

How to Spot Fake or Sub-Standard Wire

Simple checks to tell genuine, certified house wire from counterfeit or under-spec wire.

Counterfeit and under-specification wire is a leading hidden cause of house fires. It looks the same on the outside but cuts corners where it counts - thinner copper, poor insulation, no real certification. Here is how to protect yourself.

1. Check the ISI mark and licence number

Genuine wire carries the **ISI mark with a BIS licence number (CM/L-xxxxxxx)** printed on the sheath. You can verify that licence on the BIS Care app or the BIS website. No ISI mark, or a mark with no licence number, is the biggest red flag.

2. Read the printed markings

Look for brand, conductor size, voltage grade (1100 V), the IS standard (IS 694 or IS 17048) and a metre marking. Genuine wire prints these clearly and consistently along the length.

3. Check the conductor

The most common fraud is selling thin copper as a larger size - a wire labelled 1.5 sq mm that is actually less. Compare the conductor's diameter and the coil's weight against the manufacturer's stated values; a suspiciously light coil is a warning sign.

4. Inspect the insulation

Good insulation is uniform in thickness, flexible (not brittle or sticky), and on FR/FRLS/HFFR grades it should self-extinguish rather than keep burning. Patchy thickness or a harsh chemical smell are bad signs.

5. Buy from authorised dealers

Source from authorised distributors and avoid prices that look too good to be true. Genuine coils come properly labelled with brand, size, batch and length.

Quick red-flag list: no ISI / licence number · faint or missing print · under-weight coil · brittle or uneven insulation · unusually cheap · unbranded packaging.

Buying genuine APAR wire? Use an authorised APAR dealer - see the Get Dealership page to find or become one.