

## Declaration of Performance

DOP/0-16/15-10-2013

**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 concrete, mortar and grout  
Conforms to the Annex ZA of the harmonized European Standard: EN 13055-1:2002  
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/9981).**

Loose bulk density (wet) (Mg/m <sup>3</sup> )	0,760 (Min/Max: 0,730/0,810)	EN 1097-3												
Particle density (Mg/m <sup>3</sup> )	NPD <sup>(1)</sup>	EN 1097-6:, annex C												
Grading (%)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Sieve (mm)</th> <th style="width: 33%;">Passing (%)</th> <th style="width: 33%;">Range (%)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">12.5</td> <td style="text-align: center;">95</td> <td style="text-align: center;">90-100</td> </tr> <tr> <td style="text-align: center;">8</td> <td style="text-align: center;">37</td> <td style="text-align: center;">27-47</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">18</td> <td style="text-align: center;">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 <sup>(2)</sup>
	Sieve (mm)	Passing (%)	Range (%)											
	12.5	95	90-100											
	8	37	27-47											
4	18	10-26												
Fines (%)	NPD <sup>(1)</sup>	EN 933-1 <sup>(2)</sup>												
Water absorption (%)	NPD <sup>(1)</sup>	EN 1097-6:, annex C												
Water content	16-26%	EN 1097-5(calc upon wet mass)												
Crushing resistance (N/mm <sup>2</sup> )	NPD <sup>(1)</sup>	EN 13055-1, annex A												
Percentage of crushed particles (%)	NPD <sup>(1)</sup>	EN 933-5												
Resistance to disintegration (%)	NPD <sup>(1)</sup>	EN 13055-1, annex B												
Freezing and thawing resistance (%)	NPD <sup>(1)</sup>	EN 13055-1:, annex C												
Chloride (%)	0.003- 0.043%	EN 1744-1, clause 7												
Acid soluble sulfate (%)	0.0- 0.07%	EN 1744-1, clause 12												
Total sulfur (%)	0.0- 0.034%	EN 1744-1: clause 11												
Organic contaminators (%)	No harmful contaminators	EN 1744-1 15.1, 15.2												
Alkali – silica reactivity	Non reactive	ASTM C289 XP-P18594												
Dangerous substances. In particular:														
Emission of radioactivity	NPD <sup>(1)</sup>													
Release of heavy metals														
Release of polyaromatic carbons														

<sup>(1)</sup> No Performance Determined, <sup>(2)</sup>: 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:15/10/2013**

**Full Name:E. Iliodromitis  
Position: Quarries Manager**