

Date of the test report:

2007-11-01

This test report comprises:

9 pages

The test results exclusively refer to the tested materials.

The publication of the test report in extracts, and references to tests for advertising purposes requires our written agreement in each individual case.



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dated 2007-11-01



Polymer Institut

1 SUBJECT

The Polymer Institut has been charged by the Polat S. A., Thessaloniki/Greece, to carry out plastic material tests of the material

Polat High Resistant Floor (817).

1.1 Testing programme

- Compressive strength at 23 °C and at -20 °C in accordance with ASTM D 695-96
- Flexural strength at 23 °C and at -20 °C in accordance with ASTM D 790-90
- Tensile strength at 23 °C in accordance with ASTM D 638-90
- Shore D hardness at 23 °C in accordance with ASTM D 2240-00
- Adhesive strength at 23 °C in accordance with EN ISO 4624 in combination with Epoxy Primer (824)
- Water absorption at 23 °C in accordance with ASTM D 570-98

2 RECEIPT OF SAMPLES

On 2006-12-06 the following materials have been submitted to the Polymer Institut by the customer:

Table 1: Receipt of samples

No.	Material designation	Quantity [kg]
1	Polat High Resistant Floor (817), component A	1,9
2	Polat High Resistant Floor (817), component B	0,6
3	Polat High Resistant Floor (817), component C	2,5
4	Epoxy Primer (824), component A	2,5
5	Epoxy Primer (824), component B	2,5



3 PREPARATION OF TEST SPECIMENS

3.1 Preparation of the mixtures

The mixing proportions of the materials used are to be taken from the following table.

Table 2: *Mixing proportions*

Material	Mixing proportion in parts by mass		
	Component A	Component B	Component C
Polat High Resistant Floor (817)	38	12	50
Epoxy Primer (824)	1	1	-

The materials have been measured out in the above mixing proportion and mixed to homogeneity (about 3 min) using a laboratory propeller stirrer.

3.2 Coating of the substrates

The substrates have been coated at standard atmosphere DIN 50014-23/50-2 in accordance with specifications of the customer by an employee of the Polymer Institut.

Table 3: *Coating of the substrates*

	Consumption in [g/m ²] - Mean values -	
	1	2
Substrate	<i>Primer</i> Epoxy Primer (824)	<i>Coating</i> Polat High Resistant Floor (817)
Concrete slabs 300 mm x 300 mm x 40 mm	170	ca. 2.200
Application tool	Roller	Smoothing trowel
Waiting times	1 day	

3.3 Preparation of the free specimens

The test specimens have been prepared as indicated in the respective standard using the mixed material *Polat High Resistant Floor (817)*. The dimensions of the used test specimens are given in the respective clause. Prior to testing, the test specimens have been stored at standard atmosphere DIN 50014-23/50-2.

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dated 2007-11-01



Polymer Institute

4 TESTS

4.1 Compressive strength at 23 °C and at -20 °C following ASTM D 695-96

The compressive strength has been determined retaining the following test conditions:

Test apparatus: Universal testing machine UPM 1445, company Zwick, in accordance with ISO 5893
Test specimen: Prism, 10 mm x 10 mm x 4 mm (12,7 mm x 12,7 mm x 25,4 mm)*
Test temperatures: 23 °C and -20 °C
Test speed: 2 mm/min (1,3 ± 0,3 mm/min)*
Number of specimens: 5 for each test temperature
Evaluation: Compressive strength = Compressive stress at maximum force in MPa

* deviating from information in brackets in accordance with ASTM D 695-96

The result is to be taken from table 4 as mean value of 5 single values.

Table 4: Compressive strength

Material	Compressive strength at 23 °C [MPa]	Compressive strength at -20 °C [MPa]
Polat High Resistant Floor (817)	83,7	145,1



4.2 Flexural strength at 23 °C and at -20 °C in accordance with ASTM D 790-90

The flexural strength has been determined retaining the following test conditions:

Test apparatus:	Universal testing machine UPM 1445, company Zwick, in accordance with ISO 5893
Test specimen:	Prism, 80 mm x 10 mm x 4 mm
Test temperature:	23 °C and -20 °C
Test speed:	2 mm/min
Type of loading:	Three-point-bending
Number of specimens:	5 for each test temperature
Evaluation:	Bending strength = Bending stress at maximum force in MPa

The result is to be taken from table 5 as mean value of 5 single values.

Table 5: Flexural strength

Material	Flexural strength at 23 °C [M Pa]	Flexural strength at -20 °C [MPa]
Polat High Resistant Floor (817)	69,6	98,0

4.3 Tensile strength at 23 °C in accordance with ASTM D 638-90

The tensile strength has been determined retaining the following test conditions:

Test apparatus:	Universal testing machine UPM 1445, company Zwick, in accordance with ISO 5893
Test specimen:	Type I
Test temperature:	23 °C
Test speed:	5 mm/min
Number of specimens:	5
Evaluation:	Tensile strength = Tensile stress at maximum force in MPa

The result is to be taken from table 6 as mean value of 5 single values.

Table 6: Tensile strength

Material	Tensile strength [M Pa]
Polat High Resistant Floor (817)	18,4



4.4 Shore D hardness at 23 °C in accordance with ASTM D 2240-00

The Shore D hardness has been determined after 7 days at standard atmosphere DIN 50014-23/50-2 retaining the following test conditions:

Test apparatus: Type 38210 of company Karl Frank GmbH
Test specimen: Free specimen, Ø 60 mm, thickness 5 mm
Measuring time: 3 s
Test temperature: 23 °C
Number of measurements: 5

The result is to be taken from table 7 as mean value of 5 single values.

Table 7: Shore D hardness

Material	Shore D
Polat High Resistant Floor (817)	83

4.5 Adhesive strength at 23 °C following DIN EN ISO 4624

The adhesive strength of the coating system including as primer *Epoxy Primer (824)*, as indicated in table 3, has been determined retaining the following test conditions:

Test apparatus: Company Freundl F20 D Easy M 2000
Test cylinder: Steel cylinder Ø 50 mm, instead of Ø 20 mm
Adhesive: 2-component polyurethane adhesive
Test speed: 100 N/s
Test temperature: 23 °C
Number of measurements: 5

The result is to be taken from table 8 as mean value of 5 single values.

Table 8: Adhesive strength

Materials	Adhesive strength [N/mm ²]	Area of failure
Epoxy Primer (824) Polat High Resistant Floor (817)	3,1	100 % cohesion failure in concrete



4.6 Water absorption at 23 °C in accordance with ASTM D 570-98

The water absorption has been determined using free specimens retaining the following test conditions:

Dimensions of specimens:	60 mm x 60 mm x 1 mm
Conditioning:	24 h at 50 °C
Test medium:	Demineralised water
Test temperature:	23 °C
Test procedure:	Long-time immersion
Time period of immersion:	22 days (maximum water absorption)
Re-drying:	24 h at 50 °C
Evaluation:	Water absorption after 22 d Mass difference after re-drying in % by mass Diagram water absorption as a function of time (square root function)

The result is to be taken from table 9 as mean value of 3 specimens. The diagram of the water absorption as a function of time (square root function) is given in figure 1.

Table 9: Water absorption

Material	Water absorption after 22 d immersion time [% by mass]	Mass difference after re-drying [% by mass]
Polat High Resistant Floor (817)	1,2	-0,15

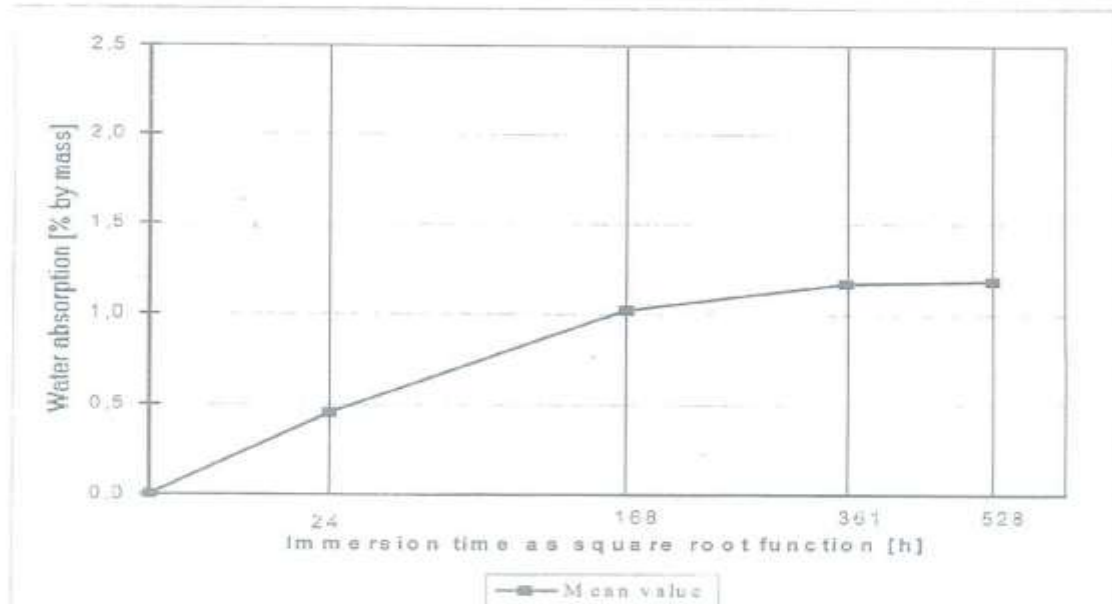


Figure 1: Water absorption as function of the immersion time (square root function)

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dated 2007-11-01



Polymer Institut

5 SUMMARY

On behalf from the Polat s. A., Thessaloniki/Greece, plastic material tests of the material

Polat High Resistant Floor (817)

have been carried out at the Polymer Institut.

The results are to be taken from the preceding clause 4.

Flörsheim-Wicker, 2007-11-01

The heads of the testing laboratory

J. Magner



The person in charge

Dipl. Ing. (FH) N. Treichel



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Test report P 7256-a-E

Testing order:

**Anti-Slip properties of
POLEPOX HARDFLOOR ANTISLIP SYSTEM
according to DIN 51130**

Customer:

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

Person in charge:

**J. Magner
T. Seitz**

Date of the test report:

21.07.2011

This test report comprises:

5 pages

The test results exclusively refer to the tested materials.
The publication of the test report in extracts, and references to tests for advertising purposes require our written agreement in each individual case.



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dated 2011-07-21

kiwa 
Partner for progress

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 **Polymer Institut**

1 SUBJECT

Polymer Institut has been charged by the Polat S. A., Thessaloniki/Greece, to carry out the test of the anti slip properties of:

POLEPOX HARDFLOOR ANTISLIP SYSTEM

according to DIN 51130 "Testing of floor coverings - Determination of the anti-slip property - Workrooms and fields of activities with slip danger, walking method -ramp test"

2 RECEIPT OF SAMPLES

On 2011-06-16 the following sample has been submitted to Polymer Institut by the customer:

Table 1: product description

No.	coating step	product	Quantity [kg/m ²]
1	PRIMER	POLEPOX - PR 824	0,25
2	SELF LEVELLING MORTAR	POLEPOX FLOOR 817	4,5
3	SCATTERING QUARTZ SAND 0,6 – 1,2 mm	POLEPOX QUARTZ 849	4 – 5
4	SEALING	POLEPOX COAT 814	0,8

The coating was applied on a weed panel of dimensions 1000 x 500 x 20 mm³



Polymer Institut

3 TESTS OF THE ANTI SLIP PROPERTIES

The Anti-Slip properties have been assessed by determining the "R class" in accordance with DIN 51130, retaining the following test conditions.

Test equipment: Inclined plane following Figure 2 with test shoe in accordance with with sub-clause 4.1.1 of DIN 51130

Test temperature: 23 °C

Lubricant: Engine oil SAE 10 W-30 in accordance with DIN 51511

Evaluation: Assessment of the surface condition
Determination of the mean acceptance angle, rounded to 0,1°
Classification according to the evaluation group of the anti-slip properties

classes

<i>corrected total acceptance angle - α_{tot}</i>	<i>class of anti slip property</i>
6° - 10°	R 9
> 10° bis 19°	R 10
> 19° bis 27°	R 11
> 27° bis 35°	R 12
> 35°	R 13

The result is to be taken from table 2.

Table 2: *anti-slip properties*

total acceptance angle* [°]	R class []
33,3 29,2 mean value: 31,2	R 12

* after correction



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dated 2011-07-21

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4 SUMMARY

On behalf of Polat s.A., Thessaloniki/Greece, the test of the anti-slip properties of the material:

POLEPOX HARDFLOOR ANTISLIP SYSTEM

has been carried out at Polymer Institut

The results are to be taken from the preceding clause.

Flörsheim-Wicker, 2011-07-21

The head of the institute


J. Magner



The person in charge


T. Seitz

 **Polymer Institut**