

Laboratory

Aalign Up Arch. & Const. Pvt. Ltd., 5, Tansen Road, Gwalior,  
Madhya Pradesh

Location 1: 5, Tansen Road, Gwalior, Madhya Pradesh

Location 2: Nainagiri Choraha, Gwalior Bypass Road, Gwalior,  
Madhya Pradesh

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-5505

Page 1 of 3

Validity 09.11.2017 to 08.11.2019

Last Amended on 29.11.2017

**MECHANICAL TESTING**

LOCATION 1				
I.	<b>BUILDING MATERIALS</b>			
1.	<b>Hardened Concrete</b>	Compressive Strength	IS 516:1959 (RA 2013)	10 MPa to 60 MPa
2.	<b>Coarse Aggregate</b>	Impact Value	IS 2386 (Part IV): 1963 (RA 2011) Clause 4	5 % to 50 %
		Flakiness Index	IS 2386 (Part I): 1963 (RA 2011) Clause 4	5 % to 80 %
		Elongation Index	IS 2386 (Part I): 1963 (RA 2011 Clause 4	5 % to 80 %
		Gradation	IS 2386 (Part I): 1963 (RA 2011) Clause 4	(0 to 100 %) 2.36 mm to 90 mm
		Abrasion Value	IS 2386 (Part IV): 1963 (RA 2011)	5 % to 50 %
3.	<b>Fine Aggregate</b>	Gradation	IS 2386 (Part I): 1970 (RA 2002)	(0 to 100 %) 4.75mm to 150 Mic.
		Specific Gravity	IS 2386 (Part III): 1963 (RA 2007)	2 to 4
4.	<b>Bricks/ Heavy Duty Burnt Clay Bricks, Fuel Ash Lime Bricks</b>	Compressive Strength	IS 3495 (Part I): 1992 (RA 2011)	3 MPa to 50 MPa
		Water Absorption	IS 3495 (Part II): 1988 (RA 2007)	5 % to 50 %
5.	<b>Cement</b>	Initial Setting Time	IS 4031 (Part V): 1988 (RA 2013)	10 Min. to 400 Min.

Malancha Das  
Convenor

N. Venkateswaran  
Program Director

**Laboratory**

**Aalign Up Arch. & Const. Pvt. Ltd., 5, Tansen Road, Gwalior,  
Madhya Pradesh**

**Location 1: 5, Tansen Road, Gwalior, Madhya Pradesh  
Location 2: Nainagiri Choraha, Gwalior Bypass Road, Gwalior,  
Madhya Pradesh**

**Accreditation Standard ISO/IEC 17025: 2005**

**Certificate Number TC-5505**

**Page 2 of 3**

**Validity 09.11.2017 to 08.11.2019**

**Last Amended on 29.11.2017**

		Final Setting Time	IS 4031 (Part V): 1988 (RA 2013)	10 Min. to 600 Min.
		Consistency	IS 4031 (Part IV): 1988 (RA 2013)	20 % to 35 %
<b>a.</b>	<b>Bitumen</b>	Bitumen Content	IRC-SP-11:1988	0.5 % to 18 %
<b>II.</b>	<b>SOIL &amp; ROCK</b>			
<b>1.</b>	<b>Soil</b>	Atterberg's Limit Liquid Limit Plastic Limit	IS 2720 (Part 5): 1985 (RA 2010) Clause No. 3 & Clause No. 7	1 % to 50 % 1 % to 50 %
		Light Compaction MDD OMC	IS 2720 (Part VII): 1980 (RA 2011)	1.0 g/cm <sup>3</sup> to 3 g/cm <sup>3</sup> 1 % to 20 %
		Heavy Compaction MDD OMC	IS 2720 (Part VIII): 1983 (RA 2010)	1.0 g/cm <sup>3</sup> to 3 g/cm <sup>3</sup> 1 % to 20 %
		CBR	IS 2720 (Part 16): 1987 (RA 2007)	1 % to 40 %

**Laboratory**

**Aalign Up Arch. & Const. Pvt. Ltd., 5, Tansen Road, Gwalior,  
Madhya Pradesh**

**Location 1: 5, Tansen Road, Gwalior, Madhya Pradesh  
Location 2: Nainagiri Choraha, Gwalior Bypass Road, Gwalior,  
Madhya Pradesh**

**Accreditation Standard ISO/IEC 17025: 2005**

**Certificate Number TC-5505**

**Page 3 of 3**

**Validity 09.11.2017 to 08.11.2019**

**Last Amended on 29.11.2017**

**MECHANICAL TESTING**

<b>LOCATION 2</b>				
<b>I.</b>	<b>MECHANICAL PROPERTIES OF METALS</b>			
<b>1.</b>	<b>Steel</b>	Tensile Strength	IS 1786:2008 (RA 2013) IS 1608:2005 (RA 2011)	250 N/mm <sup>2</sup> to 800 N/mm <sup>2</sup>
		Yield Stress	IS 1786:2008 (RA 2013) IS 1608:2005 (RA 2011)	250 N/mm <sup>2</sup> to 600 N/mm <sup>2</sup>
		% Elongation	IS 1786:2008 (RA 2013) IS 1608:2005 (RA 2011)	10 % to 40 %
		Weight Per Meter	IS 1786:2008 (RA 2013)	0.2 kg to 10 kg
		Bend Test	IS 1599:1985 RA 2011)	Qualitative (Mandrel Dia 32, 40, 48, 64, 80, 125, 140, 160)
		Rebend test	IS 1786:2008 RA 2011)	Qualitative (Mandrel Dia 40, 50, 84, 112, 140, 175, 196, 224)

---

**Malancha Das**  
Convenor

---

**N. Venkateswaran**  
Program Director