

TEST REPORT n° 201212077

Beginning of the test: 13/11/2012 Ending of the test: 19/12/2012  
Tested product (commercial designation): **•MAGNITO FLEX•**  
Type: Cementitious adhesive for tiles Colour: Grey.  
Manufacturer: **AVALON INDUSTRY JSC** RADETSKI STR. 78, VARNA, BULGARIA.  
Origin: Manufacturing plant in Varna.  
Handling and storage of the samples: 24 h in standard conditions (see Test condition)

Test conditions: Temperature: 23° C  
Relative humidity: 50%  
Speed of air: < 0,2 m/s  
Mixing water: 26%

Test method : UNI EN 1348 : 2008

Adhesives for tiles – Determination of tensile adhesion strength for cementitious adhesives.

INITIAL ADHESION

Test units	1	2	3	4	5	6	7	8	9	10
Tensile strength in N/mm <sup>2</sup>	1,37	1,51	1,59	1,46	1,39	1,54	1,57	1,49	1,56	1,52
Failure Pattern	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A
Mean: 1,50										

Tensile adhesion strength value: **1,5 N/mm<sup>2</sup>**

ADHESION AFTER WATER IMMERSION

Test units	1	2	3	4	5	6	7	8	9	10
Tensile strength in N/mm <sup>2</sup>	1,07	1,04	0,95	1,09	0,86	1,10	1,08	1,05	0,89	1,13
Failure Pattern	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A
Mean: 1,03										

Tensile adhesion strength after water immersion value: **1,0 N/mm<sup>2</sup>**

ADHESION AFTER HEAT AGEING

Test units	1	2	3	4	5	6	7	8	9	10
Tensile strength in N/mm <sup>2</sup>	1,33	1,27	1,22	1,28	1,35	1,12	1,19	1,26	1,07	1,30
Failure Pattern	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A
Mean: 1,24										

Tensile adhesion strength after heat ageing value: **1,2 N/mm<sup>2</sup>**

ADHESION AFTER FREEZE-THAW CYCLE

Test units	1	2	3	4	5	6	7	8	9	10
Tensile strength in N/mm <sup>2</sup>	1,05	1,19	1,14	1,08	0,96	1,23	1,03	1,11	1,21	1,17
Failure Pattern	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A
Mean: 1,12										

Tensile adhesion strength after freeze-thaw cycle: **1,1 N/mm<sup>2</sup>**

Key: CF-A = cohesive failure in the adhesive

Sassuolo, 19-12-2012

The Responsible: Giorgio Chinca

