

# Technical Data Sheet Yaldhurst Quarry

## Basecourse Aggregate

Quarry Source Rock: Land Deposit Alluvial Greywacke

Source Rock Characteristics	Test Method	Value
Crushing Resistance	NZS4407:1991 test 3.10	@ 130kN > 2%
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 (TNZ40 M/4 & TNZ 20 M/4)

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	63.0mm	37.5mm	19.0mm	9.5mm	4.75mm	2.36mm	0.075mm
AP65 (CCC)	>25	100%	90% - 60%	65% - 45%	50% - 30%	40% - 20%	28% - 10%	< 6%
AP40 (CCC)	>25		100%	95%- 80%	75%- 50%	50%- 30%	38%- 20%	<12%
TNZ40 M/4	>40		100% - 95%	85%- 58%	65% - 30%	45% - 15%	35% - 10%	< 8%

## Concrete Aggregate

Yaldhurst Quarry Source Rock: Alluvial Greywacke

Source Rock Characteristics	Test Method	Value
Crushing Resistance	NZS3111 Section 14	>400kN
Weathering Resistance	NZS3111 Section 15	AA-BA

### Coarse Aggregate (CA20mm & CA13mm)

Test	Test Method	Value
Unit Mass Loose Poured - SSD*	NZS3111 Section 10	1550kg/m <sup>3</sup>
-voids		35% - 45%
Broken Faces content		>30%
Flakiness	AS1141.15	<25
Elongation	BS12.105.2	<25
Absorption	NZS3111 Section 12	<2%
Density -Dry		2600 Kg/m <sup>3</sup>
-SSD*		2630 Kg/m <sup>3</sup>

\* Saturated Surface Dry

### Fine Aggregate (PAP)

Test	Test Method	Value
Unit Mass Loose Poured - SSD*	NZS3111 Section 10	1610kg/m <sup>3</sup>
-voids		40%
Absorption	NZS3111 Section 16	<1.5%
Density -Dry		2610kg/m <sup>3</sup>
-SSD*		2630kg/m <sup>3</sup>

\* Saturated Surface Dry

### Coarse Aggregate

Product	Cleanliness Value	37.5mm	26.5mm	19.0mm	13.2mm	9.5mm	4.75mm
40mm	>85	100%	100% - 95%	95% - 50%	70% - 40%	50% - 25%	<25%
20mm	>85		100%	100% - 80%	30% - 10%	<5%	
13mm	>85			100%	100% - 80%	70% - 30%	<5%
10mm	>85					100% - 80%	50% - 30%

### Fine Aggregate

Product	Moisture Content	SE	6.7mm	4.75m m	2.36m m	1.18m m	0.6mm	0.3mm	0.15m m
PAP	< 10%	>65	100%	100%-90%	90%-70%	70%-50%	60%-40%	40%-20%	< 15%

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