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1) STAIN-PROOF™

Stain Resistance – oil on granite:

6th November 2006



The following test report complies with experimental procedures and resulting classifications of unglazed tiles as described in the International standard:

ISO 10545 – 14:1995 *Ceramic Tiles – Part 14: Determination of resistance to stains*

Preparation of test specimens

Type of tile tested: Granite

Prior to testing, all granite tiles were cleaned following the procedure described in the standard.

Stain resistant coatings were applied onto tiles following the procedures as per provided by Dry-Treat or described in the direction of use for those commercial available products:

- DRY-TREAT.
- Leading European Brand.
- Leading USA Brand # 1.

1. Performance of stain resistance as a function of **White King** bleach washes.

The stain resistance of the following sealants was assessed after every 5 washes with 100% bleach. Each wash was conducted by immersing the stone in 100% bleach for 10 seconds followed by rinsing with water.

Staining agent

Staining agent used: Olive Oil

Staining agent was left on tiles for 24 hours.

Cleaning agents

Cleaning procedure B: pH = 7.5

Cleaning procedure C: pH = 10

Cleaning procedure D: Acetone

Results

Granite

Olive Oil

DRY TREAT

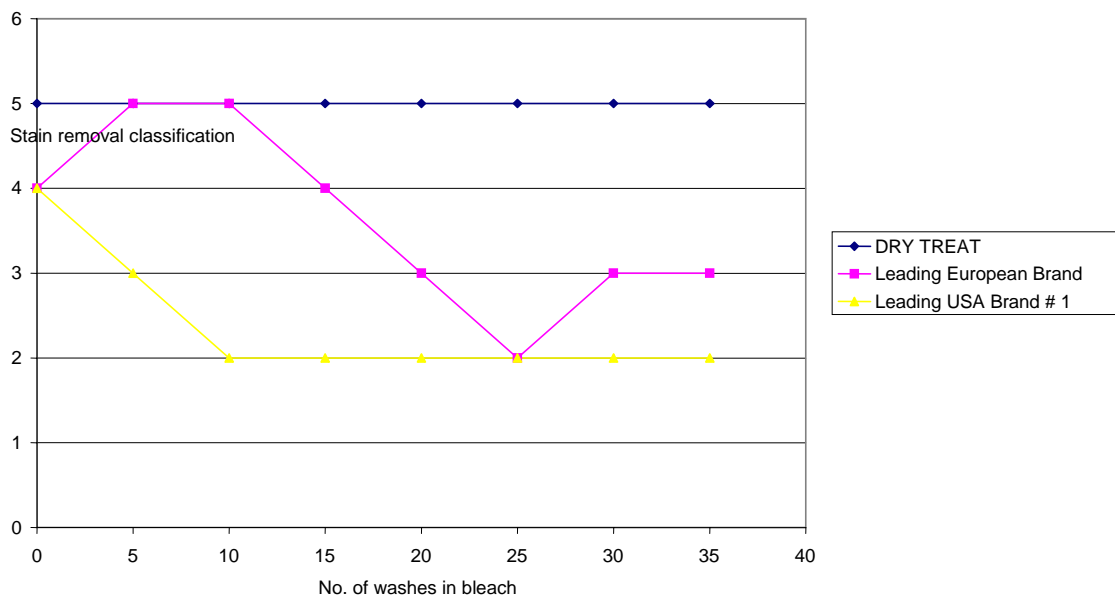
Leading European Brand

Leading USA Brand # 1

Classification after washes

0	5	4	4
5	5	5	3
10	5	5	2
15	5	4	2
20	5	3	2
25	5	2	2
30	5	3	2
35	5	3	2

Granite Dry Treat against European Leading Brand and USA Leading Brand # 1
Olive Oil Test



Visual Assessment

Stain was reported visually by examining the test samples at a distance of 25-30cm in daylight. Samples were classified according to ISO 10545-14:1995.

Classification 5 - stain removal by hot water (55 °C).

Classification 4 - stain removal by weak cleaning agent and non-abrasive cloth.

Classification 3 - stain removal by strong cleaning agent and rotating hard bristle brush.

Classification 2 - stain removal by soaking for 24 hours in strong solvent.

Classification 1 - stain not removed.

Conclusion

From the test, the sealant DRY-TREAT was most effective in resisting Olive Oil stains on granite tiles up to 35 washes in neat White King bleach compared to Leading European Brand and Leading USA Brand # 1, which have degraded significantly after 10 washes for Leading USA Brand # 1 and 20 washes for Leading European Brand.

STAIN-PROOF

Stain resistance – iodine on granite

6th November 2006



The following test report complies with experimental procedures and resulting classifications of unglazed tiles as described in the International standard:

ISO 10545 – 14:1995 *Ceramic Tiles – Part 14: Determination of resistance to stains*

Preparation of test specimens

Type of tile tested: Granite

Prior to testing, all granite tiles were cleaned following the procedure described in the standard.

Stain resistant coatings were applied onto tiles following the procedures as per provided by Dry-Treat or described in the direction of use for those commercial available products.

1. Performance of stain resistance as a function of **White King** bleach washes.

The stain resistance of the following sealants was assessed after every 5 washes with neat White King bleach up to 10 washes. Each wash on tiles was conducted by immersing in neat White King bleach for 10 seconds followed by rinsing with water.

- DRY-TREAT.
- Leading European Brand.
- Leading USA Brand # 1.
- Leading USA Brand # 2.

Staining agent

Staining agent used:

1. Iodine 13g/L in ethanol

Staining agent was left on tiles for 24 hours.

Cleaning agents

Cleaning procedure B: pH = 7.5

Cleaning procedure C: pH = 10

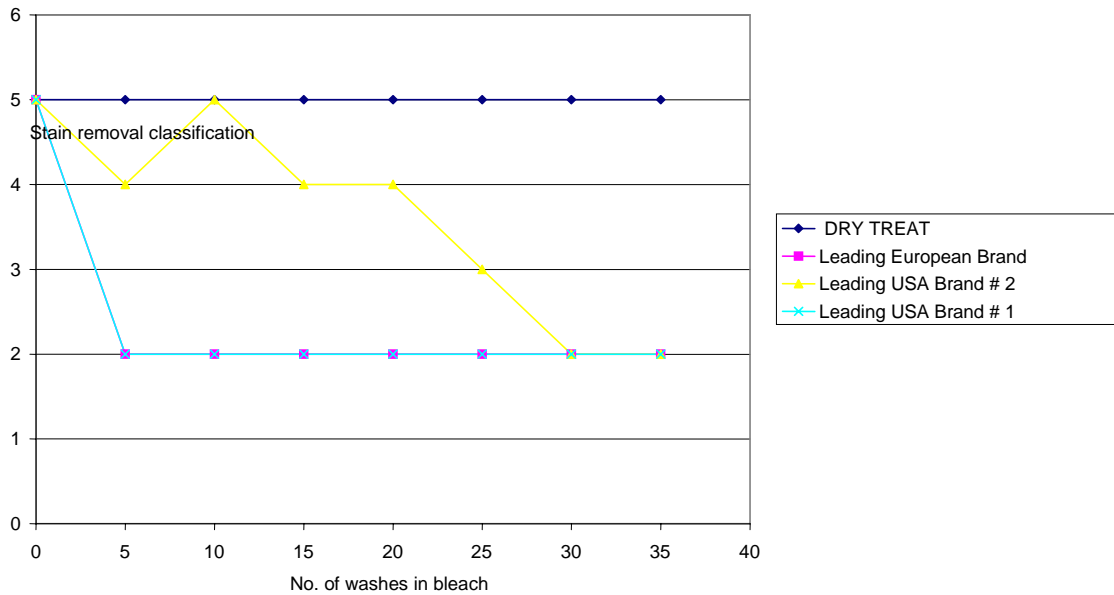
Cleaning procedure D: Acetone

Results

Granite

<i>Iodine</i>	DRY TREAT	Leading European Brand	Leading USA Brand # 2	Leading USA Brand #1
<i>Classification after washes</i>				
0	5	5	5	5
5	5	2	4	2
10	5	2	5	2
15	5	2	4	2
20	5	2	4	2
25	5	2	3	2
30	5	2	2	2
35	5	2	2	2

Granite Dry Treat against European Leading Brand, USA Leading Brand #1 and #2e
Iodine Test



Visual Assessment

Stain was reported visually by examining the test samples at a distance of 25-30cm in daylight. Samples were classified according to ISO 10545-14:1995.

Classification 5 - stain removal by hot water (55 °C).

Classification 4 - stain removal by weak cleaning agent and non-abrasive cloth.

Classification 3 - stain removal by strong cleaning agent and rotating hard bristle brush.

Classification 2 - stain removal by soaking for 24 hours in strong solvent.

Classification 1 - stain not removed.

Conclusion

From the test, the sealant DRY-TREAT was most effective in resisting Iodine stains on granite tiles up to 35 washes in neat White King bleach compared to Leading European Brand, Leading USA Brand # 2 and Leading USA Brand # 1, which have degraded significantly after 5 washes for Leading European Brand and Leading USA Brand # 1 and 20 washes for Leading USA Brand # 2.

Resistance to salt attack



BEMAC LABORATORIES
Subsidiary of Mahaffey Associates Pty Ltd A.C.N. 001 629 036
4 Mary Parade Rydalmere NSW 2116
PO Box 349 Rydalmere NSW 2116
Telephone: (02) 9684 2422 Fax: (02) 9684 2310

BJC/BJC/L22/L01/6047

11th May, 1998.

Dry-Treat (Australia) Pty Ltd
PO Box 551
ST LEONARDS NSW 2065

Attention: Luke

Dear Sir,

Re: Resistance to Salt Attack Tests on Pavers.

We have now completed the above testing on pavers supplied by you to AS/NZS 4456.10. The results are shown below.

Test Method: Method A of AS/NZS 4456.10.

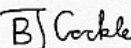
Date Tested: 3rd April, 1998 – 4th May, 1998.

<i>Sample</i>	<i>Percentage Mass Loss After 15th Cycle (Ave)</i>	<i>Category</i>
Sandstone 1 – Control	3.56	General purpose
Sandstone 1 – Treated DT40SK	0.00	Exposure
Sandstone 1 – Treated STAIN-PROOF	0.00	Exposure
Sandstone 2 – Control	3.45	General purpose
Sandstone 2 – Treated STAIN-PROOF	0.00	Exposure

Note: Sandstone 1 and Sandstone 2 – Damage: Rounding of Corners.

Please do not hesitate to contact us should you require any further assistance.

Yours sincerely,


Bronwen Cockle
Laboratory Manager

Measurement of coefficient of friction on wet surfaces



LABORATORIES

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This Laboratory is accredited by the National Association of Testing Authorities, Australia. The tests reported herein have been performed in accordance with its terms of accreditation.




Client: Drytreat
Site: Laboratory
Material Tested: 400 X 400 exposed aggregate pavers
Test Method: AS 3661 App A: Method for the measurement of the coefficient of friction of wet surfaces
Weather Condition: Not Applicable
Test Date: 10/ 11/ 2000



Test No.	Sample Description	Air Temp (deg C)	Slope (in dirn of test) (%)	Mean Test Result	
				Pendulum No.	Coef of Friction
1	Paver Seal	23	0.0	53	0.58
2	Stain Proof	23	0.0	66	0.76
3	No Coating	23	0.0	68	0.79
4	Oil Repeller	23	0.0	64	0.73

Notes:

- ▶ Samples tested using 4S Slider
- ▶ Samples wiped to remove dust, otherwise tested as received

Signed: 
David Wilshurst

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Resistance to staining



Eureka Tiles Pty Ltd ACN 074 202 592
Corner Charlesworth and Stowell Streets
PO Box 1847 Ballarat Mail Centre Ballarat 3354 Australia
Telephone: 61-3-5331 4999 • Facsimile: 61-3-5333 2587

FACSIMILE

TO: Mr Luke Dawson
COMPANY: Drytreat **FAX NO.:** 02 9954 3162
FROM: Jay Seneviratne
DATE: 17 September 1997 **No. of pages:** 1 + 1

SUBJECT: Stain Proof Test Results

Please find attached a copy of the first tests carried out at Eureka Research and Development Laboratory for your information.

The second sample which we received last week has been tested for drying times. We have not observed any differences between the first and second samples in relation to the rate of drying.

We look forward to meeting with you tomorrow (18/9/97) to discuss further technical matters.

Regards

A handwritten signature in black ink that reads "Jay Seneviratne".

Jay Seneviratne
MANUFACTURING MANAGER



STAIN PROOF TESTS
27 August 1997

Results

Staining Liquids	Unsealed				Sealed			
	Cleaning Procedures							
	A	B	C	D	A	B	C	D
Coca Cola	x	x	x		✓	-	-	-
Coffee	x	x	x		✓	-	-	-
Port Wine	x	x	x		✓	-	-	-
Margarine	x	x	x		✓	-	-	-
Olive Oil	x	x	x		✓ x Depending on Conditions			
M/Blue	x	x	x		✓	-	-	-
Chrome	✓	-	-		✓	-	-	-
Iron	✓	-	-	-	✓	-	-	-
Iodine	✓	-	-	-	x	-	-	-
Pencil	x	✓	-	-	x	x	x	✓
Texta	x	x	x	x	x	x	x	✓

Drying Times
 Vertical Application 9 minutes
 Horizontal Application 58 minutes
 Face to Face 150 minutes
 At 110 °C in Laboratory Dryer 6 minutes

Jay Seneviratne
 Jay Seneviratne
MANUFACTURING MANAGER