National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : TAMILNADU WATER SUPPLY AND DRAINAGE BOARD, QUALITY TESTING LABORATORY, MELAKKAL MAIN ROAD, KOCHADAI, MADURAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-4132 **Page No** 1 of 5

Validity 16/05/2023 to 15/05/2025 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	ELECTRICAL- CABLES & WIRES	Cross Linked Polythene insulated thermoplastic sheathed cables for working voltages up to & including 1100 V	Conductor Resistance	IS 10810 (Part 5)
2	ELECTRICAL- CABLES & WIRES	Cross Linked Polythene insulated thermoplastic sheathed cables for working voltages up to & including 1100 V	Heat Shock Tst	IS 10810(Part 14)
3	ELECTRICAL- CABLES & WIRES	Cross Linked Polythene insulated thermoplastic sheathed cables for working voltages up to & including 1100 V	High Voltage at Room Temperature	IS 10810(Part 45)
4	ELECTRICAL- CABLES & WIRES	Cross Linked Polythene insulated thermoplastic sheathed cables for working voltages up to & including 1100 V	Insulation Resistance @ Room Temperature and at 70°C	IS 10810 (Part 43)
5	ELECTRICAL- CABLES & WIRES	Cross Linked Polythene insulated thermoplastic sheathed cables for working voltages up to & including 1100 V	Shrinkage Test	IS 10810(Part 12)
6	ELECTRICAL- CABLES & WIRES	Cross Linked Polythene insulated thermoplastic sheathed cables for working voltages up to & including 1100 V	Tensile Strength and Elongation at break for thermoplastic and elastomeric insulation and Sheath	IS 10810(Part 7)
7	ELECTRICAL- CABLES & WIRES	Cross Linked Polythene insulated thermoplastic sheathed cables for working voltages up to & including 1100 V	Thickness of Insulation	IS 10810(Part 6)
8	ELECTRICAL- CABLES & WIRES	Cross Linked Polythene insulated thermoplastic sheathed cables for working voltages up to & including 1100 V	Thickness of Sheath	IS 10810 (Part 6)
9	ELECTRICAL- CABLES & WIRES	PVC Insulated (Heavy duty) Electric cables for working Voltages up to & including 1100 V	Conductor Resistance	IS 10810(Part 5)
10	ELECTRICAL- CABLES & WIRES	PVC Insulated (Heavy duty) Electric cables for working Voltages up to & including 1100 V	Heat Shock test	IS 10810(Part 14)
11	ELECTRICAL- CABLES & WIRES	PVC Insulated (Heavy duty) Electric cables for working Voltages up to & including 1100 V	High Voltage at room Temperature)	IS 10810(Part 45)
12	ELECTRICAL- CABLES & WIRES	PVC Insulated (Heavy duty) Electric cables for working Voltages up to & including 1100 V	Insulation Resistance @Room Temperature and at 70°C	IS 10810(Part 43)
13	ELECTRICAL- CABLES & WIRES	PVC Insulated (Heavy duty) Electric cables for working Voltages up to & including 1100 V	Shrinkage Test	IS 10810(Part 12)
14	ELECTRICAL- CABLES & WIRES	PVC Insulated (Heavy duty) Electric cables for working Voltages up to & including 1100 V	Tensile Strength and Elongation at break for thermoplastic and elastomeric insulation and Sheath	IS 10810(Part 7)
15	ELECTRICAL- CABLES & WIRES	PVC Insulated (Heavy duty) Electric cables for working Voltages up to & including 1100 V	Thickness of Insulation	IS 10810(Part 6)
16	ELECTRICAL- CABLES & WIRES	PVC Insulated (Heavy duty) Electric cables for working Voltages up to & including 1100 V	Thickness of Sheath	IS 10810(Part 6)
17	ELECTRICAL- CABLES & WIRES	PVC Insulated cables for working Voltages up to & including 1100 V	Conductor Resistance	IS 10810(Part 5)

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Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-4132 **Page No** 2 of 5

Validity 16/05/2023 to 15/05/2025 **Last Amended on** -

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18	ELECTRICAL- CABLES & WIRES	PVC Insulated cables for working Voltages up to & including 1100 V	Heat Shock test	IS 10810(Part 14)
19	ELECTRICAL- CABLES & WIRES	PVC Insulated cables for working Voltages up to & including 1100 V	High Voltage (Water immersion test) at elevated temperature	IS 10810(Part 45)
20	ELECTRICAL- CABLES & WIRES	PVC Insulated cables for working Voltages up to & including 1100 V	High Voltage at room Temperature	IS 10810(Part 45)
21	ELECTRICAL- CABLES & WIRES	PVC Insulated cables for working Voltages up to & including 1100 V	Insulation Resistance @Room Temperature and at 70°C	IS 10810(Part 43)
22	ELECTRICAL- CABLES & WIRES	PVC Insulated cables for working Voltages up to & including 1100 V	Overall Dimensions	IS 10810(Part 5)
23	ELECTRICAL- CABLES & WIRES	PVC Insulated cables for working Voltages up to & including 1100 V	Shrinkage Test	IS 10810(Part 12)
24	ELECTRICAL- CABLES & WIRES	PVC Insulated cables for working Voltages up to & including 1100 V	Tensile Strength and Elongation at break for thermoplastic and elastomeric insulation and Sheath	IS 10810(Part 7)
25	ELECTRICAL- CABLES & WIRES	PVC Insulated cables for working Voltages up to & including 1100 V	Thickness of Insulation	IS 10810(Part 6)
26	ELECTRICAL- CABLES & WIRES	PVC Insulated cables for working Voltages up to & including 1100 V	Thickness of Shealth	IS 10810(Part 6)
27	MECHANICAL- BUILDINGS MATERIALS	Brick	Compressive Strength	IS 3495 (Part I)
28	MECHANICAL- BUILDINGS MATERIALS	Bricks	Dimensions	IS 12894 & IS 1077
29	MECHANICAL- BUILDINGS MATERIALS	Bricks	Efflorescence	IS 3495 (Part III)
30	MECHANICAL- BUILDINGS MATERIALS	Bricks	Water Absorption	IS 3495 (Part III)
31	MECHANICAL- BUILDINGS MATERIALS	Cement	Compressive Strength	IS 4031(Part 6)
32	MECHANICAL- BUILDINGS MATERIALS	Cement	Final Setting Time	IS 4031(Part 5)
33	MECHANICAL- BUILDINGS MATERIALS	Cement	Finess by Dry Sieving	IS 4031(Part 1)
34	MECHANICAL- BUILDINGS MATERIALS	Cement	Intial Setting Time	IS 4031(Part 5)
35	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Crushing Value	IS 2386 (Part IV)

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Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-4132 **Page No** 3 of 5

Validity 16/05/2023 to 15/05/2025 **Last Amended on** -

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36	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Sieve Analysis(Gradation) (Sieve range: 4.75 mm to 125 mm)	IS 2386 (Part I) & IS 383
37	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Specific Gravity	IS 2386 (Part III)
38	MECHANICAL- BUILDINGS MATERIALS	Concrete Cubes	Compressive Strength (upto 36 MPa) of Cubes	IS 516
39	MECHANICAL- BUILDINGS MATERIALS	Ductile Iron Pipe (DI Pipe)	Hydrostatic Test	IS 8329
40	MECHANICAL- BUILDINGS MATERIALS	Ductile Iron Pipe (DI Pipe)	Outer Diameter	IS 8329
41	MECHANICAL- BUILDINGS MATERIALS	Ductile Iron Pipe (DI Pipe)	Thickness	IS 8329
42	MECHANICAL- BUILDINGS MATERIALS	Ductile Iron Pipe (DI Pipe)	Thickness of Bituminous Coating	IS 8329
43	MECHANICAL- BUILDINGS MATERIALS	Ductile Iron Pipe (DI Pipe)	Thickness of Cement Lining	IS 8329
44	MECHANICAL- BUILDINGS MATERIALS	Filtration Media- Sand and Gravel	Sieve Analysis(Gradation) (Sieve range: 75 micron to 125 mm)	IS 2386 (Part I)
45	MECHANICAL- BUILDINGS MATERIALS	Filtration Media- Sand and Gravel	Specific Gravity	IS 2386 (Part III)
46	MECHANICAL- BUILDINGS MATERIALS	Fine Aggregates	Sieve Analysis(Gradation) (Sieve range: 75 micron to 10 mm)	IS 2383 (Part I) & IS 383
47	MECHANICAL- BUILDINGS MATERIALS	Fine Aggregates	Specific Gravity	IS 2386 (Part III)
48	MECHANICAL- BUILDINGS MATERIALS	Metal - Steel Rod: 8 mm to 32 mm Grade Fe415 & Fe500; Grade 500D, Fe500D, Fe550, Fe550D	Elongation (%) (Mandrel size: Round Jaw - 10 mm to 45 mm; Flat Jaw - 0 to 40 mm)	IS 1786
49	MECHANICAL- BUILDINGS MATERIALS	Metal - Steel Rod: 8 mm to 32 mm Grade Fe415 & Fe500; Grade 500D, Fe500D, Fe550, Fe550D	Elongation (%) (Mandrel size: Round Jaw - 10 mm to 45 mm; Flat Jaw - 0 to 40 mm)	IS 1786
50	MECHANICAL- BUILDINGS MATERIALS	Metal - Steel Rod: 8 mm to 32 mm Grade Fe415 & Fe500; Grade 500D, Fe500D, Fe550, Fe550D	Ultimate Tensile Stress (N/mm2)	IS 1786
51	MECHANICAL- BUILDINGS MATERIALS	Metal - Steel Rod: 8 mm to 32 mm Grade Fe415 & Fe500; Grade 500D, Fe500D, Fe550, Fe550D	Unit Weight (kg/m3)	IS 1786
52	MECHANICAL- BUILDINGS MATERIALS	Metal - Steel Rod: 8 mm to 32 mm Grade Fe415 & Fe500; Grade 500D, Fe500D, Fe550, Fe550D	Yield Stress	IS 1786

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Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-4132 **Page No** 4 of 5

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53	MECHANICAL- BUILDINGS MATERIALS	Metal GI Pipe	Bend test	IS 2329
54	MECHANICAL- BUILDINGS MATERIALS	Metal GI Pipe	Dimension Outside Diameter	IS 1239 (Part 1)
55	MECHANICAL- BUILDINGS MATERIALS	Metal GI Pipe	Dimensions -Thickness	IS 1239 (Part 1)
56	MECHANICAL- BUILDINGS MATERIALS	Metal GI Pipe	Flattening	IS 2328
57	MECHANICAL- BUILDINGS MATERIALS	Stoneware pipe	Crushing Strength	IS 651
58	MECHANICAL- BUILDINGS MATERIALS	Stoneware pipe	Dimension inside diameter	IS 651
59	MECHANICAL- BUILDINGS MATERIALS	Stoneware Pipe	Dimension Thickness	IS 651
60	MECHANICAL- BUILDINGS MATERIALS	Stoneware Pipe	Hydraulic Test	IS 651
61	MECHANICAL- BUILDINGS MATERIALS	Stoneware Pipe	Water Absorption	IS 651
62	MECHANICAL- PLASTICS AND PLASTIC PRODUCTS	HDPE	Base Density @27 degree C	IS 7328
63	MECHANICAL- PLASTICS AND PLASTIC PRODUCTS	HDPE	Dimension Outer Diameter	IS 4984
64	MECHANICAL- PLASTICS AND PLASTIC PRODUCTS	HDPE	Dimension- Wall Thickness	IS 4984
65	MECHANICAL- PLASTICS AND PLASTIC PRODUCTS	HDPE	Internal Pressure Creep Rupture Test	IS 4984
66	MECHANICAL- PLASTICS AND PLASTIC PRODUCTS	HDPE	Reversion Test	IS 4984 Annexure C
67	MECHANICAL- PLASTICS AND PLASTIC PRODUCTS	HDPE	Visual Appearance	IS 4984
68	MECHANICAL- PLASTICS AND PLASTIC PRODUCTS	PVC/UPVC	Dimensions	IS 12235(Part I), Clauses 4,5,6,7
69	MECHANICAL- PLASTICS AND PLASTIC PRODUCTS	PVC/UPVC	Joint Leakage	IS 15328
70	MECHANICAL- PLASTICS AND PLASTIC PRODUCTS	PVC/UPVC	Resistance to External blow (Impact Test)	IS 12235(Part 9) Clause 11.2
71	MECHANICAL- PLASTICS AND PLASTIC PRODUCTS	PVC/UPVC	Resistance to Internal Hydraulic Pressure	IS 12235(Part 8) Sec 1

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Certificate Number TC-4132 **Page No** 5 of 5

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72	MECHANICAL- PLASTICS AND PLASTIC PRODUCTS	PVC/UPVC	Reversion Test (%) (Immersion method)	IS 12235(Part 5) Sec 2 Clause 2