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Bellaterra: 20th May 2008
Reference number: **08 / 32304075**
Petitioner: **DRIZORO, S.A.**
N.I.F.: A-28498038
C/ Primavera 50-52 Parque Industrial Las Monjas
28850 TORREJÓN DE ARDOZ (MADRID)

TEST REPORT

Registry code: 08-0431

MATERIAL RECEIVED:

At 25th February 2008, a sample of screed material (self-levelling mortar) based on synthetic resins and composed of tree compounds has been received at Applus+CTC with the following reference:

**SCREED MATERIAL
MAXEPOX FLOOR**

TESTS REQUIRED:

SCREED MATERIAL AND FLOOR SCREEDS, UNE-EN 13813:2003

- 1- Methods of test for screed materials - Part 2: Determination of flexural and compressive strength, UNE-EN 13892-2:2003.
- 2- Methods of test for screed materials - Part 8: Determination of bond strength, UNE-EN 13892-8.
- 3- Paints and varnishes - Rapid-deformation (impact resistance) tests, UNE-EN ISO 6272
- 4- Plastics - Determination of flexural properties, UNE-EN ISO 178.
- 5- Methods of test for screed materials - Part 4: Determination of wear resistance-BCA, UNE-EN 13892-4.

DATES FOR TESTS: From 25/02/2008 to 05/05/2008.

RESULTS: See attached documents

Laboratory stamp & Illegible signature Juan Martinez Egea Manager for Construction Material Area LGAI Technological Center, S.A.	Laboratory stamp & Illegible signature Manuel Luque Gama Responsible Technician LGAI Technological Center, S.A.
Results showed herein correspond exclusively to received material at Applus+CTC and it has been tested according with the standard methods given in this document	
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DRIZORO, S.A.	SCREED MATERIAL MAXEPOX FLOOR

RESULTS:

Mixing ratio

Component A: 4 parts = Component AB
Component B: 1 part
Component AB: 1 part / Component C: 1 part

For mixing, 4 parts of component A and 1 part of component B are mixed and then, 1 part of component C is added to the component AB.

1- Compressive and flexural strengths, UNE-EN 13892-2

Once mortar is mixed, specimens has been made and cured at 23 °C & 50 % of R.H. for 1 day into the moulds and 28 days out of the moulds, respectively.

Specimen	Curing time (days)	FLEXURAL STRENGTH		COMPRESSIVE STRENGTH	
		Ultimate Stress (N/mm ²)	Average Value (N/mm ²)	Ultimate Stress (N/mm ²)	Average Value (N/mm ²)
1	28	34,8	36,7	68,9	69,0
				69,4	
2	28	32,5		69,4	
				67,9	
3	28	42,7		68,7	
				69,8	

CLASSES OF COMPRESSIVE STRENGTH FOR SCREED MATERIALS

Class	C5	C7	C12	C16	C20	C25	C30	C35	C40	C50	C60	C70	C80
Compressive Strength (N/mm²)	5	7	12	16	20	25	30	35	40	50	60	70	80

CLASSES OF FLEXURAL STRENGTH FOR SCREED MATERIALS

Class	F1	F2	F3	F4	F5	F6	F7	F10	F15	F20	F30	F40	F50
Flexural Strength (N/mm²)	1	2	3	4	5	6	7	10	15	20	30	40	50

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2- Bond strength, UNE-EN 13892-8

Test Specimen	Tensile Strength (N/mm ²)	Type of Break
1	3,1	X / Y
2	4,1	X / Y
3	4,0	X / Y
4	4,5	X / Y
5	4,0	X / Y
6	3,9	X / Y
Average	3,9	

Type of break

X: Break by cohesion of concrete substrate.

X/Y: Break between substrate and mortar tested.

Y: Break by cohesion of mortar tested.

Z: Break between adhesive layer and the plate with the pulling head (failure).

CLASSES OF BOND STRENGTH FOR SCREED MATERIALS					
Class	B 0,2	B 0,5	B 1,0	B 1,5	B 2,0
Tensile Strength (N/mm ²)	0,2	0,5	1,0	1,5	2,0

3- Impact resistance, UNE-EN ISO 6272

A layer of 10 mm thickness of screed material is applied on a concrete surface. Impact tests are carried out on the surface using a falling weight of spherical shape with a diameter of 20 mm and a mass of 1.000 g.

Falling height at what the first fissures are observed	> 1.500 mm*
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* NO fissures are produced at this height

Diameter of signal produced at 1.500 mm high	10,09 mm
IR value (Impact Resistance) for 1.500 mm high	14,7 Nm

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4- Determination of flexural properties, UNE-EN ISO 178

Test Specimen	Elasticity Modulus (kN/mm²)
1	5,5
2	6,9
3	6,0
4	6,5
5	5,9
Average	6,2

CLASSES OF ELASTICITY MODULUS FOR SCREED MATERIALS							
Class	E1	E2	E5	E10	E15	E20	Bigger & multiple of 5
Elasticity Modulus (kN/mm²)	1	2	5	10	15	20	25-30, etc.

5- Determination of wear resistance-BCA, UNE-EN 13892-4

Test Specimen	Wear resistance BCA (µm)
1	10
2	10
3	10
Average	10

CLASSES OF WEAR RESISTANCE FOR SCREED MATERIALS					
Class	AR6	AR4	AR2	AR1	AR0,5
Maximum depth of wear (µm)	600	400	200	100	50



Bellaterra, 20th May 2008

DRIZORO, S.A.		SCREED MATERIAL	
C/ Primavera 50-52 Parque Industrial Las Monjas 28850 TORREJÓN DE ARDOZ (MADRID)		MAXEPOX FLOOR	
CEMENT-BASED FLOOR SCREED MORTAR according to UNE-EN 13813:2003.		Results	
Mixing ratio		Component A: 4 parts	
		Component B: 1 part	
		Component AB: 4 parts	
		Component C: 1 part	
1.- Compressive and flexural strengths, UNE-EN 13892-2	Flexural strength Compressive strength	36,7 N/mm² 69,0 N/mm²	
2.- Bond strength, UNE-EN 13892-8		3,9 N/mm²	
3.- Impact resistance, UNE-EN ISO 6272 Falling height wherein the first fissures are observed and diameter produced at this height		>14,7 Nm No effect at 1.500 mm Crater diameter: 10,09 mm	
4.- Determination of flexural properties, UNE-EN ISO 178		6,2 kN/mm²	
5.- Determination of wear resistance-BCA, UNE-EN 13892-4		10	

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