

kazys

From: kazys
Sent: 21 January 2019 12:27
To: kazys
Subject: Stone Porosity
Attachments: Physical-Chemical Data - Torr 2018.pdf; Torr Type 3 Grading.pdf; 2-6 Torr Grading.pdf; 20-40 Torr Grading.pdf; 4-20 Washed Torr Grading.pdf

From: Elliott Curtis [REDACTED]
Sent: 16 January 2019 14:46
To: kazys [REDACTED]
Subject: Re: Stone Porosity

Hello Kazys,

Pleasure to speak to you yesterday.

Regarding the document you sent through 'Bardon Aggregates' was an old trading name that got bought out by Aggregate Industries a number of years ago so unfortunately I will be unable to produce a similar type of document as our software has moved on since then and our CE certificates no longer state Void specification limits.

I have attached the requested grading certificates covering the range of SuDS friendly materials we do as discussed.

Finally regarding how we calculate void content;

$\text{Compacted Bulk Density} \div \text{Oven Dry Relative Density} \times 100 = (\#)$
 $100 - (\#) = \text{Void Content}$

In the case of Torr this can be done on the range of materials requested.

Density / Void Figures

Type 3 - 1.75
 $1.75 \div 2.66 \times 100 = 66$
 $100 - 66 = 34$
Type 3 = 34% Voids

2/6 SS - 1.48
 $1.32 \div 2.66 \times 100 = 56$
 $100 - 56 = 44$
2/6 SS = 44% Voids

4/20 SS - 1.57
 $1.43 \div 2.66 \times 100 = 60$
 $100 - 60 = 40$
4/20 SS = 40% Voids

20/40 SS - 1.60
 $1.60 \div 2.66 \times 100 = 61$
 $100 - 61 = 39$
20/40 SS = 39% Voids

Kind Regards
Elliott Curtis
Technical Sales Support Manager

Aggregates/Asphalt South



AGGREGATE INDUSTRIES UK LIMITED

Please note that Aggregate Industries does not maintain Professional Indemnity Insurance for any asphalt pavement advice that it provides, therefore the content in this email is provided in good faith for information only, it is not intended to amount to advice upon which you should solely rely.
You must obtain additional professional or specialist advice before taking, or refraining from taking, any action on the basis of the content of this email.

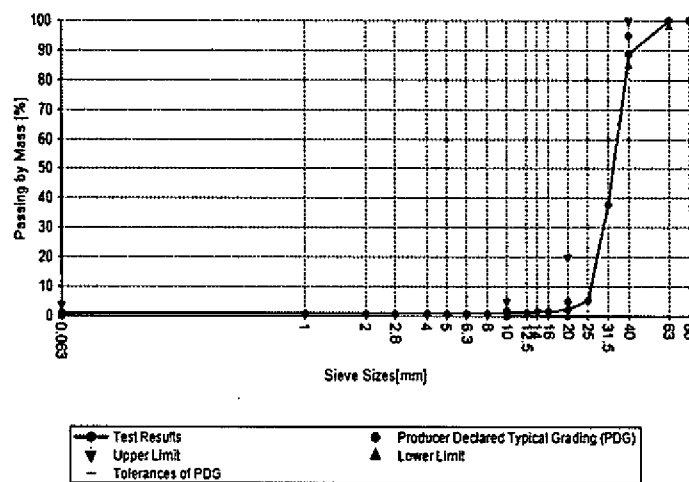
Aggregate - Estimation	
AGGREGATE CODE EN12620NNNN2040Gc8520Nf4NNNNNA/0000846	
Test order:	ICOA/0013717
Project No:	
Project designation:	
Initiator	
Project date:	14/01/2019
Producer Material:	Torr Quarry
	Aggregate Industries
	Torr Works
	East Cranmore
Designation (SIB):	20/40mm Single Size
Sample No:	SCOA/0013150
Material No:	A/0000846
Valid from:	15/01/2019

Requirements / Designation and description	
EN12620, .	
Source:	Torr Quarry
Type (see EN 832-3):	Limestone
Aggregate size (d/D):	20/40
	Aggregate Code No:
	(Sales cat):

Delivery / Sampling	
Sample No:	SCOA/0013150
Delivery date:	14/01/2019
Delivery time:	09:15
Sampling date:	14/01/2019
Sampling time:	08:30
Place of sampling:	Quarry
Sampling mass:	
Sampling point:	Stockpile
Sampler:	Operative
Address:	
Reason For Sampling:	Routine Testing

Aggregate - Estimation	Test order: tCOA/0013717
------------------------	--------------------------

EN 933-1 Particle Size Distribution, Sieving Method																			
Laboratory: Colemans AAL										Operator: Colin Cook					Date of Test: 15/01/2019				
Grading Coefficient(K):										Sum-D:									
Fineness Modulus:																			
Sieve [mm]	0.063	1	2	2.5	4	5	6.3	8	10	12.5	14	16	20	25	31.5	40	63	80	
D[%]	0.7	1	1	1	1	1	1	1	1	1	1	2	2	6	38	89	100	100	
D[%] PDG	1.0								2				5			95	100		
Cumulative percentages passing [%] [%]										Specified max value Gc85/20					Actual value Gc85/20				
Fines Content [%]										Specified max value f3					Actual value f1				



EN 1097-5: Water Content by drying in a ventilated oven			
Laboratory: Colemans AAL		Operator: Colin Cook	
Moist Test Portion: 100011 [g]		Dry Test Portion: 9951 [g]	
mass of water: 90060 [g]		Water Content: 905.0 [%]	
Water content by drying in a ventilated room		Specified max: Declared Value	
		Actual value 905.10	

Somerset, 16/01/2019

Richard Chapman
Aggregates/Asphalt ATM

Richard Chapman
Aggregates/Asphalt ATM

Aggregate - Estimation

AGGREGATE CODE	
EN12620NNNN2040Gc8520Nf4NNNNNA0000846	
Test order:	ICOA/0013717
Project No:	
Project designation:	
Initiator	
Project date:	14/01/2019
Producer Material:	Torr Quarry
	Aggregate Industries
	Torr Works
	East Cranmore
Designation (S/B):	20/40mm Single Size
Sample No:	SCOA/0013150
Material No:	A/0000846
Valid from:	15/01/2019

Requirements / Designation and description

EN12620, .	
Source:	Torr Quarry
Type (see EN 932-3):	Limestone
Aggregate size (d/D):	20/40
Aggregate Code No:	
(Sales call):	

Delivery / Sampling

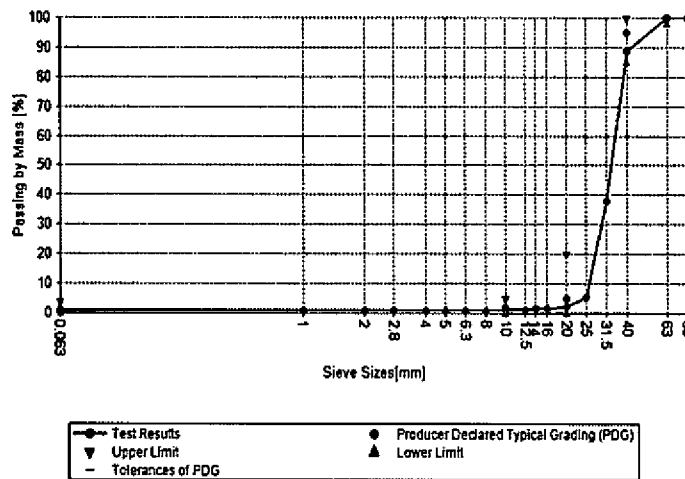
Sample No:	SCOA/0013150	Delivery ticket:	102649C
Delivery date:	14/01/2019	Delivery time:	09:15
Sampling date:	14/01/2019	Sampling time:	06:30
Place of sampling:	Quarry	Sampling mass:	
Sampling point:	Stockpile	Sampler:	Operative
Address:		Reason For Sampling:	Routine Testing

Aggregate - Estimation

Test order ICOA/0013717

EN 933-1 Particle Size Distribution, Sieving Method

Laboratory: Coleman AAL								Operator: Colin Cook								Date of Test: 15/01/2019			
Grading Coefficient(K):								Sum-D:								Fineness Modulus:			
Sieve mm	0.063	1	2	2.5	4	5	6.3	8	10	12.5	14	16	20	25	31.5	40	63	80	
D(%)	0.7	1	1	1	1	1	1	1	1	1	1	2	2	6	38	89	100	100	
D(%) PDG	1.0								2				5			95	100		
Cumulative percentages passing [%] [%]								Specified max value Gc85/20								Actual value Gc85/20			
Fines Content [%]								Specified max value f3								Actual value f1			



EN 1097-5: Water Content by drying in a ventilated oven

Laboratory: Coleman AAL	Operator: Colin Cook	Date of Test:	15/01/2019
Moist Test Portion:	100011 [g]	Dry Test Portion:	8951 [g]
mass of water:	90060 [g]	Water Content:	905.0 [%]
Water content by drying in a ventilated room	Specified max Declared Value	Actual value	905.10

Somerset, 16/01/2019

Richard Chapman
Aggregates/Asphalt ATM

Richard Chapman
Aggregates/Asphalt ATM

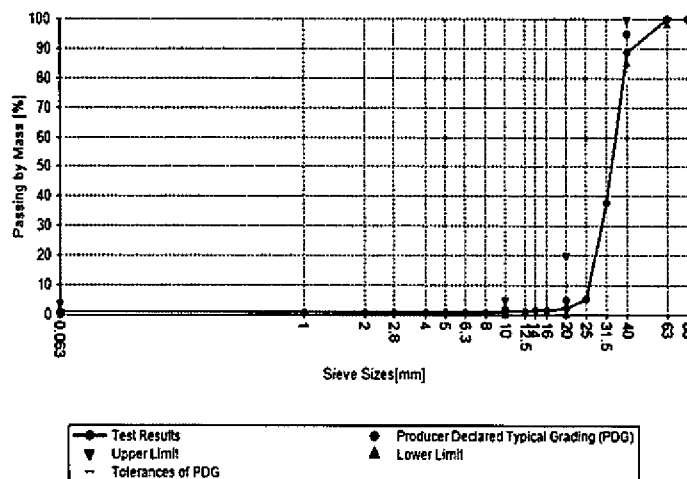
Aggregate - Estimation	
AGGREGATE CODE EN12620NNNN2040Gc8520Nf4NNNNA/0000846	
Test order:	tCOA/0013717
Project No:	
Project designation:	
Initiator	
Project date:	14/01/2019
Producer Material:	Torr Quarry Aggregate Industries Torr Works
Designation (SIS):	East Cranmore 20/40mm Single Size
Sample No:	SCOA/0013150
Material No:	A/0000846
Valid from:	16/01/2019

Requirements / Designation and description	
EN12620, .	
Source:	Torr Quarry
Type (see EN 932-3):	Limestone
Aggregate size (d/D):	20/40
Aggregate Code No:	
(Sales call):	

Delivery / Sampling	
Sample No:	SCOA/0013150
Delivery ticket:	102649C
Delivery date:	14/01/2019
Delivery time:	09:15
Sampling date:	14/01/2019
Sampling time:	06:30
Place of sampling:	Quarry
Sampling mass:	
Sampling point:	Stockpile
Sampler:	Operative
Address:	
Reason For Sampling:	Routine Testing

Aggregate - Estimation	Test order tCOA/0013717
------------------------	-------------------------

EN 933-1 Particle Size Distribution, Sieving Method	
Laboratory: Coleman AAL	Operator: Colin Cook
Grading Coefficient(K):	Date of Test: 15/01/2019
Sum-D:	Fineness Modulus:
Sieve mm	0.063 1 2 2.8 4 5 6.3 8 10 12.5 14 16 20 25 31.5 40 63 80
DPH	0.7 1 1 1 1 1 1 1 1 1 1 2 2 8 38 80 100 100
DPH PDG	1.0 2 5 95 100
Cumulative percentages passing [%] [%]	Specified max value Gc85/20 Actual value Gc85/20
Fines Content [%]	Specified max value f3 Actual value f1



EN 1097-5: Water Content by drying in a ventilated oven			
Laboratory: Coleman AAL	Operator: Colin Cook	Date of Test: 15/01/2019	
Moist Test Portion:	100011 [g]	Dry Test Portion:	8951 [g]
mass of water:	90060 [g]	Water Content:	905.0 [%]
Water content by drying in a ventilated room	Specified max Declared Value	Actual value	905.10

Somerset, 16/01/2019

Richard Chapman
Aggregates/Asphalt ATM

Richard Chapman
Aggregates/Asphalt ATM

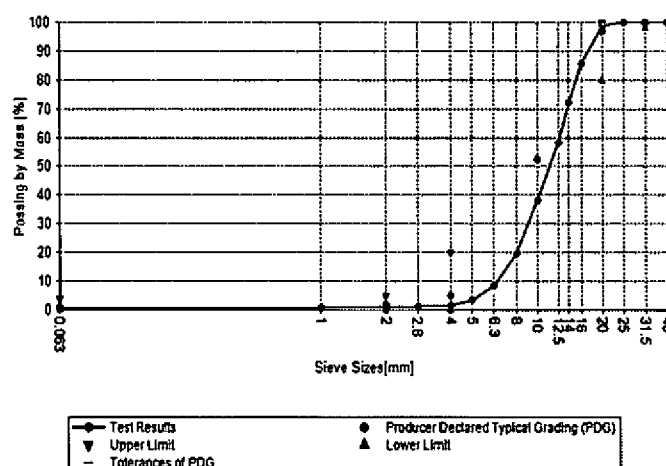
Aggregate - Estimation	
AGGREGATE CODE SHW503PipeBedNNGraded420Gc8020Nf4NA/0000004	
Test order:	ICOA/0013254
Project No:	
Project designation:	
Initiator	
Project date:	07/01/2019
Producer Material:	Torr Quarry Aggregate Industries Torr Works
Designation (SIB):	4/20mm Washed
Sample No:	SCOA/0012744
Material No:	A/0000004
Valid from:	16/01/2019

Requirements / Designation and description	
SHW, 503 P.B.	
Source:	Torr Quarry
Type (see EN 933-3):	Limestone
Aggregate size (d/D):	4/20
Aggregate Code No:	
(Sales cat):	

Delivery / Sampling	
Sample No:	SCOA/0012744
Delivery ticket:	102589C
Delivery date:	07/01/2019
Delivery time:	09:00
Sampling date:	07/01/2019
Sampling time:	08:05
Place of sampling:	Quarry
Sampling mass:	
Sampling point:	Belt
Sampler:	Tim Curtis
Address:	
Reason For Sampling:	Routine Testing

Aggregate - Estimation	Test order
	ICOA/0013254

EN 933-1 Particle Size Distribution, Sieving Method																																																				
Laboratory: Colemans AAL	Operator: Keira-Leigh Underhill																																																			
Grading Coefficient(K):	Sum-D:																																																			
Date of Test:	08/01/2019																																																			
Fineness Modulus:																																																				
<table border="1"> <thead> <tr> <th>Sieve size (mm)</th> <th>0.063</th> <th>1</th> <th>2</th> <th>2.5</th> <th>4</th> <th>5</th> <th>6.3</th> <th>8</th> <th>10</th> <th>12.5</th> <th>14</th> <th>16</th> <th>20</th> <th>25</th> <th>31.5</th> <th>40</th> </tr> </thead> <tbody> <tr> <td>OP%</td> <td>0.5</td> <td>1</td> <td>1</td> <td>1</td> <td>2</td> <td>4</td> <td>9</td> <td>20</td> <td>38</td> <td>56</td> <td>72</td> <td>86</td> <td>99</td> <td>100</td> <td>100</td> <td>100</td> </tr> <tr> <td>OP% PDG</td> <td>1.0</td> <td>2</td> <td></td> <td></td> <td>5</td> <td></td> <td></td> <td>53</td> <td></td> <td></td> <td></td> <td></td> <td>97</td> <td></td> <td>100</td> <td></td> </tr> </tbody> </table>	Sieve size (mm)	0.063	1	2	2.5	4	5	6.3	8	10	12.5	14	16	20	25	31.5	40	OP%	0.5	1	1	1	2	4	9	20	38	56	72	86	99	100	100	100	OP% PDG	1.0	2			5			53					97		100		
Sieve size (mm)	0.063	1	2	2.5	4	5	6.3	8	10	12.5	14	16	20	25	31.5	40																																				
OP%	0.5	1	1	1	2	4	9	20	38	56	72	86	99	100	100	100																																				
OP% PDG	1.0	2			5			53					97		100																																					
Cumulative percentages passing [%] (%)	Specified max G 80/20 value																																																			
Actual value	G 80/20																																																			
Fines Content (%)	Specified max 14 value																																																			
Actual value	11																																																			



EN 1097-5: Water Content by drying in a ventilated oven			
Laboratory: Colemans AAL	Operator: Keira-Leigh Underhill	Date of Test:	08/01/2019
Moist Test Portion:	2085 [g]	Dry Test Portion:	2046 [g]
mass of water:	40 [g]	Water Content:	1.9 [%]
Water content by drying in a ventilated room	Specified max Declared Value	Actual value	1.90

Somerset, 16/01/2019

Richard Chapman
Aggregates/Asphalt ATM

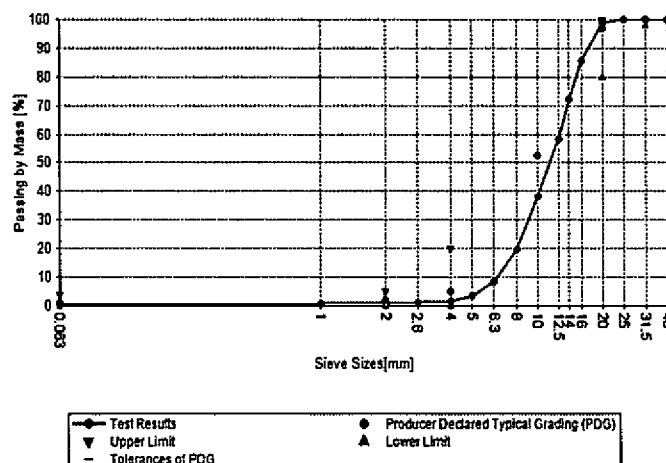
Richard Chapman
Aggregates/Asphalt ATM

Aggregate - Estimation	
AGGREGATE CODE SHW503PipeBedNNGraded420Gc8020N#4NA/0000004	
Test order:	ICOA/0013254
Project No:	
Project designation:	
Initiator	
Project date:	07/01/2019
Producer Material:	Torr Quarry Aggregate Industries Torr Works
Designation (SIB):	East Cranmore
Sample No:	4/20mm Washed
Material No:	SCOA/0012744
Valid from:	A/0000004
	16/01/2019

Requirements / Designation and description	
SHW, 503 PB.	
Source:	Torr Quarry
Type (see EN 932-3):	Limestone
Aggregate size (d/D):	4/20
Aggregate Code No:	
(Sales cat):	

Delivery / Sampling	
Sample No:	SCOA/0012744
Delivery ticket:	102589C
Delivery date:	07/01/2019
Delivery time:	09:00
Sampling date:	07/01/2019
Sampling time:	08:05
Place of sampling:	Quarry
Sampling mass:	
Sampling point:	Belt
Sampler:	Tim Curtis
Address:	
Reason For Sampling:	Routine Testing

Aggregate - Estimation		Test order ICOA/0013254	
EN 933-1 Particle Size Distribution, Sieving Method			
Laboratory: Colemans AAL	Operator: Keith-Leigh Underhill	Date of Test: 08/01/2019	
Grading Coefficient(K):	Sum-D:	Fineness Modulus:	
Sieve mm	0.063 1 2 2.5 4 5 6.3 8 10 12.5 14 16 20 25 31.5 40		
D(%)	0.5 1 1 1 2 4 9 20 38 58 72 88 99 100 100 100		
D(%) PDG	1.0 2 3 5 9 15 25 38 58 72 88 99 100 100 100		
Cumulative percentages passing [%] (%)	Specified max G 80/20 value	Actual value G 80/20	
Fines Content (%)	Specified max f4 value	Actual value f1	



EN 1097-5: Water Content by drying in a ventilated oven			
Laboratory: Colemans AAL	Operator: Keith-Leigh Underhill	Date of Test: 08/01/2019	
Moist Test Portion:	2085 [g]	Dry Test Portion:	2046 [g]
mass of water:	40 [g]	Water Content:	1.9 [%]
Water content by drying in a ventilated room	Specified max Declared Value	Actual value	1.90

Somerset, 16/01/2019

Richard Chapman
Aggregates/Asphalt ATM

Richard Chapman
Aggregates/Asphalt ATM

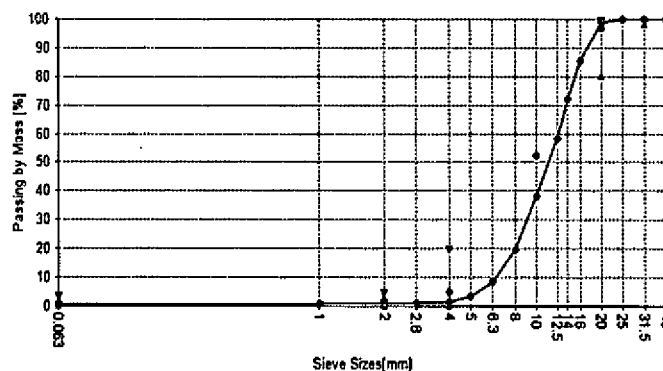
Aggregate - Estimation	
AGGREGATE CODE SHW503PipeBedNNGraded420Gc8020Nf4NA/0000004	
Test order:	tCOA/0013254
Project No:	
Project designation:	
Initiator	
Project date:	07/01/2019
Producer Material:	Torr Quarry
	Aggregate Industries
	Torr Works
	East Cranmore
Designation (SIB):	4/20mm Washed
Sample No:	SCOA/0012744
Material No:	A/0000004
Valid from:	16/01/2019

Requirements / Designation and description	
SHW, 503 P B,	
Source:	Torr Quarry
Type (see EN 932-3):	Limestone
Aggregate size (d/D):	4/20
Aggregate Code No:	
(Sales call):	

Delivery / Sampling	
Sample No:	SCOA/0012744
Delivery ticket:	102599C
Delivery date:	07/01/2019
Delivery time:	09:00
Sampling date:	07/01/2019
Sampling time:	08:05
Place of sampling:	Quarry
Sampling mass:	
Sampling point:	Belt
Sampler:	Tim Curtis
Address:	
Reason For Sampling:	Routine Testing

Aggregate - Estimation	Test order tCOA/0013254
------------------------	-------------------------

EN 933-1 Particle Size Distribution, Sieving Method	
Laboratory: Colemans AAL	Operator: Keira-Leigh Underhill
Grading Coefficient(K):	Sum-D:
Fineness Modulus:	Date of Test: 08/01/2019
Blot (mm)	0.063 1 2 2.5 4 5 6.3 8 10 12.5 14 16 20 25 31.5 40
OP%	0.5 1 1 1 2 4 9 20 30 56 72 86 93 100 100 100
OP% PDG	1.0 2 6 33 97 100
Cumulative percentages passing [%] (%)	Specified max G 80/20 value
	Actual value G 80/20
Fines Content [%]	Specified max f4 value
	Actual value f1



EN 1097-5: Water Content by drying in a ventilated oven			
Laboratory: Colemans AAL	Operator: Keira-Leigh Underhill	Date of Test: 08/01/2019	
Moist Test Portion:	2085 [g]	Dry Test Portion:	2046 [g]
mass of water:	40 [g]	Water Content:	1.9 [%]
Water content by drying in a ventilated room	Specified max Declared Value	Actual value	1.90

Somerset, 16/01/2019

Richard Chapman
Aggregates/Asphalt ATM

Richard Chapman
Aggregates/Asphalt ATM

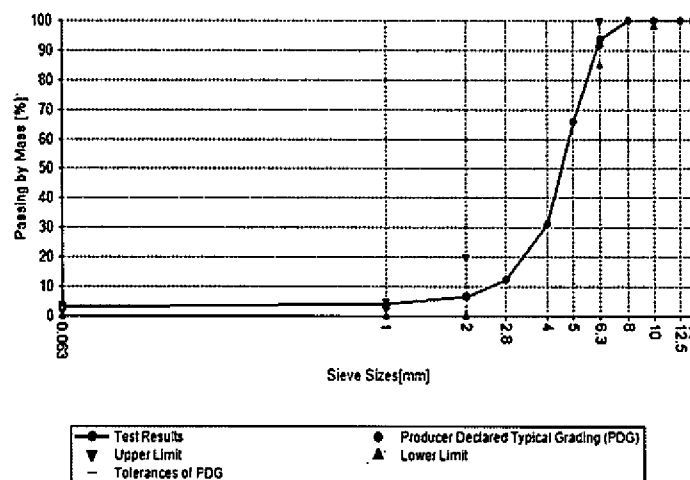
Aggregate - Estimation	
AGGREGATE CODE EN12620NNNN26.3Gc8520N4NNNNNA0000841	
Test order:	ICOA/0013703
Project No:	
Project designation:	
Initiator	
Project date:	14/01/2019
Producer Material:	Torr Quarry Aggregate Industries Torr Works
Designation (SIB):	East Cranmore 2/6mm Single Size
Sample No:	SCOA/0013136
Material No:	A/0000841
Valid from:	16/01/2019

Requirements / Designation and description	
EN12620, .	
Source:	Torr Quarry
Type (see EN 932-3):	Limestone
Aggregate size (d/D):	2/6
Aggregate Code No:	
(Sales cat):	

Delivery / Sampling	
Sample No:	SCOA/0013136
Delivery ticket:	102644C
Delivery date:	14/01/2019
Delivery time:	09:15
Sampling date:	14/01/2019
Sampling time:	06:05
Place of sampling:	Quarry
Sampling mass:	
Sampling point:	Stockpile
Sampler:	Operative
Address:	
Reason For Sampling:	Routine Testing

Aggregate - Estimation	Test order ICOA/0013703
------------------------	-------------------------

EN 933-1 Particle Size Distribution, Sieving Method											
Laboratory: Colemans AAL						Operator: Colin Cook			Date of Test: 15/01/2019		
Grading Coefficient(K):						Sum-D:			Fineness Modulus:		
Sieve mm	0.075	1	2	2.5	4	5	6.3	8	10	12.5	14
D(%)	3.0	4	6	12	31	66	94	100	100	100	100
D(%) PDG	2.5	3	7				92		100		
Cumulative percentages passing [%] (%)						Specified max value			Actual value		
Fines Content [%]						Specified max value			Actual value		



EN 1097-5: Water Content by drying in a ventilated oven			
Laboratory: Colemans AAL		Operator: Colin Cook	
Moist Test Portion: 709 [g]		Dry Test Portion: 703 [g]	
mass of water: 6 [g]		Water Content: 0.9 [%]	
Water content by drying in a ventilated room		Specified max Declared Value	
		Actual value 0.80	

Somerset, 16/01/2019

Richard Chapman
Aggregates/Asphalt ATM

Richard Chapman
Aggregates/Asphalt ATM

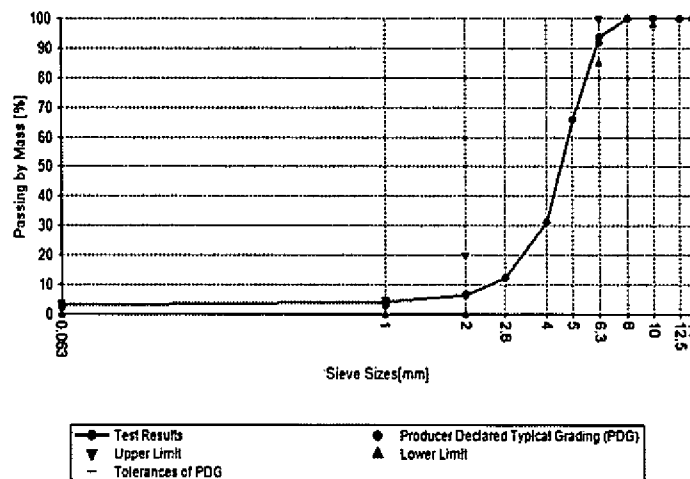
Aggregate - Estimation	
AGGREGATE CODE EN12620NNNN26.3Gc8520N4NNNNA/0000841	
Test order:	ICOA/0013703
Project No:	
Project designation:	
Initiator	
Project date:	14/01/2019
Producer Material:	Torr Quarry Aggregate Industries Torr Works
Designation (SIB):	East Cranmore 2/6mm Single Size
Sample No:	SCOA/0013136
Material No:	A/0000841
Valid from:	16/01/2019

Requirements / Designation and description	
EN12620, ,	
Source:	Torr Quarry
Type (see EN 932-3):	Uimestone
Aggregate size (d/D):	2/6
Aggregate Code No:	
(Sales cat):	

Delivery / Sampling	
Sample No:	SCOA/0013136
Delivery ticket:	102644C
Delivery date:	14/01/2019
Delivery time:	09:15
Sampling date:	14/01/2019
Sampling time:	09:05
Place of sampling:	Quarry
Sampling mass:	
Sampling point:	Stockpile
Sampler:	Operative
Address:	
Reason For Sampling:	Routine Testing

Aggregate - Estimation	Test order ICOA/0013703
------------------------	-------------------------

EN 933-1 Particle Size Distribution, Sieving Method												
Laboratory: Colemans AAL						Operator: Colin Cook			Date of Test: 15/01/2019			
Grading Coefficient(K):						Sum-D:			Fineness Modulus:			
Sieve mm]	0.063	1	2	2.5	4	5	6.3	8	10	12.5	14	
D[%]	3.0	4	8	12	31	66	94	100	100	100	100	
D[%] PDG	2.5	3	7				32		100			
Cumulative percentages passing [%] [%]								Specified max value		Gc80/20		Actual value
Fines Content [%]								Specified max value		f3		Actual value
								Specified max value				



EN 1097-5: Water Content by drying in a ventilated oven			
Laboratory: Colemans AAL		Operator: Colin Cook	
Moist Test Portion: 709 [g]		Date of Test: 15/01/2019	
mass of water: 6 [g]		Dry Test Portion: 703 [g]	
Water content by drying in a ventilated room		Water Content: 0.9 [%]	
Specified max Declared Value		Actual value 0.80	

Somerset, 16/01/2019

Richard Chapman
Aggregates/Asphalt ATM

Richard Chapman
Aggregates/Asphalt ATM

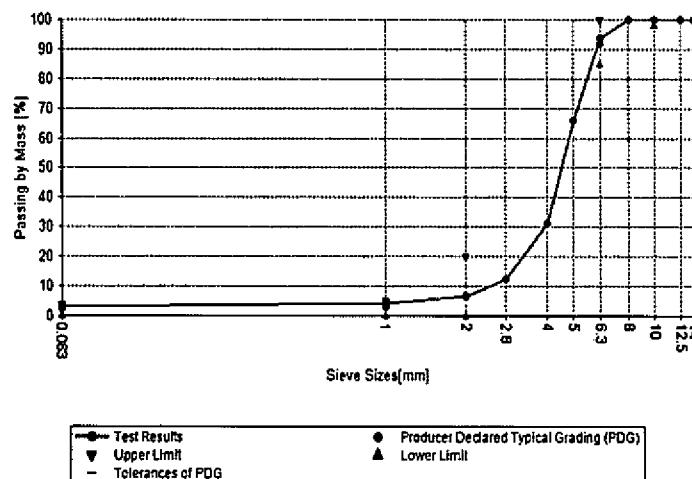
Aggregate - Estimation	
AGGREGATE CODE EN12620NNNN26.3Gc8520N4NNNNA/0000841	
Test order:	tCOA/0013703
Project No:	
Project designation:	
Initiator:	
Project date:	14/01/2019
Producer Material:	Torr Quarry Aggregate Industries Torr Works
Designation (SIB):	East Cranmore 2/8mm Single Size
Sample No:	SCOA/0013136
Material No:	A/0000841
Valid from:	16/01/2019

Requirements / Designation and description	
EN12620, .	
Source:	Torr Quarry
Type (see EN 932-3):	Limestone
Aggregate size (d/D):	2/8
Aggregate Code No:	
(Sales cat):	

Delivery / Sampling	
Sample No:	SCOA/0013136
Delivery ticket:	102644C
Delivery date:	14/01/2019
Delivery time:	09:15
Sampling date:	14/01/2019
Sampling time:	08:05
Place of sampling:	Quarry
Sampling mass:	
Sampling point:	Stockpile
Sampler:	Operative
Address:	
Reason For Sampling:	Routine Testing

Aggregate - Estimation	Test order tCOA/0013703
------------------------	-------------------------

EN 933-1 Particle Size Distribution, Sieving Method																																					
Laboratory: Colemans AAL	Operator: Colin Cook																																				
Grading Coefficient(K):	Date of Test: 15/01/2019																																				
Sum-D:	Fineness Modulus:																																				
<table border="1"> <thead> <tr> <th>Sieve (mm)</th> <th>0.063</th> <th>1</th> <th>2</th> <th>2.5</th> <th>4</th> <th>5</th> <th>6.3</th> <th>8</th> <th>10</th> <th>12.5</th> <th>14</th> </tr> </thead> <tbody> <tr> <td>Df(%)</td> <td>3.0</td> <td>4</td> <td>6</td> <td>12</td> <td>31</td> <td>66</td> <td>94</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> </tr> <tr> <td>Df(%) PDG</td> <td>2.5</td> <td>3</td> <td>7</td> <td></td> <td></td> <td></td> <td>92</td> <td></td> <td>100</td> <td></td> <td></td> </tr> </tbody> </table>	Sieve (mm)	0.063	1	2	2.5	4	5	6.3	8	10	12.5	14	Df(%)	3.0	4	6	12	31	66	94	100	100	100	100	Df(%) PDG	2.5	3	7				92		100			
Sieve (mm)	0.063	1	2	2.5	4	5	6.3	8	10	12.5	14																										
Df(%)	3.0	4	6	12	31	66	94	100	100	100	100																										
Df(%) PDG	2.5	3	7				92		100																												
Cumulative percentages passing [%] [%]	Specified max value Gc80/20																																				
Fines Content [%]	Specified max value f3																																				
	Actual value Gc80/20																																				
	Actual value f3																																				



EN 1097-5: Water Content by drying in a ventilated oven			
Laboratory: Colemans AAL	Operator: Colin Cook	Date of Test: 15/01/2019	
Moist Test Portion:	709 [g]	Dry Test Portion:	703 [g]
mass of water:	6 [g]	Water Content:	0.8 [%]
Water content by drying in a ventilated room	Specified max Declared Value	Actual value	0.80

Somerset, 16/01/2019

Richard Chapman
Aggregates/Asphalt ATM

Richard Chapman
Aggregates/Asphalt ATM

Aggregate - Estimation

AGGREGATE CODE	
SHW805Type3NNN040C80GoUF5C903A/0000860	
Test order:	ICOA/0013377
Project No:	
Project designation:	
Initiator	
Project date:	09/01/2019
Producer Material:	Torr Quarry Aggregate Industries Torr Works
Designation (SIB):	East Cranmore Type 3
Sample No:	SCOA/0012854
Material No:	A/0000860
Valid from:	14/01/2019

Requirements / Designation and description

SHW, 805 T 3,	
Source:	Torr Quarry
Type (see EN 932-3):	Limestone
Aggregate size (d/D):	0/40
Aggregate Code No: (Sales cat):	

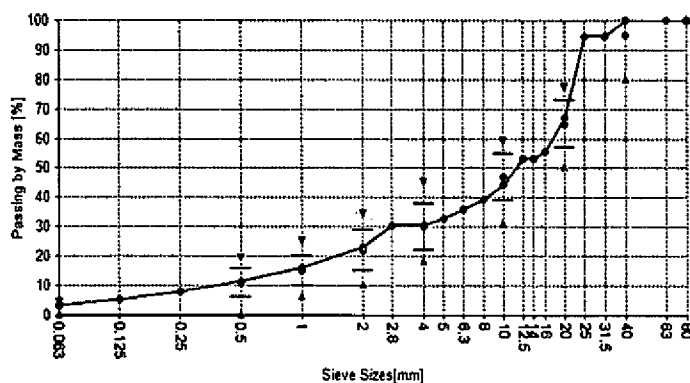
Delivery / Sampling

Sample No:	SCOA/0012854	Delivery ticket:	102623C
Delivery date:	08/01/2019	Delivery time:	09:00
Sampling date:	08/01/2019	Sampling time:	08:20
Place of sampling:	Quarry	Sampling mass:	
Sampling point:	Stockpile	Sampler:	Tim Curtis
Address:		Reason For Sampling:	Routine Testing

Aggregate - Estimation	Test order ICOA/0013377
------------------------	-------------------------

EN 933-1 Particle Size Distribution, Sieving Method

Laboratory: Colemans AAL								Operator: Keira-Leigh Underhill								Date of Test: 09/01/2019							
Grading Coefficient(K): 5.21								Sum-D: 379.40								Fineness Modulus: 5.05							
Sieve	0.063	0.125	0.25	0.5	1	2	2.8	4	5	6.3	8	10	12.5	14	16	20	25	31.5	40	63			
D(%)	3.3	6	8	12	16	23	31	31	33	36	40	45	53	53	56	67	94	94	100	100			
D(%) PDG	3.0				11	15	22					47					65			95			
Cumulative percentages passing [%] (%)								Specified max value G								Actual value G							
Fines Content [%]								Specified max value UF5								Actual value UF5							



● Test Results	● Producer Declared Typical Grading (PDG)
▼ Upper Limit	▲ Lower Limit
- Tolerances of PDG	

EN 1097-5: Water Content by drying in a ventilated oven

Laboratory: Colemans AAL	Operator: Keira-Leigh Underhill	Date of Test:	09/01/2019
Moist Test Portion:	8922 [g]	Dry Test Portion:	8545 [g]
mass of water:	377 [g]	Water Content:	4.4 [%]
Water content by drying in a ventilated room	Specified	Declared Value	Actual value 4.40

Somerset, 14/01/2019

Richard Chapman
Aggregates/Asphalt ATM

Richard Chapman
Aggregates/Asphalt ATM

Aggregate - Estimation

AGGREGATE CODE

SHW805Type3NNN040QC80GoUF5C903A/0000860

Test order: ICOA/0013377

Project No:

Project designation:

Initiator

Project date: 09/01/2019

Producer Material: Torr Quarry
Aggregate Industries
Torr Works

Designation (SIB): East Cranmore

Sample No: Type 3

Material No: SCOA/0012854

Valid from: A/0000860

14/01/2019

Requirements / Designation and description

SHW, 805 T 3,

Source: Torr Quarry

Type (see EN 933-3): Limestone

Aggregate size (d/D): 0/40

Aggregate Code No:

(Sales cal):

Delivery / Sampling

Sample No: SCOA/0012854

Delivery ticket: 102623C

Delivery date: 09/01/2019

Delivery time: 09:00

Sampling date: 08/01/2019

Sampling time: 08:20

Place of sampling: Quarry

Sampling mass:

Sampling point: Stockpile

Sampler:

Tim Curtis

Address:

Reason For Sampling:

Routine Testing

Aggregate - Estimation

Test order ICOA/0013377

EN 933-1 Particle Size Distribution, Sieving Method

Laboratory: Colemans AAL

Operator: Keira-Leigh Underhill

Date of Test: 09/01/2019

Grading Coefficient(K): 5.21

Sum-D: 379.40

Fineness Modulus: 5.05

Sieve mm	0.063	0.125	0.25	0.5	1	2	2.8	4	5	6.3	8	10	12.5	14	16	20	25	31.5	40	53
D(%)	3.3	5	8	12	16	23	31	31	33	36	40	45	53	58	67	84	94	100	100	100
D(%) PDG	3.0			11	15	22		30				47				65			95	

Cumulative percentages passing (%) [%]

Specified max value

G

Actual value

G

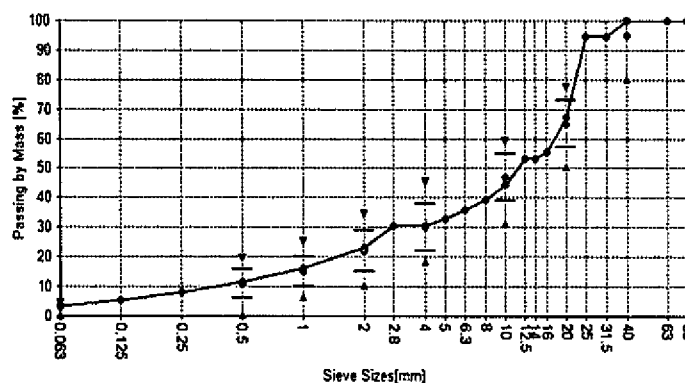
Fines Content (%)

Specified max value

UF5

Actual value

UF5



● Test Results	● Producer Declared Typical Grading (PDG)
▼ Upper Limit	▲ Lower Limit
— Tolerances of PDG	

EN 1097-5: Water Content by drying in a ventilated oven

Laboratory: Colemans AAL

Operator: Keira-Leigh Underhill

Date of Test: 09/01/2019

Moist Test Portion: 8922 [g]

Dry Test Portion: 6545 [g]

mass of water: 377 [g]

Water Content: 4.4 [%]

Water content by drying in a ventilated room

Specified

Declared Value

Actual value 4.40

Somerset, 14/01/2019

Richard Chapman
Aggregates/Asphalt ATM

Richard Chapman
Aggregates/Asphalt ATM

Aggregate - Estimation

AGGREGATE CODE	
SHW805Type3NNNN040QC80GoUF5C903A/0000860	
Test order:	tCOA/0013377
Project No:	
Project designation:	
Initiator	
Project date:	09/01/2019
Producer Material:	Torr Quarry Aggregate Industries Torr Works East Crenmore
Designation (SIB):	Type 3
Sample No:	SCOA/0012854
Material No:	A/0000860
Valid from:	14/01/2019

Requirements / Designation and description

SHW, 805 T 3,	
Source:	Torr Quarry
Type (see EN 932-3):	Limestone
Aggregate size (d/D):	0/40
Aggregate Code No:	
(Sales cat):	

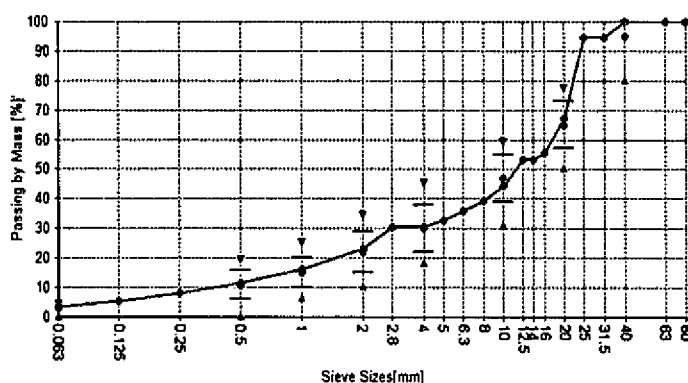
Delivery / Sampling

Sample No:	SCOA/0012854	Delivery ticket:	102623C
Delivery date:	08/01/2019	Delivery time:	09:00
Sampling date:	08/01/2019	Sampling time:	08:20
Place of sampling:	Quarry	Sampling mass:	
Sampling point:	Stockpile	Sampler:	Tim Curtis
Address:		Reason For Sampling:	Routine Testing

Aggregate - Estimation	Test order tCOA/0013377
------------------------	-------------------------

EN 933-1 Particle Size Distribution, Sieving Method

Laboratory: Colemans AAL							Operator: Keira-Leigh Underhill							Date of Test: 09/01/2019						
Grading Coefficient(K): 6.21							Sum-D: 379.40							Fineness Modulus: 6.05						
Sieve [mm]	0.063	0.125	0.25	0.5	1	2	2.8	4	5	6.3	8	10	12.5	14	16	20	25	31.5	40	63
D(%)	3.3	5	8	12	16	23	31	31	33	36	40	45	53	53	56	67	94	94	100	100
D(%) PDG	3.0			11	15	22		30				47				63			95	
Cumulative percentages passing [%] [%]							Specified max value G							Actual value G						
Fines Content [%]							Specified UF5							Actual value UF5						



● Test Results	● Producer Declared Typical Grading (PDG)
▼ Upper Limit	▲ Lower Limit
- Tolerances of PDG	

EN 1097-5: Water Content by drying in a ventilated oven

Laboratory: Colemans AAL		Operator: Keira-Leigh Underhill	Date of Test: 09/01/2019
Moist Test Portion:	8922 [g]	Dry Test Portion:	8545 [g]
mass of water:	377 [g]	Water Content:	4.4 [%]
Water content by drying in a ventilated room	Specified	Declared Value	Actual value 4.40

Somerset, 14/01/2019

Richard Chapman
Aggregates/Asphalt ATM

Richard Chapman
Aggregates/Asphalt ATM