

RN 21228888

Zagreb, 2008-12-22

## TESTING REPORT No. 2122-02-PS/003/08

Client: **BENING d.o.o.**  
Pavlovec Zabočki 121, Zabok

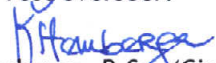
Contract/order: Order No. 01/2008-EB dated 2008-01-03

Construction product: Product **VETROFLUID**

Tested properties: Depth of penetration according to HRN EN 1504-2, Table 3  
Determination of water absorption coefficient by partial immersion according to HRN EN ISO 15148  
Bond strength by pull-off according to HRN EN 1542  
Measurement of abrasion resistance according to HRN EN 1339, annex G and annex H  
Chemical resistance according to HRN EN 13529  
Depth of penetration of water under pressure according to HRN EN 12390-8  
Compatibility on wet concrete according to HRN EN 13578  
Determination of permeability to gases according to EN 993-4

Testing purpose: Testing of product **VETROFLUID** according to IGH offer No. 2122-0-0641/07

Test overseer:

  
Karla Štemberga, B.Sc. (Civ.Eng.)

Head of the Laboratory for Concrete, Mortar and  
Repair Materials:

  
Emilija Barišić, B.Sc. (Civ.Eng.)

Head of the Concrete and Brick Laboratory:

  
Ph.D. Ružica Rosković, B.Sc. (Chem.)

Testing report No. 2122-02-PS/003/08

#### 4.4 ABRASIVE RESISTANCE TEST RESULTS, annex G

Tested property: Testing of abrasive resistance  
Testing carried out according to: HRN EN 1339, annex G  
Substrate type/test specimens: Concrete slab (300x300x100) mm, grit-blasted surface. Concrete type C(0,45) according to HRN EN 1766, label LB-38/07  
Treatment procedure: The treatment was carried out according to client recommendation. Product is applied in two layers with brash. Producer recommendation for product consumption is 345-460 g/m<sup>2</sup>. Product consumption for testing is given in Table 10.  
Treatment date: Young concrete 2008-02-21 i 2008-02-22  
Saturated aged concrete 2008-04-21 i 2008-04-22  
Curing: 24 h in laboratory conditions (21 ± 2) °C i (60 ± 10) % r.h. covered in film  
27 day in wet chamber (21 ± 2) °C i > 95 % r.h.  
Conditioning: In laboratory conditions (21 ± 2) °C i (60 ± 10) % r.h.  
Test date: Young concrete 2008-06-06  
Saturated aged concrete 2008-06-17  
Test location: Laboratory for concrete, mortar and repair materials 2 2122  
Equipment used: Wearing machine (a.c. 2383); Vernier claiper, (a.c. 2281)  
Deviation from standard  
method of testing: None  
Note: None

Table 10 Product consumption during treatment

SAMPLE	LAYER	C <sub>mi</sub> (g/m <sup>2</sup> )	Total consumption of 1 <sup>st</sup> and 2 <sup>nd</sup> (g/m <sup>2</sup> )
YOUNG CONCRETE			
CONCRETE SLAB 300/300/100 mm	I	226,33	435,22
	II	208,89	
SATURATED AGED CONCRETE			
CONCRETE SLAB 300/300/100 mm	I	216,67	431,11
	II	214,44	

Testing report No. 2122-02-PS/003/08

Table 11 Testing results of abrasive resistance, annex G

SAMPLE	SINGLE GROOVE VALUES (mm)			MEAN GROOVE VALUE (mm)
	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	
REFERENT CONCRETE				
PS 003-4A/1	19,8	19,9	20,1	19,9
PS 003-4A/2	19,6	19,7	19,8	
PS 003-4A/3	20,2	19,9	19,8	
YOUNG CONCRETE				
PS 003-4A/4	16,9	16,5	16,1	16,7
PS 003-4A/5	16,3	17,0	17,8	
PS 003-4A/6	16,9	16,5	16,4	
SATURATED AGED CONCRETE				
PS 003-4A/7	16,7	16,6	16,6	15,8
PS 003-4A/8	15,0	15,1	15,1	
PS 003-4A/9	16,7	15,6	14,4	

Statement: Testing was carried out in according with standard, except as detailed from given in „Deviation from standard method of testing“.