



Gesellschaft für Qualitätssicherung und Materialprüfung mbH

Am Zehnthof 197-203
45307 Essen

PRÜF-, ÜBERWACHUNGS- UND
ZERTIFIZIERUNGSSTELLE

Telefon 0201/5 92 13-04
Telefax 0201/5 92 13-20

Test Certificate No. 006/08/R/4

Applicant:

J. Coelho da Silva, S.A.
Albergaria
2480-071 Juncal
Portugal

Contents of application:

Roof tile test According to DIN EN 539-2 Freeze
resistance test – part B.

Sample received on: 21.02.2008

Sample taken by: Applicant

Identification: Plasma PT 271107
27.11.2007

Designation of samples: Flat interlocking tile, fragment colour red, surface natural red

DIN EN 539 – 2 – Freeze resistance test – part B

Sample No.		mass dry g	mass wet before freezing			mass wet after 150 freeze-thaw cycles		
			g	+g	%	g	+g	%
1F/93	TWII	3922	4124	202	5,15	4143	221	5,63
1F/101	TWI	3872	4071	199	5,14	4094	222	5,73
1F/110	MWI	3783	3987	204	5,39	4012	229	6,05
1F/111	HWI	3836	4061	225	5,87	4084	248	6,47
1F/116	MWII	3852	4060	208	5,40	4079	227	5,89
1F/117	HWII	3819	4040	221	5,79	4062	243	6,36
Mean value:					5,46			6,02

During the freeze thaw cycles the 6 tested roof tiles showed no signs of damage.

DIN EN 539 – 2 – Part B - Water absorption of the samples

Manufacture's no. or ID	Sample No.	Mass dry g	Mass wet after 2 days in water g	Water- absorption %
	1F/91	3783	4000	5,74
	1F/92	3792	4005	5,62
	1F/93	3922	4124	5,15
	1F/94	3860	4063	5,26
	1F/95	3851	4050	5,17
	1F/96	3792	4003	5,56
	1F/97	3880	4090	5,41
	1F/98	3876	4079	5,24
	1F/99	3856	4060	5,29
	1F/100	3818	4031	5,58
	1F/101	3872	4071	5,14
	1F/102	3846	4052	5,36
	1F/103	3802	4002	5,26
	1F/104	3824	4027	5,31
	1F/105	3798	4011	5,61
	1F/106	3791	3989	5,22
	1F/107	3809	4007	5,20
	1F/108	3827	4034	5,41
	1F/109	3807	4015	5,46
	1F/110	3783	3987	5,39
	1F/111	3836	4061	5,87
	1F/112	3781	3980	5,26
	1F/113	3798	3997	5,24
	1F/114	3790	3993	5,36
	1F/115	3791	3997	5,43
	1F/116	3852	4060	5,40
	1F/117	3819	4040	5,79
	1F/118	3783	3986	5,37
	1F/119	3813	4017	5,35
	1F/120	3850	4062	5,51
Lowest value (l.v.)				5,14
Average value (a.v.)				5,40
Highest:: (h.v.)				5,87

Overall result

The testing of this roof tiles according to DIN EN 539 – 2 – Freeze resistance test – part B was successful.


Essen 28.04.2008
Schi/Pc

The Head of the Testing Laboratory


(Dipl.-Ing. F. Rehme)



The Responsible Official


(R. Schilfberg)

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