



**BREEDON QUARRY, BREEDON ON THE HILL, DERBY, DERBYSHIRE,  
DE73 8AN**

**PETROLOGICAL CLASSIFICATION: DOLOMITIC LIMESTONE**

TEST METHOD	BS EN / BS 812	RESULT	DATE	REPORT N°
Oven-Dried Particle Density – 4/10mm	1097-6: 2000	2.75Mg/m <sup>3</sup>	12/09/2016	STR501909
S.S.D. Particle Density – 4/10mm	1097-6: 2000	2.78Mg/m <sup>3</sup>	12/09/2016	STR501909
Apparent Particle Density – 4/10mm	1097-6: 2000	2.83Mg/m <sup>3</sup>	12/09/2016	STR501909
Water Absorption – 4/10mm	1097-6: 2000	1.0%	12/09/2016	STR501909
Aggregate Crushing Value (ACV)	812: Part 110	21%	12/09/2016	STR501904
Dry Aggregate Impact Value (AIV)	812: Part 112	21%	12/09/2016	STR501905
Aggregate Abrasion Value (AAV)	1097-8: 2009	9.9	12/09/2016	STR501912
Micro Deval Coefficient (MD)	1097-1: 2011	13	12/09/2016	STR501907
Los Angeles Coefficient (LA)	1097-2: 2010	28	12/09/2016	STR501906
Methylene Blue (MB)	933-9: 2009	0.5g/kg	12/09/2016	STR501921
Chloride Ion Content	1744-1: 2009	0.003%	12/09/2016	STR501917
Total Sulfur Content	1744-1: 2009	<0.1%	12/09/2016	STR501918
Calcium Carbonate Equivalent	196-2: 2005	62.22%	12/09/2016	STR507888
Water Soluble Sulfate Content SO <sub>3</sub>	1744-1: 2009	<0.01%	12/09/2016	STR501919
Soaked 10% Fines Value (TPV)	812: Part 111	210kN	12/09/2016	STR501903
Magnesium Sulfate Value (MS)	1367-2: 2009	1	12/09/2016	STR510157
Acid Soluble Sulphur Content	1744-1: 2009	0.10%	12/09/2016	STR501920
Water Soluble Sulfate Content (SO <sub>4</sub> )	TRL Report 447-1	16mg/l	12/09/2016	STR501924
Oxidisable Sulphides (OS)	TRL Report 447-3	0.29%	12/09/2016	STR501925
Total Potential Sulphate Content	TRL Report 447-4	0.37%	12/09/2016	STR501926

TEST METHOD	RESULT	DATE	REPORT N°	POLISHED STONE VALUE (PSV) RESULTS		
Frost Heave	6.3mm	12/09/2016	STR501892	<b>43</b>	12/09/2016	STR501911
Frost Heave OMC	5.1%	12/09/2016	STR501897	<b>47</b>	28/07/2015	STR426023
Dry Density	2.48Mg/m <sup>3</sup>	12/09/2016	STR501897	<b>50</b>	02/06/2014	STR373756
CBR	250%	12/09/2016	STR501896a	<b>45</b>	03/06/2013	STR328070

CHEMICAL ANALYSIS	
Date: 12/09/2016	STR501927
SiO <sub>2</sub>	0.48%
TiO <sub>2</sub>	0.01%
Al <sub>2</sub> O <sub>3</sub>	0.11%
Fe <sub>2</sub> O <sub>3</sub>	1.00%
MgO	19.90%
MnO	0.26%
CaO	31.10%
SO <sub>3</sub>	0.07%
Cl	0.10%
K <sub>2</sub> O	0.03%
Na <sub>2</sub> O	<0.05%
P <sub>2</sub> O <sub>5</sub>	0.06%
BaO	0.15%
Loss on Ignition	46.50%