



# National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)



## SCOPE OF ACCREDITATION

Laboratory Name MICRON ENGINEERING SERVICES, PLOT NO. 16, ROYAL INDUSTRIAL HUB, VALSAD, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2005

Certificate Number TC-8022 Page No. : 1 / 6

Validity 23/10/2018 to 22/10/2020 Last Amended on -

S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
<b>Permanent Facility</b>					
1	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Coarse)	Bulk Density	IS 2386 (Part-3): 1963, RA: 2016	1.1 kg/l to 3 kg/l
2	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Coarse)	Crushing Value	IS 2386 (Part-4): 1963, RA: 2016	1 % to 60 %
3	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Coarse)	Elongation Index	IS 2386 (Part-1): 1963, RA: 2016	2 % to 40 %
4	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Coarse)	Flakiness Index	IS 2386 (Part-1): 1963, RA: 2016	2 % to 40 %
5	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Coarse)	Impact Value	IS 2386 (Part-4): 1963, RA: 2016	1 % to 60 %
6	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Coarse)	Los Angeles Abrasion Value	IS 2386 (Part-4): 1963, RA: 2016	1 % to 60 %
7	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Coarse)	Sieve Analysis	IS 2386 (Part-1): 1963, RA: 2016	4.75 mm to 125 mm
8	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Coarse)	Soundness	IS 2386 (Part-5): 1963, RA: 2016	0.1 % to 25 %
9	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Coarse)	Specific Gravity	IS 2386 (Part-3): 1963, RA: 2016	2 to 3.5



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10	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Coarse)	Water Absorption	IS 2386 (Part-5): 1963, RA: 2016	0.1 % to 10 %
11	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Fine)	Bulk Density	IS 2386 (Part-3): 1963, RA: 2016	1.2 kg/l to 3.0 kg/l
12	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Fine)	Sieve Analysis	IS 2386 (Part-1): 1963, RA: 2016	75 µm to 10 mm
13	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Fine)	Specific Gravity	IS 2386 (Part-3): 1963, RA: 2016	2.5 to 3.5
14	MECHANICAL-BUILDINGS MATERIALS	Aggregate (Fine)	Water Absorption	IS 2386 (Part-3): 1963, RA: 2016	0.01 % to 10 %
15	MECHANICAL-BUILDINGS MATERIALS	Bitumen	Absolute Viscosity	IS 1206 (Part-2): 1978, RA: 2014	2000 Poise/s to 2600 Poise/s
16	MECHANICAL-BUILDINGS MATERIALS	Bitumen	Ductility	IS 1208: 1978, RA: 2014	25 cm to 100 cm
17	MECHANICAL-BUILDINGS MATERIALS	Bitumen	Kinematic Viscosity	IS 1206 (Part-3): 1978, RA: 2014	300 cSt to 400 cSt
18	MECHANICAL-BUILDINGS MATERIALS	Bitumen	Penetration	IS 1203: 1978, RA: 2014	20 (1/10) mm to 400 (1/10)mm
19	MECHANICAL-BUILDINGS MATERIALS	Bitumen	Softening Point	IS 1205: 1978, RA: 2014	40 °C to 55 °C



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20	MECHANICAL-BUILDINGS MATERIALS	Bitumen	Specific Gravity	IS 1202: 1978, RA: 2014	0.99 to 1.102
21	MECHANICAL-BUILDINGS MATERIALS	Bitumen Mix	Binder Content	ASTM D 2172: 2011	1 % to 10 %
22	MECHANICAL-BUILDINGS MATERIALS	Bitumen Mix	Density	ASTM D 2041: 2011	2 g/cc to 3 g/cc
23	MECHANICAL-BUILDINGS MATERIALS	Bitumen Mix	Flow Test	ASTM D 6927: 2006	1 mm to 10 mm
24	MECHANICAL-BUILDINGS MATERIALS	Bitumen Mix	Marshall Stability	ASTM D 6927: 2006	0.1 kN to 25 kN
25	MECHANICAL-BUILDINGS MATERIALS	Brick Clay/ Fly Ash Bricks	Dimension	IS 1077: 1992, RA: 2016	1600 mm to 5000 mm
26	MECHANICAL-BUILDINGS MATERIALS	Brick Clay/ Fly Ash Bricks	Water Absorption	IS 3495 (Part-2): 1992, RA: 2016	2 % to 40 %
27	MECHANICAL-BUILDINGS MATERIALS	Brick Clay/ Fly Ash Bricks	Compressive Strength	IS 3495 (Part-1): 1992, RA: 2016	1 N/mm <sup>2</sup> to 15 N/mm <sup>2</sup>
28	MECHANICAL-BUILDINGS MATERIALS	Brick Clay/ Fly Ash Bricks	Efflorescence	IS 3495 (Part-3): 1992, RA: 2016	Qualitative
29	MECHANICAL-BUILDINGS MATERIALS	Cement	Compressive Strength	IS 4031 (Part-6): 1988, RA: 2014	10 N/mm <sup>2</sup> to 80 N/mm <sup>2</sup>



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30	MECHANICAL-BUILDINGS MATERIALS	Cement	Consistency	IS 4031 (Part-4): 1988, RA: 2014	25 % to 40 %
31	MECHANICAL-BUILDINGS MATERIALS	Cement	Final Setting Time	IS 4031 (Part-5): 1988, RA: 2014	30 Minute to 600 Minute
32	MECHANICAL-BUILDINGS MATERIALS	Cement	Fineness by Specific Surface by Blain air permeability	IS 4031 (Part-2): 1999, RA: 2013	100 m <sup>2</sup> /kg to 500 m <sup>2</sup> /kg
33	MECHANICAL-BUILDINGS MATERIALS	Cement	Initial Setting Time	IS 4031 (Part-5): 1988, RA: 2014	10 Minute to 250 Minute
34	MECHANICAL-BUILDINGS MATERIALS	Cement	Soundness by Le-Chatelier method	IS 4031 (Part-3): 1988, RA: 2014	0.1 mm to 10 mm
35	MECHANICAL-BUILDINGS MATERIALS	Hardened Concrete	Compressive Strength	IS 516: 1959, RA: 2013	5 N/mm <sup>2</sup> to 80 N/mm <sup>2</sup>
36	MECHANICAL-BUILDINGS MATERIALS	Hardened Concrete	Flexural Strength	IS 516: 1959, RA: 2013	1 N/mm <sup>2</sup> to 10 N/mm <sup>2</sup>
37	MECHANICAL-BUILDINGS MATERIALS	Paver Block	Compressive Strength	IS 15658: 2006, RA: 2017	5 N/mm <sup>2</sup> to 80 N/mm <sup>2</sup>
38	MECHANICAL-BUILDINGS MATERIALS	Paver Block	Water Absorption	IS 15658: 2006, RA: 2017	0.5 % to 20 %
39	MECHANICAL- SOIL AND ROCK	Soil	California Bearing Ratio	IS 2720 (Part-16): 1987, RA: 2016	1 % to 60 %



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40	MECHANICAL- SOIL AND ROCK	Soil	Consolidation Test	IS 2720 (Part-15): 1986, RA: 2016	0.02 % to 0.5 %
41	MECHANICAL- SOIL AND ROCK	Soil	Direct Shear Test (DUU)	IS 2720 (Part-13): 1986, RA: 2016	0.01 kg/cm <sup>2</sup> to 0.4 kg/cm <sup>2</sup>
42	MECHANICAL- SOIL AND ROCK	Soil	Free Swell Index	IS 2720 (Part-10): 1973, RA: 2016	10 % to 100 %
43	MECHANICAL- SOIL AND ROCK	Soil	Grain Size analysis (Wet & Dry analysis)	IS 2720 (Part-4): 1985, RA: 2015	1 % to 100 %
44	MECHANICAL- SOIL AND ROCK	Soil	Heavy Compaction	IS 2720 (Part-8): 1986, RA: 2015	1.4 g/cc to 2.6 g/cc
45	MECHANICAL- SOIL AND ROCK	Soil	Hydrometer analysis	IS 2720 (Part-4): 1985, RA: 2015	20 % to 80 %
46	MECHANICAL- SOIL AND ROCK	Soil	Light Compaction	IS 2720 (Part-7): 1986, RA: 2016	1 g/cc to 2.1 g/cc
47	MECHANICAL- SOIL AND ROCK	Soil	Liquid Limit	IS 2720 (Part-5): 1985, RA: 2015	25 % to 80 %
48	MECHANICAL- SOIL AND ROCK	Soil	Plastic Limit	IS 2720 (Part-5): 1985, RA: 2015	5 % to 50 %
49	MECHANICAL- SOIL AND ROCK	Soil	Relative Density	IS 2720 (Part-14): 1983, RA: 2015	1.1 g/cc to 2.6 g/cc
50	MECHANICAL- SOIL AND ROCK	Soil	Shrinkage Limit	IS 2720 (Part-4): 1980, RA: 2015	7 % to 25 %
51	MECHANICAL- SOIL AND ROCK	Soil	Specific Gravity	IS 2720 (Part-3): 1980, RA: 2016	2.4 to 3.0
52	MECHANICAL- SOIL AND ROCK	Soil	Swelling Pressure	IS 2720 (Part-41): 1977, RA: 2016	0.1 kg/cm <sup>2</sup> to 2.0 kg/cm <sup>2</sup>
53	MECHANICAL- SOIL AND ROCK	Soil	Unconfined Compression Strength	IS 2720 (Part-10): 1980, RA: 2015	0.1 kg/cm <sup>2</sup> to 10 kg/cm <sup>2</sup>



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<b>Site Facility</b>					
1	MECHANICAL- SOIL AND ROCK	Soil Field Test	Dry Density by Core-Cutter Method	IS 2720 (Part-29): 1975, RA: 2015	1.2 g/cc to 2.4 g/cc
2	MECHANICAL- SOIL AND ROCK	Soil Field Test	Dry Density by Sand Replacement Method	IS 2720 (Part-28): 1975, RA: 2015	1.2 g/cc to 2.4 g/cc
3	MECHANICAL- SOIL AND ROCK	Soil Field Test	Field CBR test	IRC 37: 2012	2 % to 50 %