

NABL

National Accreditation Board for Testing and Calibration Laboratories

(An Autonomous Body under Department of Science & Technology, Govt. of India)

CERTIFICATE OF ACCREDITATION

TESTING LABORATORY OF VIDYABHARTI TRUST INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2005

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at Umrakh, TA-Bardoli, Dist. Surat, Gujarat

in the discipline of MECHANICAL TESTING

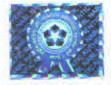
(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Certificate Number

T-3168

Issue Date

24/10/2016



Valid Until

23/10/2018

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the additional requirements of NABL.

Signed for and on behalf of NABL

N. Venkateswaran

Program Manager

Anil Relia

Director

Prof. S. K. Joshi

Chairman



रा.पू.पू.बो

राष्ट्रीय परीक्षण और अंशशोधन प्रयोगशाला प्रत्यायन बोर्ड

(विज्ञान एवं प्रौद्योगिकी विभाग, भारत सरकार के अधीन स्वायत्तशासी निकाय)

पत्यायन प्रमाण-पत्र

विद्या भारती ट्रस्ट प्रौद्योगिकी संस्थान और अनुसंधान केन्द्र की परीक्षण प्रयोगशाला

का मूल्यांकन और प्रत्यायन निम्न मानक के अनुसार

आई.एस.ओ./आई.ई.सी. 17025:2005 "परीक्षण एवं अंशशोधन प्रयोगशालाओं की सक्ष्मता की सामान्य अपेक्षाएँ"

सूरत, गुजरात

में स्थित इसकी सुविधाओं के लिए

यांत्रिक परीक्षण

के विषय क्षेत्र में किया गया।

www.nabl-india.org से भी प्राप्त कर सकते हैं) (इस प्रयोगशाला के प्रत्यायन के विषय क्षेत्र की

प्रमाण-पत्र संख्या

प-3168

जारी करने की तिथि

24/10/2016



वैधता की तिथि

23/10/2018

यह प्रमाण-पत्र उपर्युक्त मानक तथा राष्ट्रीय परीक्षण और अंशशोधन प्रयोगशाला प्रत्यायन बोर्ड की अतिरिक्त अपेक्षाओं का निरंतर संतोषप्रद अनुपालन किए जाने पर अनुबंध में निर्दिष्टानुसार प्रत्यायन के क्षेत्र के लिए वैध रहेगा।

रा.प.प.बो. की ओर से हस्ताक्षरित

कार्यक्रम पुबन्धक

अतिस देविया

अनिल रेलिया निदेशक



Laboratory

Testing Laboratory of Vidyabharti Trust Institute of Technology &

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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection		
I.	BUILDINGS MATERIALS					
1.	Fine Aggregate	Gradation	IS 2386 (Part 1): 1963 (RA 2011) IS 383: 1970 (RA 2011)	0 to 100 %		
		Specific Gravity	IS 2386 (Part 3): 1963 (RA 2011)	2.0 to 3.0		
		Water Absorption	IS 2386 (Part 3): 1963 (RA 2011)	0.20 % to 10.0 %		
		Silt Content	IS 2386 (Part 1 & 2): 1963 (RA 2011)	0.10 % to 20 %		
		Bulk Density	IS 2386: 1963(Part 3) (RA 2011)	1.60 kg/l to 2.00 kg/l		
2.	Coarse Aggregate	Gradation	IS 2386 (Part 1): 1963 (RA 2007)	0 to 100 %		
		Specific Gravity	IS 2386 (Part 3): 1963 (RA 2011)	1.85 to 3.5		
		Water Absorption	IS 2386 (Part 3): 1963 (RA 2011)	0.10 % to 5.0 %		
		Flakiness	IS 2386 (Part 1): 1963 (RA 2011)	0 to 50 %		
		Elongation Index	IS 2386 (Part 1): 1963 (RA 2011)	0 to 50 %		
		Impact Value	IS 2386 (Part 4): 1963 (RA 2011), IS 383: 1970 (RA 2011)	0 to 50 %		

Pankaj Goyal Convenor

N. Venkateswaran **Program Manager**

Creeks



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	Coarse Aggregate	Abrasion Value	IS 2386 (Part 4): 1963 (RA 2011)	0 to 50 %
		Crushing Value	IS 2386 (Part 4): 1963 (RA 2011)	0 to 50 %
3.	Building Stone	Specific Gravity (apparent)	IS 1124: 1974 (RA 2013)	2.0 to 3.5
		Water Absorption	IS 1124: 1974 (RA 2013)	0.20 % to 10.0 %
		Compressive Strength	IS 1121 (Part 1): 2013 Rev. 2013	10 N/mm ² to 150 N/mm ²
4.	Cement (OPC & PPC)	Consistency	IS 4031 (Part 4): 1995 (RA 2009)	25 % to 45 %
		Initial setting time	IS 4031 (Part 5): 1995 (RA 2009)	30 min. to 150 min.
		Final setting time	IS 4031 (Part 5): 1995 (RA 2009)	60 min. to 600 min.
		Fineness by Blain air Permeability	IS 4031 (Part 2): 1995 (RA 2008)	100 m ² /kg to 1000 m ² /kg
		Soundness by Le-Chatelier apparatus	IS 4031 (Part 3): 1988 (RA 2009)	0.5 mm to 3 mm
		Compressive Strength	IS 4031 (Part 6): 1988 (RA 2009)	10 N/mm ² to 70 N/mm ²
5.	Steel Reinforcement	Ultimate Tensile Strength	IS 1608: 2005 (RA 2008) IS1786: 2008	100 N/mm ² to 1000 N/mm ² (Upto 20 mm Dia.)

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		against which tests are performed	Range of Testing / Limits of Detection
Steel Reinforcement	Percentage Elongation	IS 1608: 2005 (RA 2008), IS1786: 2008	5 % to 40 %
	Yield Stress	IS 1608: 2005 (RA 2008)	100 N/mm ² to 1000 N/mm ²
Concrete	Compressive Strength of C.C.	IS 516: (1959) (RA 2008), IS 456: (2000) (RA 2011)	1 N/mm ² to 60 N/mm ²
	Slump test of fresh concrete	IS 1199: 2005	0 to 300 mm
Bitumen	Penetration	IS 1203: 1978 (RA 1998)	10 mm to 100 mm
	Ductility	IS 1208: 1978 (RA 1998)	10 cm to 100 cm
	Softening Point	IS 1205: 1978 (RA 1998)	30 °C to 65 °C
	Absolute Viscosity	IS 1206 (Part 2) (RA 1998)	360 Poise to 8000 Poise
	Kinematics Viscosity	IS 1206 (Part 3) (RA 1998)	60 CST to 1000 CST
	Specific Gravity	IS 1202: 1978 (RA 1998)	0.50 to 2.00
Bituminous Mix Test	Binder Content Test	ASTM-D.2172: (Year 1988)	1 % to 6 %
	Marshal Stability Test	ASTM-D6927,(15)	5000 N to 20000 N
	Flow value test	ASTM-D6927,(15)	1 mm to 10 mm
	Compacted Density of Mix	ASTM-D6927,(15)	1 g/cc to 5 g/cc
Bricks	Dimension	IS 1077: 1992 (RA 2007)	Width- 2235 mm to 2165 mm Length- 4515 mm to 4685 mm Height- 1435 mm to 1365 mm
	Concrete Bitumen Bituminous Mix Test	Concrete Compressive Strength of C.C. Cube Slump test of fresh concrete Bitumen Penetration Ductility Softening Point Absolute Viscosity Kinematics Viscosity Specific Gravity Bituminous Mix Test Marshal Stability Test Flow value test Compacted Density of Mix Bricks Dimension	Time

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Pankaj Goyal Convenor N. Venkateswaran Program Manager



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	Bricks	Water Absorption	IS 3495 (Part 2): 1992 (RA 2007)	1 % to 45 %
		Compressive Strength	IS 3495 (Part 1): 1992 (RA 2007)	1 N/mm ² to 15 N/mm ²
п.	SOIL AND ROCK			
1.	Soil	Grain Size Analysis (By Sieve)	IS 2720 (Part 4): 1985, (RA 2006) Clause 3,4 & 5,2	0 to 100 %
		Liquid limit	IS 2720 (Part 5): 1985, (RA 2006) Clause 6 & 7	20 % to 60 %
		Plastic limit		10 to 40 %
		Light Compaction OMC MDD	IS 2720 (Part 7): 1980 (RA 2002)	10 % to 35 %
		MDD		1.25 g/cc to 2.25 g/cc
		Heavy Compaction OMC MDD	IS 2720 (Part 8): 1983 (RA 2006)	10 % to 35 %
		NIDD		1.25 g/cc to 2.25 g/cc
		C.B.R. Test	IS 2720 (Part 16): 1987 (RA 2007)	1 to 40

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