

# Technical Data Sheet Awatoto Shingle Plant

## Basecourse Aggregate

Quarry Source Rock: Land Deposit Alluvial Greywacke

Source Rock Characteristics	Test Method	Value
Crushing Resistance	NZS4407:1991 test 3.10	@ 230kN > 3%
Weathering Resistance	NZS 4407:1991 test 3.11	AA – BA
Solid Density	NZS4407:1991 3.7.1	> 2600 kg/m <sup>3</sup>
Los Angeles Abrasion (LAA)	NZS 4407:1991, test 3.12	<20

### Sub Basecourse Aggregate (AP40 & AP65)

Test	Test Method	Value
Max Dry Density	NZS4402:1986 test 4.1.3	> 2.3 T/m <sup>3</sup>
Optimum Water Content		4% - 6%

### Basecourse Aggregate (BC40mm)

Test	Test Method	Value
Max Dry Density	NZS4402:1986 test 4.1.3	> 2.26 T/m <sup>3</sup>
Optimum Water Content		4% - 6%

### Coarse Aggregate

Product	SE		37.5mm	19.0mm	9.5mm	4.75mm	2.36mm	0.075mm
BC40mm	>30		100%	85% - 65%	60% - 40%	45% - 25%	35% - 15%	< 10%
TOP20	>30		100%	95%- 80%	75%- 50%	50%- 30%	38%- 20%	<12%

Concrete Aggregate

Awatoto Quarry Source Rock: River Alluvial Greywacke

Source Rock Characteristics	Test Method	Value
Crushing Resistance	NZS3111 Section 14	>500kN
Weathering Resistance	NZS3111 Section 15	AA-BA

### Coarse Aggregate (CA20mm & CA13mm)

Test	Test Method	Value
Unit Mass Loose Poured - SSD*	NZS3111 Section 10	1540kg/m <sup>3</sup>
-voids		35% - 45%
Flakiness	AS1141.15	<25
Elongation	BS12.105.2	<25
Absorption	NZS3111 Section 12	<2%
Density -Dry		2600 Kg/m <sup>3</sup>
-SSD*		2650 Kg/m <sup>3</sup>

\* Saturated Surface Dry

### Concrete Sand

Test	Test Method	Value
Unit Mass Loose Poured - SSD*	NZS3111 Section 10	1720kg/m <sup>3</sup>
-voids		40%
Absorption	NZS3111 Section 16	<1.5%
Density -Dry		2600kg/m <sup>3</sup>
-SSD*		2650kg/m <sup>3</sup>

\* Saturated Surface Dry

### Coarse Aggregate

Product	Cleanliness Value	37.5mm	26.5mm	19.0mm	13.2mm	9.5mm	4.75mm
20mm	>85		100%	100% - 80%	50% - 10%	<10%	
13mm	>85			100%	90% - 70%	50% - 10%	<10%
10mm	>85					100%	<50%

### Fine Aggregate

Product	Moisture Content	SE	4.75m m	2.36m m	1.18m m	0.6mm	0.3mm	0.15m m
PAP	< 10%	>80	100%	100%-800%	90%-50%	60%-20%	30%-5%	< 10%

All testing carried out at an IANZ accredited laboratory. Test results available upon request. All results correct at time of publication, July 2012.