

Declaration of Performance

DOP/0-16/1-10-2013

The undersigned, representing
LAVA MINING AND QUARRYING S.A.
 19,3 km Markopoulou Avenue 19002 Paiania Athens - Greece
Declares that

PUMICE (0/16mm), Lightweight aggregate for bound and unbound applications
Conforms to the Annex ZA of the harmonized European Standard: EN 13055-2:2004
CPR ANNEX V System 2+

The Notified Body Bureau Veritas Certification Denmark A/S, Oldenborggade 1B, 7000 Fredericia, Tlf. 77 31 10 00, identified No. 0615, performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control, and issued the certificate of constancy of conformity of the factory production control (0615-CPR-9984).

Loose bulk density (wet) (Mg/m ³)	0,760 (Min/Max: 0,730/0,810)	EN 1097-3												
Particle density (Mg/m ³)	NPD ⁽²⁾	EN 1097-6:2000, annex C												
Grading (%)	<table border="1"> <thead> <tr> <th>Sieve (mm)</th> <th>Passing (%)</th> <th>Range (%)</th> </tr> </thead> <tbody> <tr> <td>12.5</td> <td>95</td> <td>90-100</td> </tr> <tr> <td>8</td> <td>37</td> <td>27-47</td> </tr> <tr> <td>4</td> <td>18</td> <td>10-26</td> </tr> </tbody> </table>	Sieve (mm)	Passing (%)	Range (%)	12.5	95	90-100	8	37	27-47	4	18	10-26	EN 933-1 ⁽³⁾
	Sieve (mm)	Passing (%)	Range (%)											
	12.5	95	90-100											
	8	37	27-47											
4	18	10-26												
Fines (%)	NPD ⁽²⁾	EN 933-1 ⁽³⁾												
Water content	16-26%	EN 1097-5(calc upon wet mass)												
Water absorption (%)	NPD ⁽²⁾	EN 1097-6, annex C												
BulkCrushing resistance (N/mm ²)	NPD ⁽²⁾	EN 13055-1, annex A												
Percentage of crushed particles (%)	NPD ⁽²⁾	EN 933-5												
Resistance to disintegration (%)	NPD ⁽²⁾	EN 13055-1:, annex B												
Freezing and thawing resistance (%)	NPD ⁽²⁾	EN 13055-2:, annex B												
Water Suction height	NPD ⁽²⁾	EN 1097-10												
Compaction and load bearing capacity	NPD ⁽²⁾	EN 13055-2, annex A												
Resistance to cyclic compressive loading	NPD ⁽²⁾	EN 13286-7												
Resistance to thermal shock	NPD ⁽²⁾	EN 1367-5												
Resistance to polishing	NPD ⁽²⁾	EN 1097-8												
Resistance to wear by abrasion from studded tyres	NPD ⁽²⁾	EN 1097-9												
Compatibility between LWA and bitumen	N/A ⁽¹⁾	EN 12697-11												
Water Soluble Chloride (%)	NPD ⁽²⁾	EN 1744-1:, clause 7												
Water soluble sulphate (%)	NPD ⁽²⁾	EN 1744-1:, clause 10												
Thermal conductivity	N/A ⁽¹⁾	EN 12664 or EN 12667												
Dangerous substances. In particular:														
Emission of radioactivity	NPD ⁽²⁾													
Release of heavy metals														
Release of polyaromatic carbons														

⁽¹⁾Not Applicable, ⁽²⁾ No Performance Determined, ⁽³⁾: dry sieving

The performance of the product identified above is in conformity with the declared values. The present Declaration of performance is established under the full responsibility of LAVA SA.

Signed on behalf of the manufacturer

Date:1/10/2013

Full Name:E. Iliodromitis

Position: Quarries Manager