



National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)



SCOPE OF ACCREDITATION

Laboratory Name REGIONAL TEST CENTRE CUM TECHNICAL BACKUP UNIT FOR SOLAR THERMAL DEVICES, SARDAR PATEL RENEWABLE ENERGY RESEARCH INSTITUTE, VALLABH VIDYANAGAR, ANAND, GUJARAT , INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-8168 Page No. : 1 / 3

Validity 30/11/2018 to 29/11/2020 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
Permanent Facility					
1	MECHANICAL-THERMAL TESTS	Solar box type cooker	Cooking tray leakage test	IS 13429 (Part 3): 2000	Qualitative
2	MECHANICAL-THERMAL TESTS	Solar box type cooker	Cooking tray test	IS 13429 (Part 2): 2000	Qualitative
3	MECHANICAL-THERMAL TESTS	Solar box type cooker	Cover plate slam test	IS 13429 (Part 3): 2000	Qualitative
4	MECHANICAL-THERMAL TESTS	Solar box type cooker	Exposure Test	IS 13429 (Part 3): 2000	Qualitative
5	MECHANICAL-THERMAL TESTS	Solar box type cooker	Leakage test for lowerside of cover plate	IS 13429 (Part 3): 2000	Qualitative
6	MECHANICAL-THERMAL TESTS	Solar box type cooker	Leakage test for upperside of cover plate	IS 13429 (Part 3): 2000	Qualitative
7	MECHANICAL-THERMAL TESTS	Solar box type cooker	Load Test : Sensible Heating of Water	IS 13429 (Part 3): 2000	0.15 to 0.70
8	MECHANICAL-THERMAL TESTS	Solar box type cooker	Load Test for FRP body Cooker only	7.2.2 of IS 13429 (Part 1): 2000	Qualitative
9	MECHANICAL-THERMAL TESTS	Solar box type cooker	Mirror Reflectivity Test	IS 13429 (Part 3): 2000	40 % to 95 %
10	MECHANICAL-THERMAL TESTS	Solar box type cooker	Mirror slam test	IS 13429 (Part 3): 2000	Qualitative
11	MECHANICAL-THERMAL TESTS	Solar box type cooker	Rain penetration test	IS 13429 (Part 3): 2000	Qualitative
12	MECHANICAL-THERMAL TESTS	Solar box type cooker	Rubber gasket leakagetest	IS 13429 (Part 3): 2000	Qualitative
13	MECHANICAL-THERMAL TESTS	Solar box type cooker	Stagnation Temperature Test	IS 13429 (Part 3): 2000	0.04 to 0.16



National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)



SCOPE OF ACCREDITATION

Laboratory Name REGIONAL TEST CENTRE CUM TECHNICAL BACKUP UNIT FOR SOLAR THERMAL DEVICES, SARDAR PATEL RENEWABLE ENERGY RESEARCH INSTITUTE, VALLABH VIDYANAGAR, ANAND, GUJARAT , INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-8168 Page No. : 2 / 3

Validity 30/11/2018 to 29/11/2020 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
14	MECHANICAL-THERMAL TESTS	Solar box type cooker	Standard boiling time	IS 13429 (Part 3): 2000	Qualitative
15	MECHANICAL-THERMAL TESTS	Solar box type cooker	Thermal Shock test for gasket and Sealants	IS 13429 (Part 2): 2000	Qualitative
16	MECHANICAL-THERMAL TESTS	Solar box type cooker	Transmittance Test	IS 13429 (Part 2): 2000	40 % to 97 %
17	MECHANICAL-THERMAL TESTS	Solar flat plate collector	Determination of time constant	IS 12933 (Part 5): 2003	60 Seconds to 250 Seconds
18	MECHANICAL-THERMAL TESTS	Solar flat plate collector	External thermal shock test	IS 12933 (Part 5): 2003	Qualitative
19	MECHANICAL-THERMAL TESTS	Solar flat plate collector	Impact resistance test	IS 12933 (Part 5): 2003	Qualitative
20	MECHANICAL-THERMAL TESTS	Solar flat plate collector	Incident angle modifier test	IS 12933 (Part 5): 2003	0.05 to 0.6
21	MECHANICAL-THERMAL TESTS	Solar flat plate collector	Internal thermal shock test	IS 12933 (Part 5): 2003	Qualitative
22	MECHANICAL-THERMAL TESTS	Solar flat plate collector	Outdoor no flow Exposure test	IS 12933 (Part 5): 2003	Qualitative
23	MECHANICAL-THERMAL TESTS	Solar flat plate collector	Resistance to Abrasion	IS 12933 (Part 2): 2003	Qualitative
24	MECHANICAL-THERMAL TESTS	Solar flat plate collector	Static pressure leakage test	IS 12933 (Part 5): 2003	Qualitative
25	MECHANICAL-THERMAL TESTS	Solar flat plate collector	Temperature test (Absorber)	IS 12933 (Part 2): 2003	Qualitative
26	MECHANICAL-THERMAL TESTS	Solar flat plate collector	Thermal efficiency test [FR($\tau \cdot \alpha$)e]	IS 12933 (Part 5): 2003	0.3 to 0.9
27	MECHANICAL-THERMAL TESTS	Solar flat plate collector	Thermal Shock test (Gasket and Grommets)	IS 12933 (Part 2): 2003	Qualitative



National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)



SCOPE OF ACCREDITATION

Laboratory Name REGIONAL TEST CENTRE CUM TECHNICAL BACKUP UNIT FOR SOLAR THERMAL DEVICES, SARDAR PATEL RENEWABLE ENERGY RESEARCH INSTITUTE, VALLABH VIDYANAGAR, ANAND, GUJARAT , INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-8168 Page No. : 3 / 3

Validity 30/11/2018 to 29/11/2020 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
28	MECHANICAL-THERMAL TESTS	Solar flat plate collector	Transmittance Test	IS 12933 (Part 2): 2003	40 % to 97 %