Laboratory	**Material Testing Laboratory- KEC International Limited, Deori, P.O. – Panagar, Jabalpur, Madhya Pradesh**		
Accreditation Standard	**ISO/IEC 17025: 2005**		
Discipline	**Mechanical Testing**	**Issue Date**	**31.03.2015**
Certificate Number	**T-3341**	**Valid Until**	**30.03.2017**
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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.	**MECHANICAL PROPERTIES OF MATERIALS**			
1.	**Structural Steel**	Tensile Strength	IS 1608: 2005 (RA 2011) BSEN 10002-1: 2001 BSEN ISO 6892-1: 2009	5 kN to 600 kN
		Yield Stress	IS 1608: 2005(RA 2011) BSEN 10002-1: 2001 BSEN ISO 6892-1: 2009	5 kN to 600 kN 220 N/ mm^2 to 540 N/ mm^2
		% Elongation	IS 1608: 2005(RA 2011) BSEN 10002-1: 2001 BSEN ISO 6892-1: 2009	1 % to 50 %
		Bend	IS 1599: 2012 BSEN 10002-1: 2001 BSEN ISO 6892-1: 2009 ASTM E290M: 2014 JIS Z 2248: 2006	Qualitative Mandrel Diameters: (2, 7.5, 8, 9, 10. 5, 12, 13.5, 14, 15, 16, 16.5, 18, 19.5, 20, 21, 22.5, 24, 27, 28, 30, 32, 33, 37.5, 36, 40, 42, 45, 48, 60) mm
		Charpy / Impact Test	IS 1608: 2005 BSEN ISO 6892-1: 2009 ASTM E23: 2012c ASTM A370 JIS Z 2242: 2005	5 J to 300 J (Room Temp) 5 J to 300 J (-) 20 ºC Temp
		Weight of Steel / Meter	IS1852 BSEN 10056 (Part 1): 1999 ASTM A6: 2014 JIS G 3192: 2010 JIS G3194: 2010	1 kg/m to 150 kg/m

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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
II.	**COATING MATERIAL ON REINFORCING STEEL**			
1.	**Galvanized Structural Steel**	Embrittlement	ASTM A143: 2007	Angle: 25 x 25 x 3 mm to 250 x 250 x 35 mm Plate: 0.5 mm to 60 mm
		Adhesion	IS 4759: 1996 (RA 2010)	Qualitative
		Thickness of Zinc Coating	IS 4759: 1996 ASTM E123: 2013 BSEN ISO 1461: 2009 JIS H 0401: 2013 JIS H 8641: 2007	1 µm to 1500 µm
III.	**PERFORMANCE TEST**			
1.	**Overhead Line Structures**	Loading test (Full scale)	IEC 60652: 2002 IS 802 (Part 3): 1978	Load 1 t to 30 t per point Maximum 36 points Width (Square base) Lattice tower only: 1.5 m x 1.5 m to 24 m x 24 m Width (Rectangular base): 4 m x 3 m to 30 m x 24 m Uplift:250 t to 450 t per leg Pulley levels -Longitudinal Mast:12 Nos. from 1 m to 63 m in steps of 1 m Transverse Mast:12 Nos. from 0.5 m to 50 m in steps of 0.5 m

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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
	Overhead Line Structures	Loading test (Full scale)	IEC 60652: 2002 IS 802 (Part 3): 1978	Vertical:12 Nos. Maximum Height of Lattice Tower:70 m

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Convenor

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Program Manager