

UW-HDPE-DUCT

Sr. No.	Types of Test	Standard Reference	Acceptance Norms
1	Visual Appearance	GR No. TEC/GR/FA/CDS-008/04/AUG-19	Smooth inside & outside surface, free of blisters, shrinks, hole, flaking, scratches & roughness. Pipe shall be smooth, clean & round. The end shall be clearly cut and shall be square with axis of pipe.
2	Color of Duct		Colour of Duct- Black/Blue/Green (as per customer requirement)
3	Color of Inner Layer		White
4	Thickness of inner layer		Min: 0.28 mm Max: 0.42 mm
5	Identification of strips		Min: 3 White strips
6	Outer Diameter		40 mm +0.4 mm
7	Wall Thickness of duct including inner layer		3.5 ± 0.2 mm
8	Ovality Test		Max. 1.4 mm
9	Coil Length		Above 250 mtr Coil
10	Construction		Two Concentric Layer Construction
11	Material of inner Layer		Permanent Lubricant (Silicone) based on HDPE Resin
12	Tensile Strength	ASTM :D 638 &	Min. 20 N/mm ²
13	Elongation at Break	ASTM :D 2160	Min, 600%
14	Melt Flow Index Composite Sample	IS:2530	0.2-1.1g/10min
15	Density of finished product	IS: 7328	940.0 to 958.0 Kg/m ³
16	Crush Resistance Test	GR No. TEC/GR/FA/CDS-008/04/AUG-19	Max. 10% Deflection with load of 50 Kg
			Max. 2% Deflection after recovery
17	Impact Test		Striker Weight 10 kg & fall height 1.5m. No Crack or split
18	Oxidation induction Time	ASTM : D 3895	≥30 minute.
19	Acceptance Test : 48 Hrs at 80°C & induced stress 3.8 Mpa	IS : 4984	Shall not show signs of localized swelling or leakage and shall not burst during the test Duration. With stand 6khf/cm ²
20	Duct Accessories: Compression Fit coupler, End Plug, Cable Sealing Plug.	Visual Check	Satisfactory.