

How to Read a House-Wire Label

Decode the markings printed on a house wire — grade, voltage, standard and the ISI mark.

Every genuine house wire prints key information along its sheath. A typical line reads:

APAR ANUSHAKTI HR-FR-LSH 2.5 SQ.MM 1100V IS 694 ISI CM/L-XXXXXXX

What each part means

On the wire	Meaning
APAR Anushakti	Brand / sub-brand
HR-FR-LSH	Grade / fire-safety type (see glossary below)
2.5 SQ.MM	Conductor cross-section (size)
1100V	Voltage grade (working voltage up to 1100 V)
IS 694	Indian Standard the wire is made and tested to
ISI · CM/L-XXXXXXX	BIS certification mark and licence number

Grade glossary

Grade	What it means
FR	Flame Retardant — resists the spread of flame.
FRLS	Flame Retardant Low Smoke — FR plus reduced smoke and acid-gas emission.
HR-FR-LSH	Heat-Resistant, Flame-Retardant, Low-Smoke Halogen — higher temperature rating with low smoke and halogen.
HFFR / EBXL	Halogen-Free Flame-Retardant, electron-beam cross-linked (APAR Fire Protekt) — zero halogen, very low smoke, high temperature endurance.

Why it matters: the ISI mark with a CM/L licence number is your proof the wire is BIS-certified to the stated IS. No ISI mark, or a missing licence number, is a red flag for counterfeit or sub-standard wire.

Exact grade names, voltage grade and standard numbers vary by product — check the specific APAR datasheet for the wire you are buying.

