

Conundrum Holdings Pty Ltd Product Specification

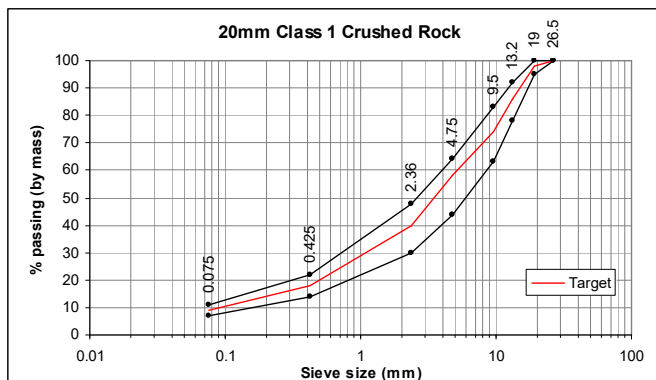
Stawell Quarry 20mm Class 1 Crushed Rock

PRODUCT CODE: 020-000-t SOURCE ROCK TYPE: Hornfels
023-001-t

Product Grading

AS1289.3.6.1

Sieve Size AS (mm)	Limits of Grading		Target Grading (% Passing)
	% Passing	% Retained	
26.5	100	0	100
19.0	95 – 100	0 – 5	98
13.2	78 – 92	7 – 18	86
9.50	63 – 83	10 – 16	74
6.7	-	-	66
4.75	44 – 64	14 – 24	58
2.36	30 – 48	10 – 20	40
0.425	14 – 22	14 – 28	18
0.075	7 – 11	6 – 13	9



Tests Carried Out For Product Quality Control Purposes

Sampling Method: AS1141.3.1

Test	Method	Frequency	Requirements	Reference
Unit Mass Density	AS1141.4	1 per 3 Years	N/A - For reference purposes only	N/A
Maximum Dry Density / Optimum Moisture Content	AS1289.5.2	1 per Year	N/A - For reference purposes only	N/A
Plastic Index (PI)	AS1289.3.3.1	1 per 2,500t	2-6	VicRoads 812
Liquid Limit (as part of PI test)	AS1289.3.3.1	1 per 2,500t	≤30%	VicRoads 812
Flakiness Index (FI)	RC302.11	1 per Month	≤35%	VicRoads 812
Permeability (Perm)	AS1289.6.7.1	1 per Year	≤5 x 10 ⁻⁸ m/sec	VicRoads 812
pH Value	AS1289.3.8.1	As per customer requirements	6.0 (min)	VicRoads 812
Conductivity	RC353.09	As per customer requirements	1500 μS/cm (max)	VicRoads 812
Unsound stone count by visual assessment	RC372.01	1 per 1500t	Unsound ≤5% Marginal + Unsound ≤10%	VicRoads 812
Moisture Content (MC) – Dry Product	AS1289.2.1.6 (Hotplate method)	1 per 500t	≤4%	VicRoads 812
MC – Wet Mixed (WM) Product	AS1289.2.1.6 (Hotplate method)	1 per production day then 1 per 500t	-1.0% to +0.5% of MC nominated by customer	VicRoads 812
Particle size distribution (Grading)	AS1289.3.6.1	1 per 500t	See table and graph above	VicRoads 812

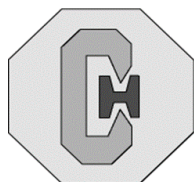
Relevant Tests Carried Out On Source Rock

Test	Method	Frequency	Requirements	Reference
Los Angeles (LA) Value	AS1141.23	VicRoads Issue	≤30	VicRoads 801
Preparation of Reference Specimens	AS1141.30 Appendix A	VicRoads Issue	See below for sound and marginal classifications	VicRoads 801
Degradation Factor – Source Rock	AS1141.25.1	VicRoads Issue	Sound ≥40% Marginal 20-39%	VicRoads 801

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Conundrum Holdings Pty Ltd Product Specification

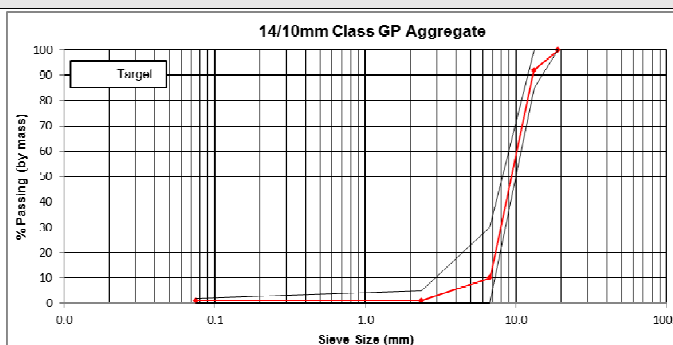
Stawell Quarry 14/10mm Class GP Aggregate

PRODUCT CODE: 023-005-t SOURCE ROCK TYPE: Hornfels

Product Grading

AS1141.11 (washed)

Sieve Size AS (mm)	Limits of Grading (% Passing)	Limits of Deviation %	Target Grading (% Passing)
19.0	100	-	100
13.2	85 – 100	±10	92
6.70	0 – 30	±15	10
2.36	0 – 5	-	1
0.075	0 – 2	-	1



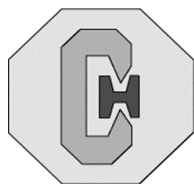
Tests Carried Out For Product Quality Control Purposes

Sampling Method: AS1141.3.1

Test	Method	Frequency	Requirements	Reference
Unit Mass Density	AS1141.4	1 per 3 Years	N/A – For reference purposes only	N/A
Particle Density (Coarse Agg)	AS1141.6	1 per 3 Years	$\geq 2.1\text{t/m}^3$, $< 3.2\text{t/m}^3$	AS2758.1.7.1
Particle Shape by Proportional Calliper	AS1141.14	1 per year	$\leq 10\%$ using 3:1 ratio	AS2758.1.8.3
Flakiness Index (FI)	AS1141.15	1 per 9,600t	$\leq 35\%$	AS2758.1.8.3
Unsound stone count by visual assessment	AS1141.30.1	1 per 4,800t	Unsound $\leq 5\%$ Marginal + Unsound $\leq 10\%$	AS2758.1.9.3.4
Particle size distribution (Grading)	AS1141.11 (washed)	1 per 2,400t	See table above	AS2758.1.8.1.2

Relevant Tests Carried Out On Source Rock

Test	Method	Frequency	Requirements	Reference
Los Angeles (LA) Value	AS1141.23	VicRoads Issue	≤ 30	AS2758.1.9.3.3
Alkali-Silica Reactivity (ASR) Value	RC376.03	VicRoads Issue	$\leq 0.1\%$	VicRoads 610
Preparation of Reference Specimens	AS1141.30 Appendix A	VicRoads Issue	See below for sound and marginal classifications	VicRoads 801
Degradation Factor – Source Rock	AS1141.25.1	VicRoads Issue	Sound $\geq 40\%$ Marginal 20-39%	VicRoads 801
Soundness by exposure to Sodium Sulphate	AS1141.24	VicRoads Issue	weighted average loss $\leq 6\%$	AS2758.1.9.3.3



Conundrum Holdings Pty Ltd Product Specification

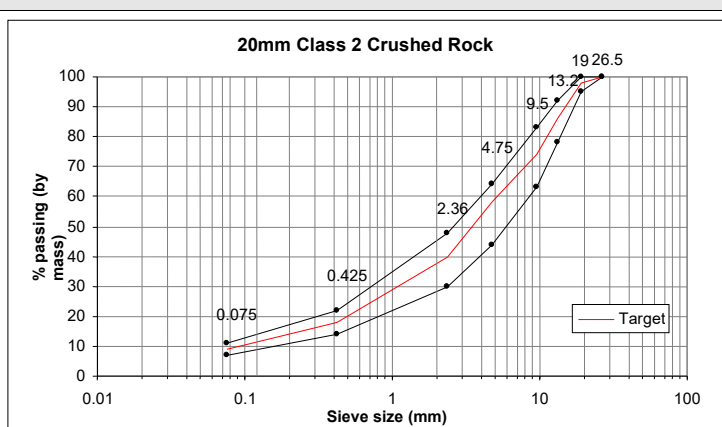
Stawell Quarry 20mm Class 2 Crushed Rock

PRODUCT CODE: 020-010-t SOURCE ROCK TYPE: Hornfels
023-011-t

Product Grading

AS1289.3.6.1

Sieve Size AS (mm)	Limits of Grading		Target Grading (% Passing)
	% Passing	% Retained	
26.5	100	0	100
19.0	95 – 100	0 – 5	98
13.2	78 – 92	7 – 18	86
9.50	63 – 83	10 – 16	74
6.7	-	-	66
4.75	44 – 64	14 – 24	58
2.36	30 – 48	10 – 20	40
0.425	14 – 22	14 – 28	18
0.075	7 – 11	6 – 13	9



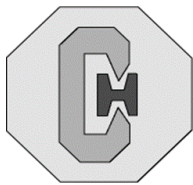
Tests Carried Out For Product Quality Control Purposes

Sampling Method: AS1141.3.1

Test	Method	Frequency	Requirements	Reference
Unit Mass Density	AS1141.4	1 per 3 Years	N/A - For reference purposes only	N/A
Maximum Dry Density / Optimum Moisture Content	AS1289.5.2	1 per Year	N/A - For reference purposes only	N/A
Plastic Index (PI)	AS1289.3.3.1	1 per 5,000t	0-6	VicRoads 812
Liquid Limit (as part of PI test)	AS1289.3.3.1	1 per 5,000t	≤30%	VicRoads 812
Flakiness Index (FI)	RC302.11	1 per production month	≤35%	VicRoads 812
pH Value	AS1289.3.8.1	As per customer requirements	6.0 (min)	VicRoads 812
Conductivity	RC353.09	As per customer requirements	1500 µS/cm (max)	VicRoads 812
Unsound stone count by visual assessment	RC372.01	1 per 1,500t	Unsound ≤7% Marginal + Unsound ≤10%	VicRoads 812
Moisture Content (MC) – Dry Product	AS1289.2.1.6 (Hotplate method)	1 per 500t	≤4%	VicRoads 812
MC – Wet Mixed (WM) Product	AS1289.2.1.6 (Hotplate method)	1 per production day then 1 per 500t	-1.0% to +0.5% of MC nominated by customer	VicRoads 812
Particle size distribution (Grading)	AS1289.3.6.1	1 per 500t	See table and graph above	VicRoads 812

Relevant Tests Carried Out On Source Rock

Test	Method	Frequency	Requirements	Reference
Los Angeles (LA) Value	AS1141.23	VicRoads Issue	≤30	VicRoads 801
Preparation of Reference Specimens	AS1141.30 Appendix A	VicRoads Issue	See below for sound and marginal classifications	VicRoads 801
Degradation Factor – Source Rock	AS1141.25.1	VicRoads Issue	Sound ≥40% Marginal 20-39%	VicRoads 801



Conundrum Holdings Pty Ltd Product Specification

Stawell Quarry 7mm Class SS Aggregate

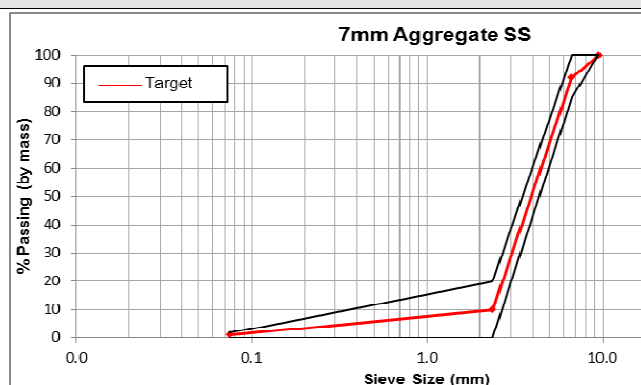
PRODUCT CODE: 023-015

SOURCE ROCK TYPE: Hornfels

Product Grading

AS1141.11 (washed)

Sieve Size AS (mm)	Limits of Grading		Target Grading (% Passing)
	% Passing	% Retained	
9.50	100	-	100
6.70	85 – 100	±10	92
4.75	-	±10	50
2.36	0 – 20	±10	10
0.075	0 – 2	-	1



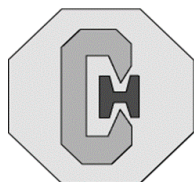
Tests Carried Out For Product Quality Control Purposes

Sampling Method: AS1141.3.1

Test	Method	Frequency	Requirements	Reference
Unit Mass Density	AS1141.4	On initial introduction of product	N/A – For reference purposes only	N/A
Unsound stone count by visual assessment	AS1141.30	1 per 4,800t	Unsound ≤5% Marginal + Unsound ≤10%	AS2758.1.9.3.4
Particle size distribution (Grading)	AS1141.11 (washed)	1 per 4,800t	See table above	AS2758.1.8.1.2

Relevant Tests Carried Out On Source Rock

Test	Method	Frequency	Requirements	Reference
Los Angeles (LA) Value	AS1141.23	VicRoads Issue	≤30	AS2758.1.9.3.3
Alkali-Silica Reactivity (ASR) Value	RC376.03	VicRoads Issue	≤0.1%	VicRoads 610
Preparation of Reference Specimens	AS1141.30 Appendix A	VicRoads Issue	See below for sound and marginal classifications	VicRoads 801
Degradation Factor – Source Rock	AS1141.25.1	VicRoads Issue	Sound ≥40% Marginal 20-39%	VicRoads 801
Soundness by exposure to Sodium Sulphate	AS1141.24	VicRoads Issue	weighted average loss ≤6%	AS2758.1.9.3.3



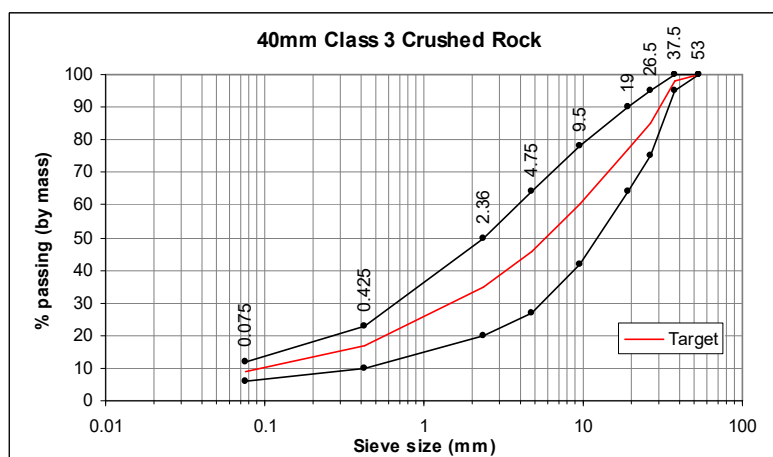
Conundrum Holdings Pty Ltd Product Specification

Stawell Quarry 40mm Class 3 Crushed Rock

PRODUCT CODE: 023-019-t SOURCE ROCK TYPE: Hornfels

Product Grading AS1289.3.6.1

Sieve Size AS (mm)	Limits of Grading (% Passing)	Target Grading (% Passing)
53.0	100	100
37.5	95 – 100	98
26.5	75 – 95	85
19.0	64 – 90	77
9.50	42 – 78	60
4.75	27 – 64	46
2.36	20 – 50	35
0.425	10 – 23	17
0.075	6 – 12	9



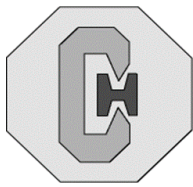
Tests Carried Out For Product Quality Control Purposes

Sampling Method: AS1141.3.1

Test	Method	Frequency	Requirements	Reference
Unit Mass Density	AS1141.4	1 per 3 years	N/A - For reference purposes only	N/A
Maximum Dry Density / Optimum Moisture Content	AS1289.5.2	1 per 3 years	N/A - For reference purposes only	N/A
Plastic Index (PI)	AS1289.3.3.1	1 per 5,000t	0-10	VicRoads 812
Liquid Limit (as part of PI test)	AS1289.3.3.1	As per customer requirements	≤35%	VicRoads 812
Unsound stone count by visual assessment	RC372.01	1 per 1,500t	Unsound ≤10% Marginal + Unsound ≤20%	VicRoads 812
Moisture Content (MC) – Dry Product	AS1289.2.1.6 (Hotplate method)	1 per 500t	≤4%	VicRoads 812
Particle size distribution (Grading)	AS1289.3.6.1	1 per 500t	See table and graph above	VicRoads 812

Relevant Tests Carried Out On Source Rock

Test	Method	Frequency	Requirements	Reference
Los Angeles (LA) Value	AS1141.23	VicRoads Issue	≤35	VicRoads 801
Preparation of Reference Specimens	AS1141.30 Appendix A	VicRoads Issue	See below for sound and marginal classifications	VicRoads 801
Degradation Factor – Source Rock	AS1141.25.1	VicRoads Issue	≥40% = Sound 20-39% = Marginal	VicRoads 801



Conundrum Holdings Pty Ltd Product Specification

Stawell Quarry 20mm Class 3 Crushed Rock

PRODUCT CODE: 020-020-t SOURCE ROCK TYPE: Hornfels
023-021-t

Product Grading

AS1289.3.6.1

Sieve Size AS (mm)	Limits of Grading (% Passing)	Target Grading (% Passing)
26.5	100	100
19.0	95 – 100	98
13.2	75 – 95	85
9.50	60 – 90	75
4.75	42 – 76	59
2.36	28 – 60	44
0.425	14 – 28	21
0.075	6 – 13	10

20mm Class 3 Crushed Rock

Sieve size (mm)	% passing (by mass)
0.075	10
0.425	21
2.36	44
4.75	59
9.5	75
13.2	85
19	98
26.5	100

Tests Carried Out For Product Quality Control Purposes

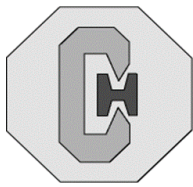
Sampling Method: AS1141.3.1

Test	Method	Frequency	Requirements	Reference
Unit Mass Density	AS1141.4	1 per 3 Years	N/A - For reference purposes only	N/A
Maximum Dry Density / Optimum Moisture Content	AS1289.5.2	1 per Year	N/A - For reference purposes only	N/A
Plastic Index (PI)	AS1289.3.3.1	1 per 5,000t	0-10	VicRoads 812
Liquid Limit (as part of PI test)	AS1289.3.3.1	1 per 5,000t	≤35%	VicRoads 812
Permeability (Perm)	AS1289.6.7.1	On Request ¹	As per customer requirements	VicRoads 812
Unsound stone count by visual assessment	RC372.01	1 per 1,500t	Unsound ≤10% Marginal + Unsound ≤20%	VicRoads 812
Moisture Content (MC) – Dry Product	AS1289.2.1.6 (Hotplate method)	1 per 500t	≤4%	VicRoads 812
MC – Wet Mixed (WM) Product	AS1289.2.1.6 (Hotplate method)	1 per production day then 1 per 500t	-1.0% to +0.5% of MC nominated by customer	VicRoads 812
Particle size distribution (Grading)	AS1289.3.6.1	1 per 500t	See table and graph above	VicRoads 812

¹Charges may apply

Relevant Tests Carried Out On Source Rock

Test	Method	Frequency	Requirements	Reference
Los Angeles (LA) Value	AS1141.23	VicRoads Issue	≤35	VicRoads 801
Preparation of Reference Specimens	AS1141.30 Appendix A	VicRoads Issue	See below for sound and marginal classifications	VicRoads 801
Degradation Factor – Source Rock	AS1141.25.1	VicRoads Issue	≥40% = Sound 20-39% = Marginal	VicRoads 801



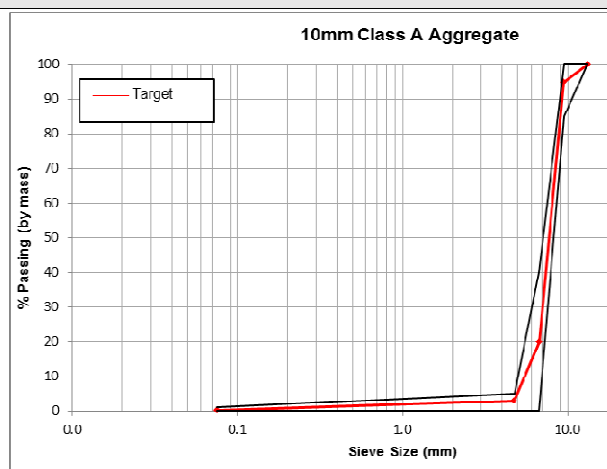
Conundrum Holdings Pty Ltd Product Specification

Stawell Quarry 10mm Class A Aggregate

PRODUCT CODE: 023-025-t SOURCE ROCK TYPE: Hornfels

Product Grading RC375.11

Sieve Size AS (mm)	Limits of Grading		Target Grading (%Passing)
	(% Passing)	(%Retained)	
13.2	100	-	100
9.50	85 – 100	-	95
6.70	0 – 40	60 (min)	20
4.75	0 – 5	-	3
75µm	0 – 1.0	-	0.2



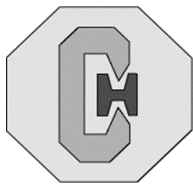
Tests Carried Out For Product Quality Control Purposes

Sampling Method: AS1141.3.1

Test	Method	Frequency	Requirements	Reference
Unit Mass Density	AS1141.4	1 per 3 Years	N/A - For reference purposes only	N/A
Flakiness Index (FI)	AS1141.15	1 per 350t	Individual test $\leq 25\%$	VicRoads 831
Median Size and Average Least Dimension (ALD)	AS1141.20.1/ AS1141.20.3	1 per 350t	≥ 5	VicRoads 831
Unsound stone count by visual assessment	RC372.01	1 per 350t	Unsound $\leq 3\%$ Marginal + Unsound $\leq 10\%$	VicRoads 831
Particle size distribution (Grading)	RC375.11	1 per 350t	See table above	VicRoads 831

Relevant Tests Carried Out On Source Rock

Test	Method	Frequency	Requirements	Reference
Los Angeles (LA) Value	AS1141.23	VicRoads Issue	≤ 20	VicRoads 801
Polished Stone (PS) Value	RC374.01	VicRoads Issue	≥ 48	VicRoads 801
Preparation of Reference Specimens	AS1141.30 Appendix A	VicRoads Issue	See below for sound and marginal classifications	VicRoads 801
Degradation Factor – Source Rock	AS1141.25.1	VicRoads Issue	Sound $\geq 40\%$ Marginal 20-39%	VicRoads 801



Conundrum Holdings Pty Ltd Product Specification

Stawell Quarry 20mm B Grade Crushed Rock

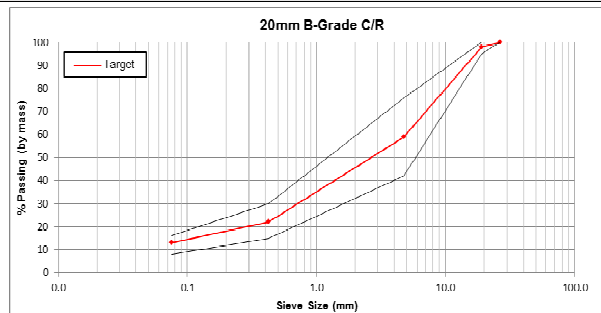
PRODUCT CODE: 023-030

SOURCE ROCK TYPE: Hornfels

Product Grading

AS1289.3.6.1

Sieve Size AS (mm)	Limits of Grading (% Passing)	Target Grading (% Passing)
26.5	100	100
19.0	95 – 100	98
4.75	42 – 76	59
0.425	15 – 30	22
0.075	8 – 16	13



Tests Carried Out For Product Quality Control Purposes

Sampling Method: AS1141.3.1

Test	Method	Frequency	Requirements	Reference
Unit Mass Density	AS1141.4	On initial introduction of product	N/A - For reference purposes only	N/A
Maximum Dry Density / Optimum Moisture Content	AS1289.5.2	1 per 3 Years	N/A - For reference purposes only	N/A
Plastic Index (PI)	AS1289.3.3.1	1 per Year	N/A - For reference purposes only	N/A
Liquid Limit (as part of PI test)	AS1289.3.3.1	1 per Year	N/A - For reference purposes only	N/A
Particle size distribution (Grading)	AS1289.3.6.1	1 per 3 months	See table and graph above	Conundrum historical data

Relevant Tests Carried Out On Source Rock

Test	Method	Frequency	Requirements	Reference
Nil	N/A	N/A	N/A	N/A

Date issued: 9 Aug 2024

Issue number: 6

Authorised by: David Kerr

Date printed: 11 Jul 2025

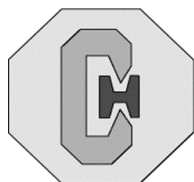
Previous issue date: 17 Jun 2020

Date of first issue: 9 May 2002

Max review interval: 5 years

Manual index location: 19.i

Form: 2030.02



Conundrum Holdings Pty Ltd Product Specification

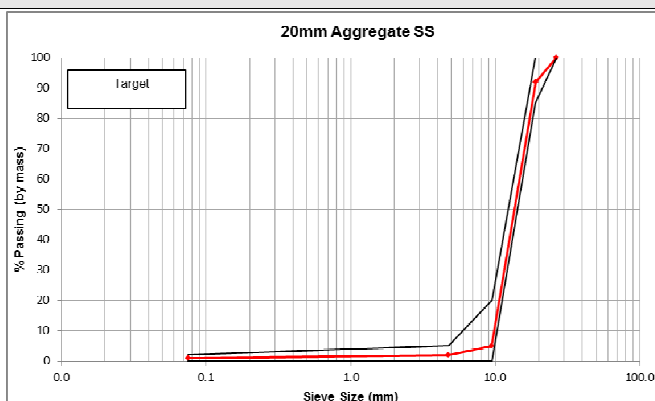
Stawell Quarry 20mm Class SS Aggregate

PRODUCT CODE: 023-045-t SOURCE ROCK TYPE: Hornfels

Product Grading

AS1141.11 (washed)

Sieve Size AS (mm)	Limits of Grading (% Passing)	Limits of Deviation %	Target Grading (% Passing)
26.5	100	-	100
19.0	85 – 100	±10	92
9.50	0 – 20	±10	5
4.75	0 – 5	-	2
0.075	0 – 2	-	1



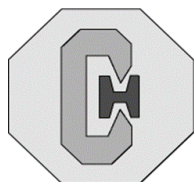
Tests Carried Out For Product Quality Control Purposes

Sampling Method: AS1141.3.1

Test	Method	Frequency	Requirements	Reference
Unit Mass Density	AS1141.4	1 per 3 Years	N/A – For reference purposes only	N/A
Particle Density (Coarse Agg)	AS1141.6	1 per 3 Years	$\geq 2.1\text{t/m}^3$, $< 3.2\text{t/m}^3$	AS2758.1.7.1
Particle Shape by Proportional Calliper	AS1141.14	1 per year	$\leq 10\%$ using 3:1 ratio	AS2758.1.8.3
Flakiness Index (FI)	AS1141.15	1 per 9,600t	$\leq 35\%$	AS2758.1.8.3
Unsound stone count by visual assessment	AS1141.30	1 per 4,800t	Unsound $\leq 5\%$ Marginal + Unsound $\leq 10\%$	AS2758.1.9.3.4
Particle size distribution (Grading)	AS1141.11 (washed)	1 per 2,400t	See table above	AS2758.1.8.1.2

Relevant Tests Carried Out On Source Rock

Test	Method	Frequency	Requirements	Reference
Los Angeles (LA) Value	AS1141.23	VicRoads Issue	≤ 30	AS2758.1.9.3.3
Alkali-Silica Reactivity (ASR) Value	RC376.03	VicRoads Issue	$\leq 0.1\%$	VicRoads 610
Preparation of Reference Specimens	AS1141.30 Appendix A	VicRoads Issue	See below for sound and marginal classifications	VicRoads 801
Degradation Factor – Source Rock	AS1141.25.1	VicRoads Issue	Sound $\geq 40\%$ Marginal 20-39%	VicRoads 801
Soundness by exposure to Sodium Sulphate	AS1141.24	VicRoads Issue	weighted average loss $\leq 6\%$	AS2758.1.9.3.3



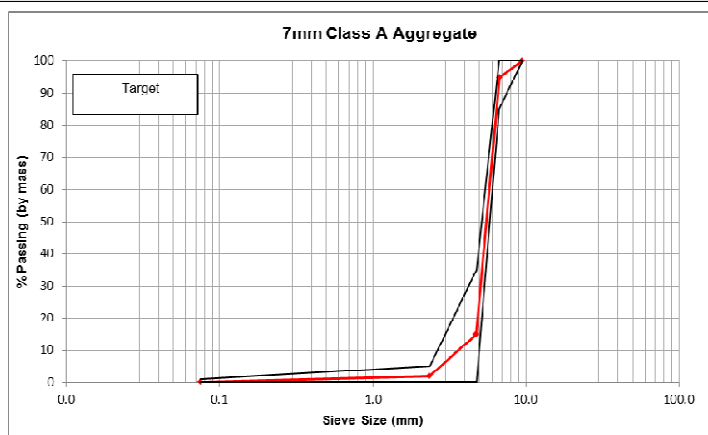
Conundrum Holdings Pty Ltd Product Specification

Stawell Quarry 7mm Class A Aggregate

PRODUCT CODE: 023-065-t SOURCE ROCK TYPE: Hornfels

Product Grading RC375.11

Sieve Size AS (mm)	Limits of Grading (% Passing)	Target Grading (% Passing)
9.50	100	100
6.70	85 – 100	95
4.75	0 – 35	15
2.36	0 – 5	2
75µm	0 – 1.0	0.2



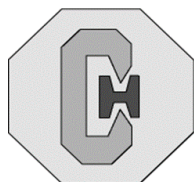
Tests Carried Out For Product Quality Control Purposes

Sampling Method: AS1141.3.1

Test	Method	Frequency	Requirements	Reference
Unit Mass Density	AS1141.4	1 per 3 Years	N/A - For reference purposes only	N/A
Flakiness Index (FI)	AS1141.15	N/A	≤25%	VicRoads 831
Median Size and Average Least Dimension (ALD)	AS1141.20.2	1 per 350t	Minimum ALD of 3.5	VicRoads 831
Unsound stone count by visual assessment	RC372.01	1 per 350t	Unsound ≤3% Marginal + Unsound ≤10%	VicRoads 831
Particle size distribution (Grading)	RC375.11	1 per 350t	See table above	VicRoads 831

Relevant Tests Carried Out On Source Rock

Test	Method	Frequency	Requirements	Reference
Los Angeles (LA) Value	AS1141.23	VicRoads Issue	≤20	VicRoads 801
Polished Stone (PS) Value	RC374.01	VicRoads Issue	≥48	VicRoads 801
Preparation of Reference Specimens	AS1141.30 Appendix A	VicRoads Issue	See below for sound and marginal classifications	VicRoads 801
Degradation Factor – Source Rock	AS1141.25.1	VicRoads Issue	Sound ≥40% Marginal 20-39%	VicRoads 801



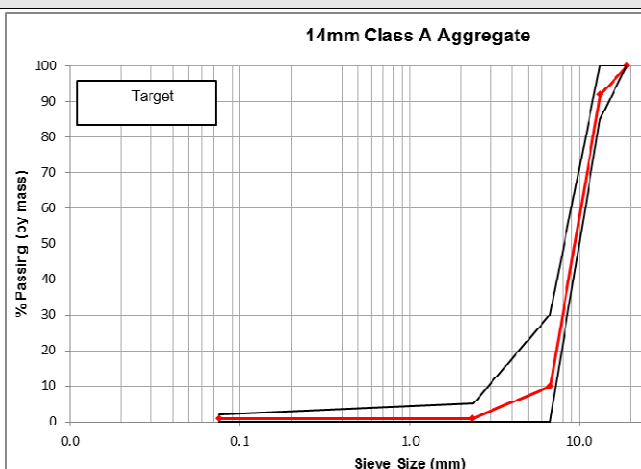
Conundrum Holdings Pty Ltd Product Specification

Stawell Quarry 14mm Class A Aggregate

PRODUCT CODE: 023-075-t SOURCE ROCK TYPE: Hornfels

Product Grading RC375.11

Sieve Size AS (mm)	Limits of Grading (% Passing)	Target Grading (% Passing)
19.0	100	100
13.2	85 – 100	95
9.50	0 – 30	15
6.70	0 – 5	2
75µm	0 – 1.0	0.2



Tests Carried Out For Product Quality Control Purposes

Sampling Method: AS1141.3.1

Test	Method	Frequency	Requirements	Reference
Unit Mass Density	AS1141.4	1 per 3 Years	N/A - For reference purposes only	N/A
Flakiness Index (FI)	AS1141.15	1 per 350t	≤25%	VicRoads 831
Median Size and Average Least Dimension (ALD)	AS1141.20.1/ AS1141.20.3	1 per 350t	≥7	VicRoads 831
Unsound stone count by visual assessment	RC372.01	1 per 350t	Unsound ≤3% Marginal + Unsound ≤10%	VicRoads 831
Particle size distribution (Grading)	RC375.11	1 per 350t	See table above	VicRoads 831

Relevant Tests Carried Out On Source Rock

Test	Method	Frequency	Requirements	Reference
Los Angeles (LA) Value	AS1141.23	VicRoads Issue	≤20	VicRoads 801
Polished Stone (PS) Value	RC374.01	VicRoads Issue	≥48	VicRoads 801
Preparation of Reference Specimens	AS1141.30 Appendix A	VicRoads Issue	See below for sound and marginal classifications	VicRoads 801
Degradation Factor – Source Rock	AS1141.25.1	VicRoads Issue	Sound ≥40% Marginal 20-39%	VicRoads 801