

HOUSE WIRE (FR, FRLSH)

HOUSE / BUILDING PVC WIRES

ELECTRICAL WIRES

Zenium offers PVC Insulated Single Core Unsheathed Wires using more than 99.9% pure Electrolytic grade Copper within 100% conductivity. These electrolytic grade copper conductors are annealed and bunched together, as multiple strands, which offers great flexibility to make it more ideal for conduit wiring. These wires are being insulated with a Flame Retardant (FR) & Flame Retardant Low Smoke & Halogen Free (FRLSH) PVC Compound with high insulation resistance. The insulation process is carried out on highly efficient and speedy extrusion lines, for higher accuracy in performance. These wires are as per IS : 694 : 2010

FLAME RETARDANT (FR)

ZENIUM-FR wires have high oxygen and temperature index, that prevents the spreading of fire even at high temperatures. ZENIUM-FR wires are manufactured using 99.97% pure, electrolytic grade, bright annealed bare copper within 100% conductivity. These wires are insulated with flame retardant-FR PVC compound with a high oxygen and temperature index, specially formulated and manufactured in house.

FLAME RETARDANT LOW SMOKE & HALOGEN FREE (FRLSH)

In case of fire, conventional PVC insulated wires give out thick black smoke and toxic fumes of hydrochloric acid gas. This impairs visibility and hampers rescue operations. ZENIUM FRLSH on the contrary, not only emits very little smoke and toxic gases, but also retards the spreading of fire. It is thus ideal of concealed and conduit wiring in multi-storied high rise buildings such as hotels, banks, hospitals, factories, commercial complexes and residential apartments etc.,

TABLE 1.1

FR, FRLS, HFFR MULTI STRAND, SINGLE CORE, UNSHEATHED WIRES IN VOLTAGE 1100 V

Nominal Area of Copper Conductor Sq.mm	Number / Nominal Diameter of Strands mm	Thickness of Insulation (Nominal) mm	Approx. Overall Diameter of Wire mm	Current Carrying Capacity 2 Cables Single Phase	D. C. Resistance 20° C Ohms / km
				Unenclosed clipped directly to a surface or on cable trays Amps	
0.5	16/0.20	0.6	2.1	4	39
0.75	24/0.20	0.6	2.3	8	26
1	14/0.30	0.7	2.7	13	18.1
1.5	22/0.30	0.7	3	18	12.1
2.5	36/0.30	0.8	3.6	24	7.41
4	56/0.30	0.8	4.1	32	4.95
6	84/0.30	0.8	4.6	41	3.3
10	80/0.40	1.0	6.1	51	1.91
16	126/0.40	1.0	7	69	1.21
25	196/0.40	1.2	8.6	89	0.78
35	276/0.40	1.2	9.7	113	0.554
50	396/0.40	1.4	11.5	153	0.386
70	360/0.50	1.4	13	238	0.272
95	475/0.50	1.6	15.1	289	0.206
120	608/0.50	1.6	16.6	339	0.161
150	750/0.50	1.8	18.5	394	0.129
185	925/0.50	2	20.4	461	0.106
240	1221/0.50	2.2	23.2	555	0.0801
300	1525/0.50	2.4	26	649	0.0641
400	2013/0.50	2.6	30	771	0.0486
500	2310/0.50	2.8	33	818	0.0384
630	3090/0.50	2.8	38	916	0.0287

Standard Colours : Red, Yellow, Blue, Black & Green (For Earthing). Packed in 90 / 180 Mts. Length.

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