

Bellaterra : 01st June 2021
Report number : **21/32301842**
Petitioner's reference : **CIMENTART MICROCEMENT, S.L.**
Avda. del carrer de la mar 12
03560 El Campello

TEST REPORT

RECEIVED MATERIAL

On April 21, 2021, a sample of a screed mortar system with the following reference according to the petitioner was received at Applus Laboratories:

REVESTIMIENTO PISCINAS CIMENTART

REQUESTED TESTS

Screed material and floor screeds — Screed material, UNE-EN 13813:2014

- 1- Resistance to wear BCA, UNE-EN 13892-4:2003
- 2- Bond strength, UNE-EN 13892-8:2003
- 3- Determination of resistance to severe chemical attack, UNE-EN 13529
- 4- Impact resistance, UNE-EN ISO 6272-1:2012
- 5- Determination of surface hardness, UNE-EN 13892-6:2003
- 6- Determination of the penetration of water under direct and indirect pressure according to basic criteria of the UNE-EN 12390-8

TEST DATE: from 21/04/2021 to 01/06/2021

RESULTS: see attached pages

Responsible for Construction Materials
LGAI Technological Center, S.A.

Technician responsible
LGAI Technological Center, S.A.

These results are exclusively related to the received material in Applus Laboratories and proved under given indications.

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Page 1 – The present document consists of **6** pages of which **0** are attachments.

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RESULTS

Dosing: Component A:B:C:D - 9,8:2,3:2:20,4 by weight

Thickness: 2 layers of 1 mm each one separated by 24 h

1- Resistance to wear BCA, UNE-EN 13892-4:2003

Specimen	Wear BCA (µm)
1	20
2	20
3	30
Mean	20

WEAR BCA UNE-EN 13813:2014					
Class	AR6	AR4	AR2	AR1	AR0,5
Wear (µm)	600	400	200	100	50

2- Bond strength, UNE-EN 13892-8:2003

Specimen	Bond strength (N/mm ²)	Type of failure
1	3,89	X
2	3,11	X
3	3,69	X
4	3,63	X
5	3,72	X
Mean	3,6	

Faiure

X: Cohesive failure of substrate

Y: Cohesive failure of mortar

X/Y: Adherence failure

BOND STRENGTH UNE-EN 13813:2014					
Class	B 0,2	B 0,5	B 1,0	B 1,5	B 2,0
Bond Strength (N / mm ²)	0,2	0,5	1,0	1,5	2,0

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3- Determination of resistance to severe chemical attack, UNE-EN 13529

After exposing the product to the reagents selected by the petitioner for 3 days, the following is observed:

Reagent	Visual Evaluation	Hardness Shore Loss (%)
Agua salada	Sin defectos	2%
Agua clorada	Sin defectos	2%

4- Impact resistance, UNE-EN ISO 6272-1:2012

On a concrete surface has been applied the sample. Impacts were made on the surface through a head having a spherical shape of diameter 20 mm, a free mass 1000 g.

Drop height at which the first cracks are observed	> 1500 mm*
* At this point NO cracks still occur.	
Footprint diameter produced 1500 mm	8,4 mm
Impact Resistance (IR) (1500 mm)	14,7 Nm

5- Determination of surface hardness, UNE-EN 13892-6:2003

Specimen	Depth of indentation (t) (mm)	Surface Hardness (N/mm ²)
1	0,19	84
2	0,21	76
3	0,19	84
Mean		81

Surface Hardness UNE-EN 13813:2014							
Class	SH30	SH40	SH50	SH70	SH100	SH150	SH200
Surface Hardness N / mm ²	30	40	50	70	100	150	200

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6- Determination of the penetration of water under direct and indirect pressure according to basic criteria of the UNE-EN 12390-8

The specimens have been tested on a concrete support to check the transfer of water through the mortar and thus be able to compare with a standard concrete without the product applied.

Concrete used:

- Dosing 300 kg/m³ cement.
- Compression at 28 days: 225 kg/cm²
- Porosity: 14%

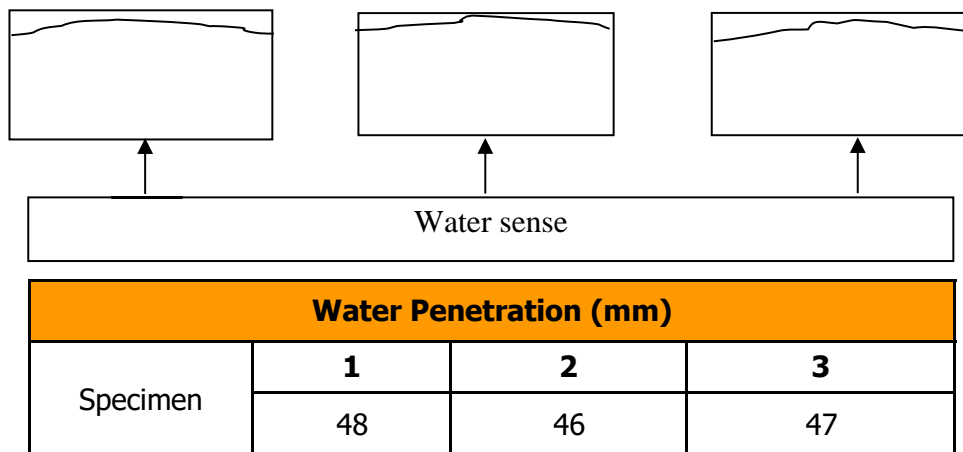
DIRECT PRESSURE TEST 5 bar for 3 days.

Specimens of 5 cm thickness have been used. The diameter of the test tubes was 15 cm.

It is tested under direct pressure, with the penetration front on the waterproofing product, at a pressure of 5 bars for 3 days.

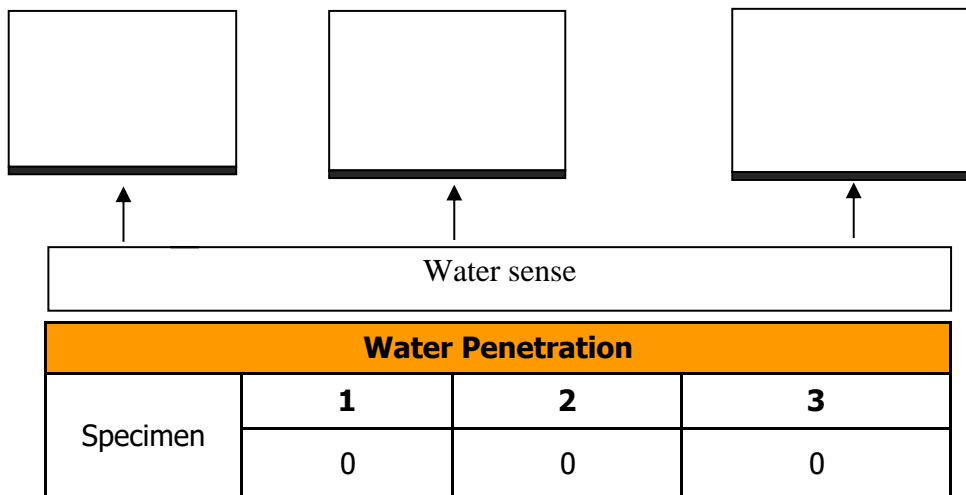
Finally, the penetration of the water in the test tubes is evaluated.

- Standard Specimen (without application):



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- Test specimen (with application):

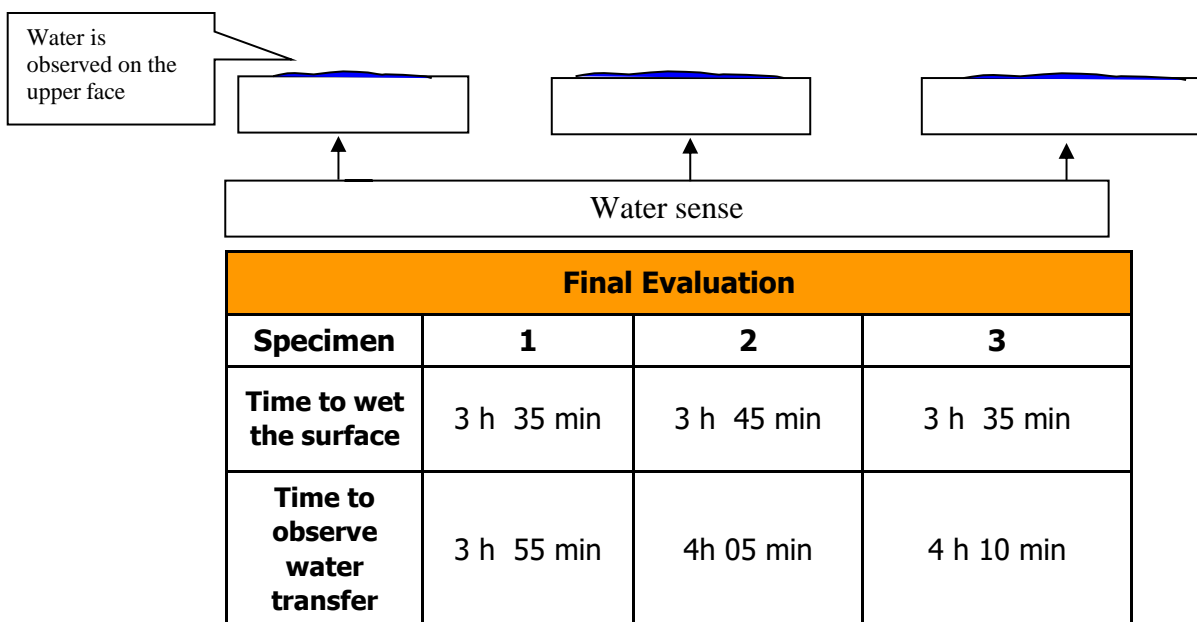


INDIRECT PRESSURE TEST: 5 bar for 3 days.

3 cm thick specimens have been used. The diameter of the test tubes was 15 cm.

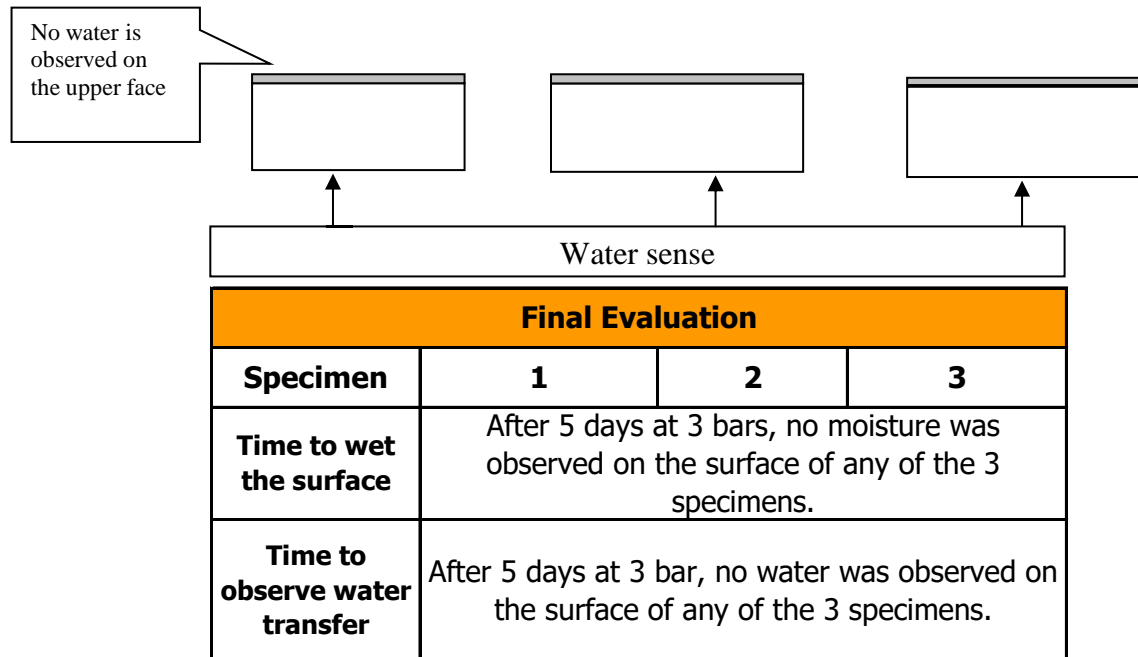
The appearance of the first dampness and water in the test tubes is evaluated on the opposite side that is waterproofed.

- Standard Specimen (without application):



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- Test specimen (with application):



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