



भारत सरकार  
कार्यालय अपर महानिदेशक(भोपाल)  
केन्द्रीय लोक निर्माण विभाग



भूतल, निर्माण सदन, 52-ए, अरेरा हिल्स, भोपाल-462011 (म.प्र.)

दूरभाष 0755-2551636, 2988393 मेल : [dirwr2cpwd-mp@nic.in](mailto:dirwr2cpwd-mp@nic.in), [adgwr2cpwd-mp@nic.in](mailto:adgwr2cpwd-mp@nic.in)

सं. 54(84)/अमनि(भोपाल)/2460-हि'

दिनांक: 01/11/2022

कार्यालय आदेश

विषय : Approval of Krishna Digital Material Testing Laboratory J.K. Road Bhopal (MP).

In exercise of Power vested as per para 5.7.2(SOP 5/16) of CPWD works manual - 2022 ADG, Bhopal hereby approves the material testing laboratory mentioned below for testing of building and Roads construction material (List of material and scope as per table below) to be used in various ongoing and upcoming project /works under jurisdiction of ADG, Bhopal. The approval is subject to fulfillment of condition mentioned below :

Name of Laboratory	Address
Krishna Digital Material Testing Laboratory J.K. Road Bhopal (MP)	Krishna Digital Material Testing Laboratory ,02 Bhavani Nagar J.K. Road Bhopal (MP)

**List of Material and Scope of Test - (As per scope of accreditation)**

Sr. no.	List of Material		Scope of Test
1.	Reinforcement	Mechanical	Bend test,% Elongation, test, Re-bend, Ultimate Tensile strength, weight per meter , rib area by dimension measurement, 0.2% proof stress/yield stress.
2.	Cement (OPC & PPC)	Mechanical	Standard Consistency Fineness by Blain "s Air permeability, Fineness by dry sieving, initial Setting Time, final setting time, compressive strength, density, drying shrinkage, Soundness by Le- Chatelier, Soundness by autoclave method.
3.	Bricks (Clay / Fly ash)		Compressive strength, Efflorescence, water absorption, dimension.
4.	Autoclave cellular aerated concrete Block		Density, Compressive strength, Dimension
5.	Ceramic tiles		Breaking strength, chemical resistance, crazing resistance, Dimension, scatch hardness, surface quality, thermal shock resistance, Modulus of rupture, water Absorption.
6.	Coarse aggregate	Mechanical	10% Fines value, Abration value by Loss angeles machine, Bulk Density, clay lumps, Crushing Value, coal & Lignite Elongation index, Flakiness Impact value Sieve Analysis, (40 to 4.75 mm sieve) soundness by sodium sulphate, Material finer than 75 micron, Specific Gravity, Water Absorption.
7.	Fine aggregate	Chemical	Organic Impurities.
		Mechanical	Bulk density, bulking, clay lumps, Coal & lignite, Material finer than 75 micron, Organic impurities, Sieve Analysis (4.75 mm to 75 micron sieve), silt content, Specific Gravity, Water Absorption, soundness by sodium sulphate.

8.	Fly Ash	Fineness by blaines permeability, lime reactivity, Compressive strength, Residue on 45 micron IS sieve, soundness by autoclave method, Specific gravity.
9.	Hardened Concrete	Compressive strength of cube and Core as per IS 516 part 4 2018, depth of water penetration under pressure, Flexural strength, pull out test split tensile strength, water absorption.
10	Block board	Adhesion of pile, Dimension, Resistance to water, spot test.
11.	Particle Board / Prelaminated Particle board / Medium density fibre board.	Crack resistance, Density, moisture content, resistance to cigarette burns, resistance to steam, screw withdrawal strength, swelling in water, Tensile strength, water absorption.
12.	Soil	CBR, Free swell index, Grain size Analysis (4.25 mm to 75 micron sieve), Heavy Compaction (O.M.C) Heavy Compaction (M.D.D.), Light Compaction- Maximum Dry Density (M.D.D.), Light Compaction (O.M.C.), Liquid Limit, Moisture Content, Plastic Limit, Specific gravity, dry density by sand replacement & core cutter, direct shear cohesion & Angle of shearing resistance, shrinkage limit, Standard penetration test, Triaxial compression, Plate Load test.
13.	Granite / Marble/stone	Compressive strength, Dimension, Hardness MOHS scale, specific gravity, water absorption.
14.	Pile integrity Test	Pile integrity test as per IS : 14893.
15	Concrete flooring Tiles	Dimension - (surface regularity, perpendicularity, flatness, streighness), registance to wear, water absorption, wet transvers strength.
16.	Reinforced Concrete structure (NDT).	Rebound hammer, ultrasonic pulse velocity
17	Precast Concrete Paving block	Compressive strength, water Absorption, Abrasion Resistance, Flexural strength, Freez - thaw durability, Dimension Thickness of wearing layer, Tensile splitting strength.
18	Door shutters	End emmersion, glue adhesion, Knife test.
19	Water for Construction purposes	Acidity (neutralise 100 ml sample of water using 0.02 N NaOH), Alkalinity (Neutralise 100 ml sample of water using 0.02 N H2SO4), Inorganic solids, Organic Solids, PH value, Sulphate, suspended solids.
20	GSB/WMM	Abrasion value by loss angeles machine, CBR, Heavy compaction MDD & OMC, Impact value, sieve analysis, water absorption.
21	Bitumen Emulsion	Coagulation of emulsion at low temperature, coating ability and water resistance, miscibility with water, residue on 600 micron IS sieve, Test on residue.
22	Paving Bitumen	Absolute viscosity , ductility, fire point, flash point, penetration, softening point, specific gravity.
23	Bituminous mix	Binder content, Marshall stability, Marshall flow, stripping value, water absorption, density, gradation Impact value
24	Precast Concrete krebs	Water absorption.

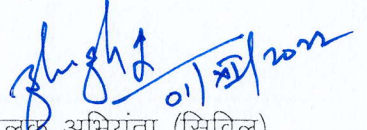
1. The above approval is for a period of **One Year** from the date of issue of this order of accreditations issued as per ISO/IEC 17025 by the accreditation body operating in accordance with ISO/IEC 17011 whichever is earlier.
2. The approval will automatically lapse after end or one year of expiration of accreditation issued as per ISO /IEC 17025 by the accreditation body which ever earlier from issue of this letter.
3. Approval can be withdrawn prematurely without assigning any reason on complaints if found true or uncalled for action of the lab.
4. They shall have valid calibrations certificate from accreditation body operating in accordance with ISO/IEC 17011 at all times.
5. CEs, SEs,EEs and AEs are required to ensure validity of accreditation of Laboratory before sending material / samples for testing to approved Laboratory.
6. The approved does not absolve the executive /supervisory officers concerned of their responsibility of exercising necessary check on performance of the Laboratory and quality of work Short comings/deficiencies in performance during the courses of testing of material/ sample if observed may be brought to the notice of this office.
7. The approval does not make the laboratory eligible for claiming right to get the testing of materials /samples through them only which is subject to their competitive stand amongst other approved laboratories.
8. The performance of the Laboratory shall be watched by the field units and report submitted to the approving authority for periodical review.

यह कार्यालय आदेश अपर महानिदेशक (क्षे.भो.) की अनुमति से जारी किया जा रहा है।

कार्यपालक अभियंता (सिविल)  
कार्यालय अपर महानिदेशक—भोपाल  
के.लो.नि.वि., भोपाल

प्रतिलिपि :-

1. The All Chief Engineers Superintending Engineers and Executive Engineers under this region for information and necessary action please. (By email only)
2. Krishna Digital Material Testing Laboratory, 02 Nagar J.K. Road Bhopal (MP)  
(By email & Speed Post) E-Mail: krishnalab12@gmail.com

  
कार्यपालक अभियंता (सिविल)