

TEST REPORT n° 201212073

Beginning of the test: 13/11/2012 Ending of the test: 19/12/2012
Tested product (commercial designation): **•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: 25%

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 ²	1,19	1,36	1,34	1,40	1,38	1,36	1,24	1,29	1,34	1,33
Failure Pattern	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A	CF-A
Mean: 1,32										

Tensile adhesion strength value: 1,3 N/mm²

ADHESION AFTER WATER IMMERSION

Test units	1	2	3	4	5	6	7	8	9	10
Tensile strength in N/mm ²	1,05	1,03	1,01	1,08	1,04	1,12	1,14	0,94	1,03	1,06
Failure Pattern	AF-T	AF-T	AF-T	AF-T	AF-T	AF-T	AF-T	AF-T	AF-T	AF-T
Mean: 1,05										

Tensile adhesion strength after water immersion value: 1,1 N/mm²

ADHESION AFTER HEAT AGEING

Test units	1	2	3	4	5	6	7	8	9	10
Tensile strength in N/mm ²	0,94	1,09	1,23	1,26	1,28	1,12	1,20	1,10	1,22	1,20
Failure Pattern	AF-T	AF-T	AF-T	AF-T	AF-T	AF-T	AF-T	AF-T	AF-T	AF-T
Mean: 1,16										

Tensile adhesion strength after heat ageing value: 1,2 N/mm²

ADHESION AFTER FREEZE-THAW CYCLE

Test units	1	2	3	4	5	6	7	8	9	10
Tensile strength in N/mm ²	1,31	1,25	1,26	1,35	1,28	1,29	1,29	1,30	1,33	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: 1,30										

Tensile adhesion strength after freeze-thaw cycle: 1,3 N/mm²

Key: CF-A = cohesive failure in the adhesive
AF-T = adhesive failure between tile and adhesive

Sassuolo, 19-12-2012

The Responsible: Giorgio Chinca

