



**QUALITY CONTROL
STABILISING INFILL**

ISS30 DRIED SILICA INFILL SAND

CLIENT	Irwins Quality Aggregates Ltd
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CLIENT CONTACT	Alastair Harrison (Sales Director)

REPORT NUMBER	LSUK.21-0237-A1	
REPORT STATUS	Final	
REVISION NUMBER & DATE	1.0	16/04/2021
REPORTED BY		David Rigby Technical Director
APPROVED BY		Professor David James Managing Director

SUMMARY OF REPORT / FINDINGS	<p>A series of quality control tests have been carried out on test specimen(s) of stabilising infill used in the sports and play sector.</p> <p>The test specimen(s) submitted were tested under laboratory conditions to the requirements of the specified standards on the 16/04/2021.</p>
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SCOPE OF TESTING / PROJECT	<p>Loose bulk density was calculated by weighing a dry mass of aggregate(s) that filled a specified container.</p> <p>Particle size distribution was calculated by dividing and separating the aggregate(s) into several particle size classifications of decreasing sizes by means of a series of sieves. The mass of the particles retained on the various sieves is related to the initial mass of the material. The cumulative percentages passing each sieve are reported in numerical form and graphical form.</p> <p>The granules of unbound aggregate(s) were visually assessed using a microscope and classified for particle shape using a classification chart (see appendix).</p>
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TEST PROCEDURE / STANDARDS	<p>EN 1097-3:1998 – Tests for mechanical and physical properties of aggregates – Part 3: Determination of loose bulk density and voids</p> <p>EN 933-1:2012 – Tests for geometrical properties of aggregates – Part 1: Determination of particle size distribution – Sieving method</p> <p>EN 14955:2005 – Surfaces for sports areas – Determination of composition and particle shape of unbound mineral surfaces for outdoor sports areas</p> <p>EN ISO/IEC 17025:2017 – General requirements for the competence of testing and calibration laboratories</p>
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PRODUCT (DETAILS / DESCRIPTION)	<p>Silica sand referred to as “ISS30 Dried Silica Infill Sand”.</p>
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TEST CONDITIONS	<p>The test specimen(s) were tested at $23 \pm 2^{\circ}\text{C}$ and $50 \pm 10\%$ relative humidity and conditioned for a minimum of 24 hours prior to testing commencement.</p> <p>The test specimen(s) were dried to constant mass and reduced into test portions.</p>
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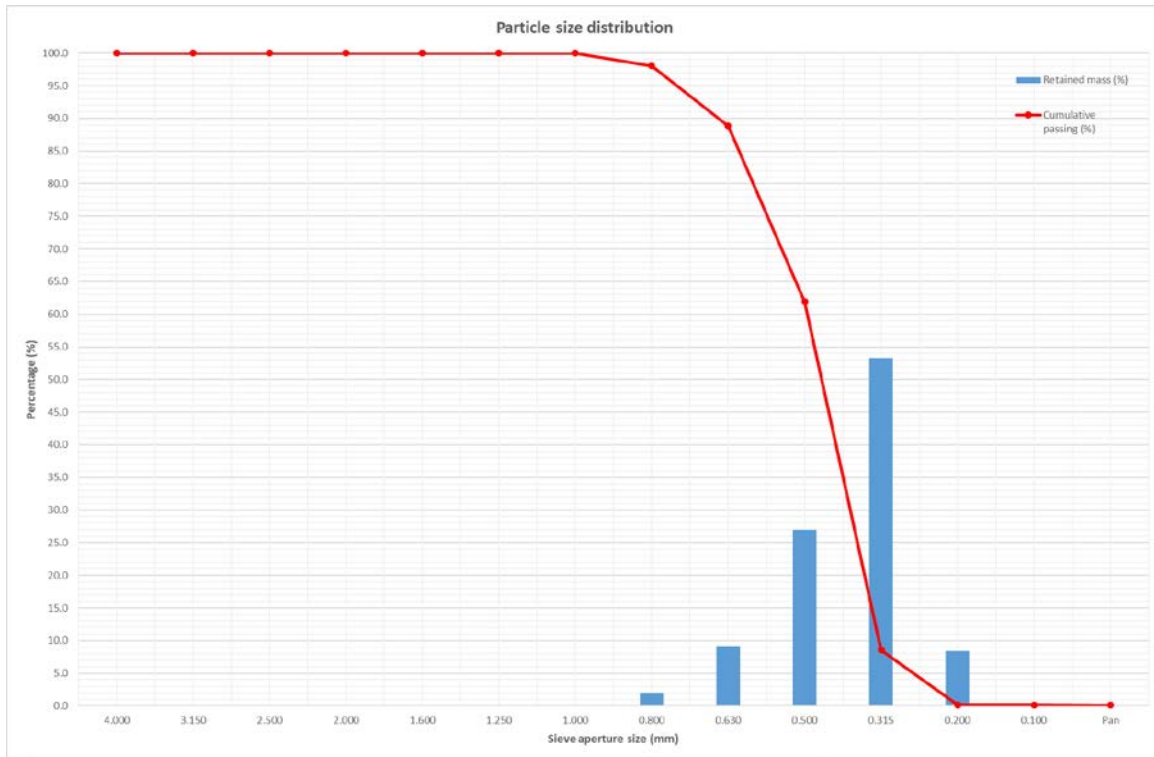
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TEST RESULTS	STABILISING INFILL			
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ISS30 Dried Silica Infill Sand

Test procedure / standard	Declared measurement	Measured result	Difference	
Bulk density	EN 1097-3	N/A	1.446g/cm ³	N/A
Particle size	EN 933-1	0.25mm – 0.8mm	0.315mm – 0.8mm 98% within range	d: ± 1 sieve(s) D: ± 0 sieve(s)
Particle shape	EN 14955	N/A	Round C1	N/A

Particle size distribution graph



X: Sieve aperture (mm)	0	0.1	0.2	0.315	0.5	0.63	0.8	1.0	1.25	1.6	2.0	2.5	3.15
Y: Cumulative passing (%)	0.1	0.2	0.2	8.6	61.9	88.9	98.0	100	100	100	100	100	100
Z: Retained (%)	0	0	8.4	53.3	27.0	9.2	2.0	0	0	0	0	0	0

DISCUSSION	<p>The test specimen(s) submitted were found to be typical of stabilising infill used in the sports and play sector.</p>
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CONCLUSIONS	<p>The test specimen(s) submitted were tested under laboratory conditions to the requirements of the specified standards.</p> <p>The results relate only to the test specimen(s) received and tested.</p>
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APPENDIX

Classification chart for particle shape

	A	B	C	
1				High sphericity (Round/square)
2				Medium sphericity (Cylindrical)
3				Low sphericity (Flat)
	Angular	Irregular	Round	

Microscope photograph – Stabilising infill

