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### e) Surface flatness

No.	Test Result (%)							
140.	Centre c	curvature	Edge	curvature	Warp	age		
1	0.01	0.01	0.04	0.03	0.04	0.01		
· '	0.01	0.01	0.04	0.05	0.03	0.01		
2	0.02	0.01	0.06	0.07	0.02	0.01		
	0.02	0.01	0.10	0.07	0.02	0.01		
3	0.02	0.01	0.06	0.07	0.01	0.02		
3	0.01	0.01	0.08	0.05	0.03	0.05		
4	0.02	0.01	0.09	0.10	0.05	0.03		
4	0.02	0.01	0.10	0.10	0.05	0.03		
5	0.01	0.01	0.09	0.07	0.04	0.02		
5	0.01	0.01	0.08	0.07	0.04	0.02		
6	0.01	0.01	0.07	0.07	0.04	0.04		
0	0.02	0.01	0.08	0.08	0.06	0.05		
7	0.01	0.01	0.06	0.08	0.03	0.04		
,	0.01	0.01	0.07	0.09	0.02	0.04		
8	0.02	0.01	0.07	0.11	0.06	0.04		
0	0.02	0.01	0.09	0.10	0.03	0.03		
0	0.01	0.01	0.10	0.10	0.03	0.04		
9	0.02	0.02	0.10	0.10	0.04	0.04		
10	0.01	0.01	0.10	0.10	0.04	0.03		
10	0.01	0.01	0.09	0.09	0.04	0.03		
Maximum deviation	0.02		0.11		0.06			

\*\*\*\*\*\*\* To be continued\*\*\*\*\*\*

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### f) Surface quality

The percentage of tiles examined (%)	100
Remark	Specimen nominal dimensions: 100mm×100mm×20mm, 10pcs No obvious defects on the surface of all specimens.

### XI. Thermal conductivity

Test conducted: EN 12664:2001 Thermal performance of building materials and products – Determination of thermal resistance by means of guarded hot medium and low thermal resistance

### 1. Specimen description

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:Material Laboratory

Specimen description	Specimen dimension		
White	300mm×300mm×20.6mm		

#### Test result

	Test cor	ndition	Test result		
Test method	Mean temperature Temperature		Thermal conductivity		
	(℃)	difference (℃)	[W/(m·K)]		
EN 12664:2001	25.63 9.39		0.525		
Remark	The test result can not be compared with other results obtained from different test conditions, and should not be cited to the use condition directly.  Instruments effective range is 0.005~0.5[W/(m·K)], the test result is for reference only.				

\*\*\*\*\*\* To be continued\*\*\*\*\*\*

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XII. Slip resistance

Test conducted: EN 14231:2003 Natural stone test methods - Determination of the slip resistance by means of the pendulum tester

### Test result:

Test Item	Dry co	ndition	Wet condition		
i est item	Individual value	Average value	Individual value	Average value	
	46		14		
	50		14 _		
Slip registence	48	49	12	13	
Slip resistance	48	49	12	13	
	50		12		
	50		12		
Remark	Specimen nominal dimensions: 200mm×150mm×20mm, 6pcs				

XIII. Surface Resistivity, Volume Resistivity

Test conducted: EN 14617-13:2005 Agglomerated stone - Test methods - Part 13: Determination of electrical resistivity

#### Sample Description:

1) Name: floor tile

2) Quantity: 5pcs

3) Shape: square

4) Size: 100mm×100mm

5) Thickness: See the result table

## Sample pretreatment:

1) Condition: 24h/23℃/50%RH

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Cleaning: Samples' surface was not cleared before test.

\*\*\*\*\*\* To be continued\*\*\*\*\*\*

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Test electrode description:

Type: TOM600ME

Surface Resistance

1)  $D_0$ =30mm,  $D_2$ =57mm, weight: 2.27Kg ( $D_1$ =43.5mm, g=13.5mm)

2) Calculated formula:  $\rho_s = R_s \times P/g$ 

Remark:  $R_{s^-}$  surface resistance;  $\rho_{s^-}$  surface resistivity;  $P=\pi \times D_{-1}$ 

Volume Resistance

1) D<sub>1</sub>=63mm, D<sub>2</sub>=63mm, weight: 2.5Kg

2) Calculated formula: ρ<sub>v</sub>=A×R<sub>v</sub>/t

Remark:  $\rho_{v}$ - volume resistivity;  $R_{v}$ - volume resistance;  $A=\pi \times D^{2}/4=31.17$ cm<sup>2</sup>

Test condition:

1) Temp.: 23°C Hum.: 50%RH

2) Test Method: Voltmeter-Ammeter Method

3) Test voltage: 500V

4) Electrification time: 60s

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#### Test Results:

	Test Result							
Sample No.	Thickness(cm)	$R_{s}(\Omega)$	ρ <sub>s</sub> (Ω/square)	R <sub>v</sub> (Ω)	$\rho_{v}(\Omega \cdot m)$			
1#	2.0	2.44×10 <sup>12</sup>	2.44×10 <sup>13</sup>	$6.70 \times 10^{12}$	1.04×10 <sup>12</sup>			
2#	2.0	1.98×10 <sup>12</sup>	1.98×10 <sup>13</sup>	4.89×10 <sup>12</sup>	7.62×10 <sup>11</sup>			
3#	2.0	$4.74 \times 10^{12}$	4.74×10 <sup>13</sup>	4.63×10 <sup>12</sup>	7.22×10 <sup>11</sup>			
4#	2.0	4.25×10 <sup>12</sup>	4.25×10 <sup>13</sup>	5.79×10 <sup>12</sup>	9.02×10 <sup>11</sup>			
5#	2.0	2.81×10 <sup>12</sup>	2.81×10 <sup>13</sup>	4.57×10 <sup>12</sup>	7.12×10 <sup>11</sup>			
Mean		•••	3.24×10 <sup>13</sup>		8.28×10 <sup>11</sup>			

Attention: This test method has been shown to have a repeatability of approximately one half order of magnitude.

\*\*\*\*\*\* To be continued\*\*\*\*\*\*

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Equipment information:

Equipment	Model	Equipment No.	Calibration date	Next Calibration date
Ac/dc withstand voltage tester	Guoyi	P-207	2012-8-28	2013-8-27
Digital Calipers	1	P-260	2013-2-10	2014-2-9
Electrode	1	P-236	2011-4-20	2014-4-19

XIV. Abrasion resistance

Test conducted: EN 14617-4:2012 Agglomerated stone - Test methods - Part 4: Determination of abrasion

resistance

Specimens: Agglomerated stone, 150mm×100mm×20mm, 6pcs, one face polished

Testing surface: polished

Test Result:

Specimens identification No.	1	2	3	4	5	6
The length of the groove (mm)	20.5	21.5	21.5	21.5	21.5	21.5
Mean value (mm)	21.3					

#### XV. Freeze and thaw resistance

Test conducted:

EN 14617-5:2012 Agglomerated stone - Test methods - Part 5: Determination of freeze and thaw resistance

EN 14617-2:2008 Agglomerated stone - Test methods - Part 2: Determination of flexural strength (bending)

Specimens: Agglomerated stone, 200mm×50mm×20mm, 6pcs, one face polished

Loading rate: (0.25±0.05)MPa/s

Test Result:

There is no visible damage after 25 freeze/thaw cycles.

\*\*\*\*\*\*\* To be continued\*\*\*\*\*\*

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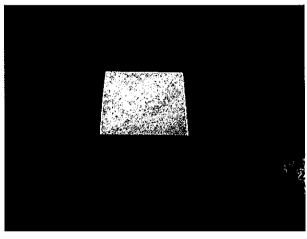
### Flexural strength subjected to 25 freeze/thaw cycles:

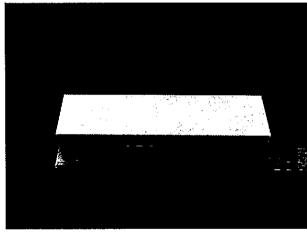
Specimens identification No.	1	2	3	4	5	6		
Flexural strength (MPa)	57.6	55.7	55.9	58.5	58.8	57.8		
Mean value (MPa)	57.4							
Standard deviation (MPa)	1.3							
Lower expected value (MPa)	54.4							
KMf <sub>25</sub>	0.87							

Note: Test item XIV and XV were performed by SGS internal laboratory.

Statement: Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

### Sample photos:





Test item I and IX

Test item II and III

\*\*\*\*\*\* To be continued\*\*\*\*\*

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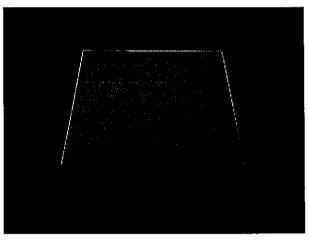


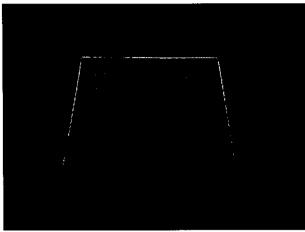


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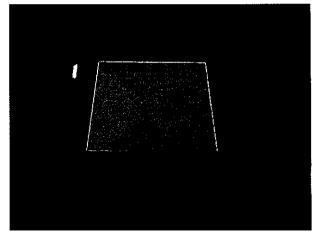
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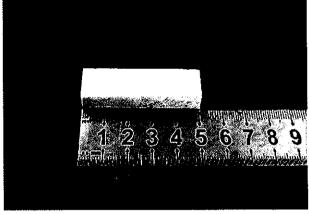




Test item IV

Test item V





Test item VI and X

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Test item VII

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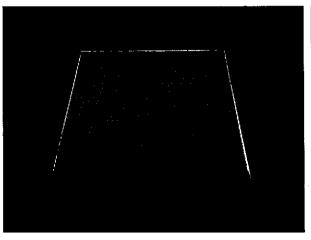


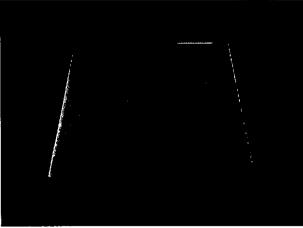


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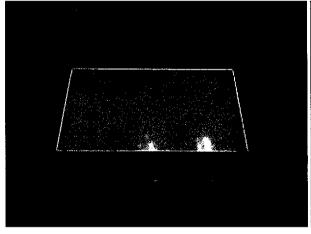
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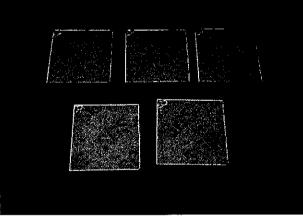




Test item VIII

Test item XI





Test item XII

Test item XIII

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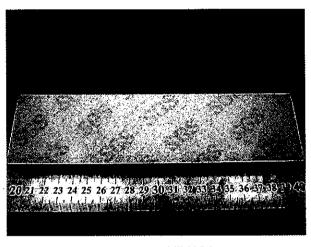
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