



**NSIC – TECHNICAL SERVICES CENTRE
NATIONAL SMALL INDUSTRIES CORPORATION LIMITED**

(A Government of India Enterprise)

Aji Industrial Area, 80 Feet Road, Near Amul Chowk, Rajkot – 360003

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Material Testing Laboratory

NSIC – Technical Services Centre at Rajkot, Gujarat offering the following testing Facilities to Industries through Material Testing Laboratory

A. Building Materials Testing (Physical)

Sr No	Product Details	Test Details	Applicable Standard
1	High Strength deformed steel Bars & Wire for Concrete re-enforcement	Ultimate Tensile Strength	IS 1786 IS 1599 IS 1608
		Yield Strength	
		Elongation	
		Bend & Re-bend Test	
2	Hot Rolled Medium and High Tensile Structural Steel	Ultimate Tensile Strength	IS 2062 IS 1599 IS 1608
		Yield Strength	
		Elongation	
		Face & Root Bend	
3	Steel Pipes for Water and Sewage	Ultimate Tensile Strength	IS 3589 IS 1599
		Yield Strength	
		Elongation	
		Face & Root Bend	
4	Sand	Sieve analysis	IS 386 IS 2386
		Silt content	
		Fineness modulus	
		Water absorption	
		Specific gravity	
5	Aggregate	Sieve analysis	IS 386 IS 2386
		Water absorption	
		Impact value	
		Specific gravity	
6	Cement	Specific surface area	IS 269 IS 4031
		Soundness	
		Setting time (initial/final)	
		Compressive strength	
7	CC Cube	Compressive Strength (7 days & 28 days)	IS 456 IS 516
8	Brick	Dimensions	IS 13757IS 1077
		Compressive strength	
		Water absorption	
9	Bela Stone	Compressive strength	IS 1121 IS 1124 IS 1597
		Water absorption	
10	Tiles	Breaking load	IS 13630 IS 15622
		Modulus of Rupture	
		Water absorption	

11	CM Cube	Compressive Strength	IS 2250
12	AAC Block	Compressive Strength	IS 2185
		Dry Density	
13	CC Block	Compressive Strength	IS 2185
		Water absorption	
14	Paver Block	Compressive Strength	IS 15658
		Water absorption	

B. Building Materials Testing (Chemical)

Sr No	Product Details	Test Details	Applicable Standard
1	Aluminium & its Alloys	Spectrometric analysis for the determination of copper, Iron, Lead, Magnesium, Manganese, Nickel, Silicon, Titanium, Zinc etc.	ASTM E 1251
2	Cast Iron	Spectrometric analysis for the determination of Aluminium, Carbon, Chromium, Copper, Manganese, Molybdenum, Nickel, Phosphorus, Silicon, Sulphur, Vanadium etc.	IS 15338
3	Copper & its alloys	Spectrometric analysis for the determination of Aluminium, Antimony, Arsenic, Beryllium, Bismuth, Cadmium, Chromium, Cobalt, Iron, Lead, Magnesium, Nickel, Phosphorus, Silicon, Tin, Zinc etc.	BS EN 15079
4	Plain Carbon and Low Alloy Steel	Spectrometric analysis for the determination of Aluminium, Arsenic, Boron, Carbon, Chromium, Cobalt, Manganese, Molybdenum, Nickel, Niobium, Phosphorus, Sulphur, Silicon, Tin, Titanium, Vanadium, Zirconium etc.	IS 8811
5	Stainless Steel	Spectrometric analysis for the determination of Carbon, Chromium, Copper, Manganese, Molybdenum, Nickel, Phosphorus, Sulphur, Silicon etc	IS 9879
6	Construction Water	Neutralization with acid	IS 456 IS 3025
		Neutralization with alkali	
		Organic matter	
		Inorganic matter	
		ph value	
		Sulphate content	
		Chloride content	
		Suspended matter	
7	Cement	Ratio of % of lime to % of silica, alumina and iron oxide	IS 4032
		Ratio of % of alumina to iron oxide	
		% loss of ignition	
		% of Magnesium	
		% of Insoluble matter	

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