



Method Statement of On Site Production of Aggregates from Waste

Nestle Factory, Nestles Road, Hayes, Middlesex, UB3 4QF

Client: Barratt West London
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Author: Thomas Kiddier
Checked By: Justin Ferigo



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AMENDMENT RECORD SHEET

The revision history of this document is summarised below:

Document Revision Number	Date of Revision	Author	Reason/Section/Subject	Page



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2 INTRODUCTION

Rye Group (RYE) has been contracted by Barratt West London (the Client) to undertake the demolition and enabling works at Nestle Factory, Nestles Road, Hayes, Middlesex, UB3 4QF (the Site). The works comprise:

- Demolition of the existing buildings, concrete foundations, and hardstanding
- Excavation of the previously backfilled demolition arisings
- Removing any obstructions found up to 2m below ground level
- Excavation through made ground and/or natural occurring sand and gravels to formation level
- Processing and stockpiling demolition arisings to form an engineered product that is within the Class 6 materials in the Specification for Highway Works Series 600.

Throughout these works a large amount of concrete arisings will be generated, it is therefore proposed that RYE will process all demolition arisings into suitable aggregates in line with Class 6F2 as per the Specification for Highway Works Series 600.

This method statement forms a production quality protocol to demonstrate the end of waste of site won concrete arisings and other potentially re-useable materials for the production of aggregate as per the WRAP Quality Protocol. It includes:

- Detail of the waste types to be processed and the evaluation procedure for the waste acceptance from on-site sources
- Detail of mechanical crushing and/or screening process to be employed in producing the desired class of material
- Material classification sampling requirements, testing parameters, and the frequency of compliance testing

Fundamentally, this document serves as a live register of the materials produced and as such the material classification and compliance testing certificates are to be regularly imported into the appropriate appendices of this document. Where certificates are to be issued to either the Client, their representatives, a regulator, or a proposed material receiver.



2.1 PREVIOUS SITE INVESTIGATIONS

Currently it is known that licenced and non-licensed asbestos is present on the Site. All asbestos containing materials (ACMs) will be removed prior to demolition in these areas.

It is believed that certain areas of the site may contain hydrocarbon contamination in the made ground.

3 AGGREGATE PRODUCTION AND TESTING

3.1 MATERIAL / WASTE TYPES

It is believed by RYE that the majority of the material / waste types on site that will be suitable for processing will include:

- 'Oversized' concrete, broken out from demolition of buildings and foundations
- Broken concrete, brick, and stone from demolition of buildings and foundations
- Concrete, slabs, asphalt, and kerbs from demolition and excavation of hardstanding and roadways
- Previously processed aggregates from underside of roadways, footpaths, drainage, etc. This may not require processing, however, some of this material may require further processing to ensure it meets relevant classification requirements
- Soil arisings from demolition and excavation works

Other materials may be present on site, which will be suitable for processing.

3.2 PROCESS / METHODOLOGY OF PRODUCTION

In order to effectively choose and process material on Site, the following methodology will be used:

- Inspection of the material prior to processing, by an experienced and competent operative, who will check for visual/olfactory signs of contamination, including hydrocarbons and ACMs. Should there be any signs of contamination the material will be segregated and quarantined so that it is not processed until it has been treated (bioremediated and/or picked for ACMs) and chemical validation testing has been carried out to prove the treatment has been successful. Currently no remediation is deemed to be necessary as part of the RYE processing works
- The material will be crushed and/or screened to target Class 6F2 grading and constituent requirements, as per the Specification for Highway Works Series 600



- Testing will be carried out in line with section 3.3 below
- The material(s) will then be allocated for re-use on site or for export from Site, depending on the Site requirements and material class.

3.3 VISUAL AND OLFACTORY SCREENING ANALYSIS

All visual asbestos and hydrocarbon screening has been carried out on the Site, and no visible asbestos or hydrocarbon contamination was present in pre-processed material.

3.4 SAMPLING AND ANALYSIS

Sampling is to be conducted by trained and suitably competent personnel, in appropriate sample containers and accompanied by a clear and detailed Chain of Custody as instruction to the analytical laboratory. All analysis is to be carried out by a UKAS accredited laboratory, utilising the test methods described in the Specification for Highway Works Series 600, as per the frequencies below. Other material types may be present on site that are suitable for selected engineered material, these will be tested as per the Specification for Highway Works Series 600.

Table 1.

Class	Description	Re-use	Analysis	Frequency
6F2	Selected Granular Material (Coarse Grading)	On-site (or taken off site as 6F5)	Grading (PSD)	1 per 1,000m ³
			Visual inspection for asbestos	1 per source
			Visual/olfactory inspection for hydrocarbons	1 per source

3.5 RECORD KEEPING

Records to be kept and uploaded on a regular basis in relation to this method statement include:

- Disposal register of any deleterious material picked including waste transfer notes/hazardous waste consignment notes
- Material grading certificates
- Optimum moisture content analysis (if required)
- Los Angeles coefficient testing (if required)



- Material constituent certificates (if required)
- Asbestos screening results
- TRL 447 results (if required)

3.6 STOCKPILE AND MATERIALS MANAGEMENT

All stockpiles will be formed with good housekeeping in mind, with heights kept at reasonable heights, and adequate signage put in place to identify stockpiles, when necessary. The stockpiles shall be located away from potential human and environmental receptors, and all pathways restricted.

Stockpiles shall be dampened down, where required, if dust is found to be produced from the stockpiled materials.

Stockpile records will be maintained throughout the works, this will show the source of the material, material type, volume, processing location, processing methodology, placement location of materials, and any analytical testing undertaken on each stockpile.

4 CONCLUSION

Upon completion of the verification and compliance testing and placement of the material, either on-site or off-site, the waste shall cease to be waste and shall be considered a material as per the classification. This is therefore evidence that the material has reached end of waste and has certainty of use for the intended on or off-site re-use requirements.



Appendix 1. STOCKPILE PLAN

1) TO BE CARRIED OUT

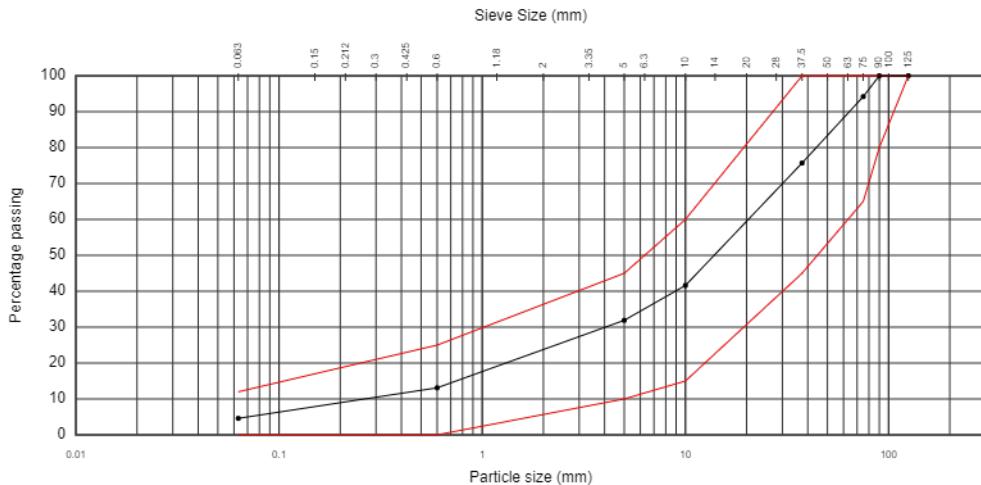


Appendix 2. MATERIAL TESTING RESULTS

- 1) 5NO GRADING (PSD TESTING)
- 2) ASBESTOS AND HYDROCARBON VISUAL/OLFACtORY SCREENING – IN SECTION 3.3



TEST REPORT:
DETERMINATION OF PARTICLE SIZE DISTRIBUTION
 BS 1377 - 2 : 1990, Method 9.2 Washing & Dry Sieving

REPORT NUMBER:
C1039551 / 90478.4.1.1
SAMPLE NUMBER:
146114
CLIENT:
Cognition Land & Water Ltd
CLIENT REF:
6F2 stockpile
ADDRESS:
Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ
DATE SAMPLED:
16/12/2019
SITE:
Former Nestle Factory, Hayes
SAMPLED BY:
Harry Dorling
SUPPLIER:
Site Won, Site Won
DATE RECEIVED:
17/12/2019
MATERIAL:
Fine material with aggregate blocks
DATE COMPLETED:
02/01/2020
CLASSIFICATION:
Class 6F2
TESTED BY:
MD, DG, AV, RH
LOCATION:
6F2 Stockpile
WITHIN ORIGINAL SPECIMEN:
N/A
PREPARATION METHOD:
BS 1377:Part 1:1990 clause 7.3 & 7.4.5
TYPE OF SAMPLE:
Disturbed
VARIATIONS:
No variations
RESULT


Class 6F2 - Specification for Highway Works (2016) Table 6/2 Earthworks Materials - Class 6F2

Uniformity Coefficient (D60/D10) N/A

Sample complies with the grading specification

Moisture content: 12.6%

SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
125	100	100 - 100
100	100	
90	100	80 - 100
75	94	65 - 100
63	88	
50	81	
37.5	76	45 - 100
28	69	
20	58	
14	51	
10	42	15 - 60
6.3	34	
5	32	10 - 45
3.35	26	
2	21	
1.18	17	
0.6	13	0 - 25
0.425	11	
0.3	9	
0.212	7	
0.15	6	
0.063	5	0 - 12

Remarks:

Remaining sample will be retained for a minimum of 28 days from date of report.

Test results reported relate only to the items tested.

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For and on behalf of CET

Dan Gay - Laboratory Supervisor

 Approved Signatory
 02-Jan-20


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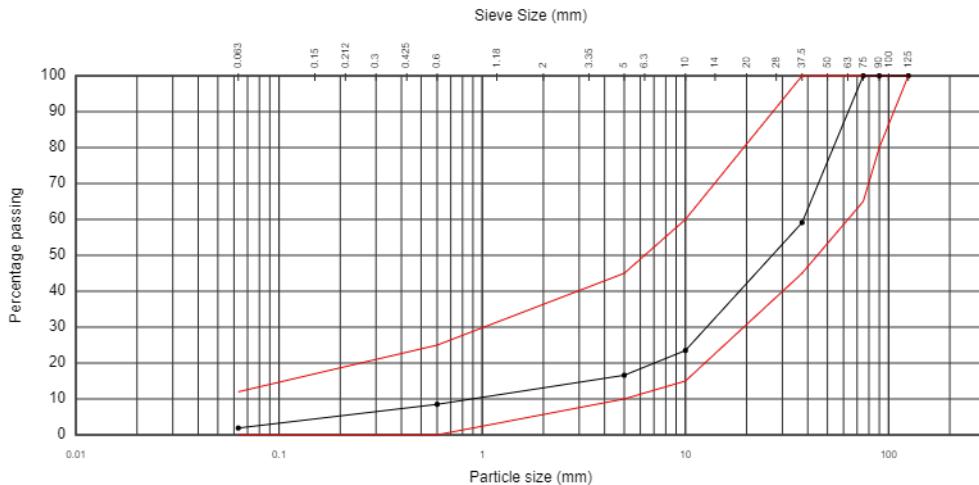
Report Format: L/Rep S6a/9

 Northdown House, Ashford Road
 Harrietsham, Nr Maidstone
 Kent ME17 1QW

 01332 817383
 enquiries@cet-testing.com
www.cet-testing.com

 CET Infrastructure is a trading name for Construction Testing Solutions Ltd.
 Registered in England No. 05998333

TEST REPORT:
DETERMINATION OF PARTICLE SIZE DISTRIBUTION
 BS 1377 - 2 : 1990, Method 9.2 Washing & Dry Sieving

REPORT NUMBER:
C1039551 / 90478.5.1.1
SAMPLE NUMBER:
146115
CLIENT:
Cognition Land & Water Ltd
CLIENT REF:
6F2 stockpile
ADDRESS:
Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ
DATE SAMPLED:
16/12/2019
SITE:
Former Nestle Factory, Hayes
SAMPLED BY:
Harry Dorling
SUPPLIER:
Site Won, Site Won
DATE RECEIVED:
17/12/2019
MATERIAL:
Fine material with aggregate blocks
DATE COMPLETED:
02/01/2020
CLASSIFICATION:
Class 6F2
TESTED BY:
DG, AV, RH, CG
LOCATION:
6F2 Stockpile
WITHIN ORIGINAL SPECIMEN:
N/A
PREPARATION METHOD:
BS 1377:Part 1:1990 clause 7.3 & 7.4.5
TYPE OF SAMPLE:
Disturbed
VARIATIONS:
No variations
RESULT


Class 6F2 - Specification for Highway Works (2016) Table 6/2 Earthworks Materials - Class 6F2

Uniformity Coefficient (D60/D10) N/A

Sample complies with the grading specification

Moisture content: 10.9%

SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
125	100	100 - 100
100	100	
90	100	80 - 100
75	100	65 - 100
63	91	
50	70	
37.5	59	45 - 100
28	49	
20	39	
14	30	
10	24	15 - 60
6.3	18	
5	17	10 - 45
3.35	14	
2	12	
1.18	11	
0.6	9	0 - 25
0.425	7	
0.3	5	
0.212	4	
0.15	3	
0.063	2	0 - 12

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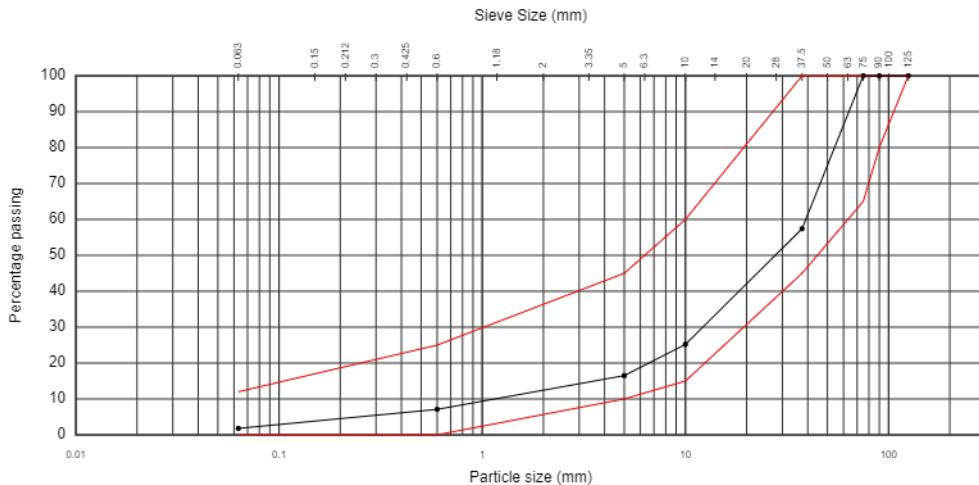
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TEST REPORT:
DETERMINATION OF PARTICLE SIZE DISTRIBUTION
 BS 1377 - 2 : 1990, Method 9.2 Washing & Dry Sieving

REPORT NUMBER:
C1039551 / 90478.6.1.1
SAMPLE NUMBER:
146116
CLIENT:
Cognition Land & Water Ltd
CLIENT REF:
6F2 stockpile
ADDRESS:
Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ
DATE SAMPLED:
16/12/2019
SITE:
Former Nestle Factory, Hayes
SAMPLED BY:
Harry Dorling
SUPPLIER:
Site Won, Site Won
DATE RECEIVED:
17/12/2019
MATERIAL:
Fine material with aggregate blocks
DATE COMPLETED:
02/01/2020
CLASSIFICATION:
Class 6F2
TESTED BY:
DG, AV, RH, CG
LOCATION:
6F2 Stockpile
WITHIN ORIGINAL SPECIMEN:
N/A
PREPARATION METHOD:
BS 1377:Part 1:1990 clause 7.3 & 7.4.5
TYPE OF SAMPLE:
Disturbed
VARIATIONS:
No variations
RESULT


Class 6F2 - Specification for Highway Works (2016) Table 6/2 Earthworks Materials - Class 6F2

Uniformity Coefficient (D60/D10) N/A

Sample complies with the grading specification

Moisture content: 11.5%

SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
125	100	100 - 100
100	100	
90	100	80 - 100
75	100	65 - 100
63	88	
50	69	
37.5	57	45 - 100
28	50	
20	45	
14	33	
10	25	15 - 60
6.3	19	
5	17	10 - 45
3.35	13	
2	11	
1.18	9	
0.6	7	0 - 25
0.425	5	
0.3	4	
0.212	3	
0.15	3	
0.063	2	0 - 12

Remarks:

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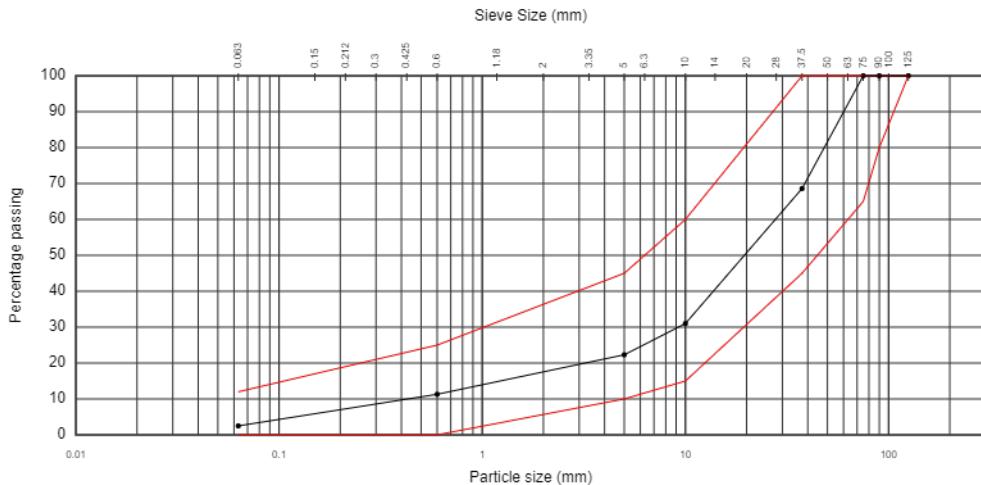
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TEST REPORT:
DETERMINATION OF PARTICLE SIZE DISTRIBUTION
 BS 1377 - 2 : 1990, Method 9.2 Washing & Dry Sieving

REPORT NUMBER:
C1039551 / 90478.7.1.1
SAMPLE NUMBER:
146117
CLIENT:
Cognition Land & Water Ltd
CLIENT REF:
6F2 stockpile
ADDRESS:
Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ
DATE SAMPLED:
16/12/2019
SITE:
Former Nestle Factory, Hayes
SAMPLED BY:
Harry Dorling
SUPPLIER:
Site Won, Site Won
DATE RECEIVED:
17/12/2019
MATERIAL:
Fine material with aggregate blocks
DATE COMPLETED:
02/01/2020
CLASSIFICATION:
Class 6F2
TESTED BY:
DG, AV, RH, CG
LOCATION:
6F2 Stockpile
WITHIN ORIGINAL SPECIMEN:
N/A
PREPARATION METHOD:
BS 1377:Part 1:1990 clause 7.3 & 7.4.5
TYPE OF SAMPLE:
Disturbed
VARIATIONS:
No variations
RESULT


Class 6F2 - Specification for Highway Works (2016) Table 6/2 Earthworks Materials - Class 6F2

Uniformity Coefficient (D60/D10) N/A

Sample complies with the grading specification

Moisture content: 12.1%

SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
125	100	100 - 100
100	100	
90	100	80 - 100
75	100	65 - 100
63	92	
50	79	
37.5	69	45 - 100
28	60	
20	51	
14	40	
10	31	15 - 60
6.3	24	
5	22	10 - 45
3.35	19	
2	17	
1.18	14	
0.6	11	0 - 25
0.425	9	
0.3	7	
0.212	6	
0.15	4	
0.063	3	0 - 12

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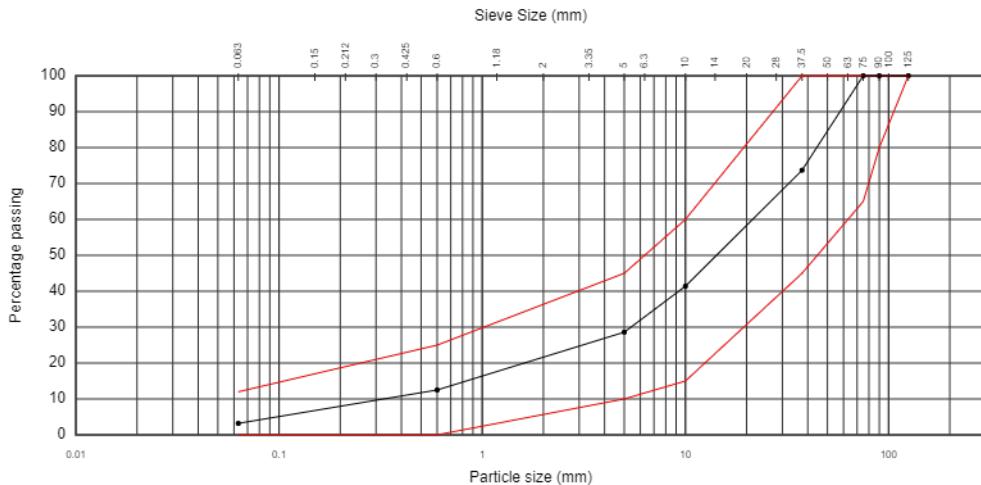
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TEST REPORT:
DETERMINATION OF PARTICLE SIZE DISTRIBUTION
 BS 1377 - 2 : 1990, Method 9.2 Washing & Dry Sieving

REPORT NUMBER:
C1039551 / 90657.1.1.1
SAMPLE NUMBER:
146113
CLIENT:
Cognition Land & Water Ltd
CLIENT REF:
6F2 stockpile
ADDRESS:
Springfield House, Oatlands Drive, Weybridge, Surrey, KT13 9LZ
DATE SAMPLED:
16/12/2019
SITE:
Former Nestle Factory, Hayes
SAMPLED BY:
Harry Dorling
SUPPLIER:
Site Won, Site Won
DATE RECEIVED:
17/12/2019
MATERIAL:
Fine material with aggregate blocks
DATE COMPLETED:
02/01/2020
CLASSIFICATION:
Class 6F2
TESTED BY:
DG, AV, RH, CG
LOCATION:
6F2 Stockpile
WITHIN ORIGINAL SPECIMEN:
N/A
PREPARATION METHOD:
BS 1377:Part 1:1990 clause 7.3 & 7.4.5
TYPE OF SAMPLE:
Disturbed
VARIATIONS:
No variations
RESULT


Class 6F2 - Specification for Highway Works (2016) Table 6/2 Earthworks Materials - Class 6F2

Uniformity Coefficient (D60/D10) N/A

Sample complies with the grading specification

Moisture content: 12.4%

SIEVE ANALYSIS

Particle Diameter mm	Passing %	Specification Limits
125	100	100 - 100
100	100	
90	100	80 - 100
75	100	65 - 100
63	92	
50	79	
37.5	74	45 - 100
28	68	
20	61	
14	51	
10	41	15 - 60
6.3	32	
5	29	10 - 45
3.35	24	
2	19	
1.18	16	
0.6	13	0 - 25
0.425	10	
0.3	8	
0.212	6	
0.15	5	
0.063	3	0 - 12

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