CABLE TYPES AND MARKS OF CONFORMITY

GREY OR WHITE TWIN AND EARTH. DOES IT MATTER?

CABLE	WHAT IT IS / WHERE IT'S USED
Single core	One insulated conductor, e.g. a 10 mm^2 green/yellow bonding conductor or a 16 mm^2 earthing conductor. "Single core" means one cable, not one strand.
Twin and earth (T&E) flat, multicore, PVC/PVC, 70 °C	The standard domestic cable. **6242Y** has a **grey** sheath. **6242B** has a **white** sheath and is **low smoke zero halogen (LSZH / LSF)**: less, lighter smoke in a fire, but harder to strip. Grey has a chalky powder inside so it strips easily, which is why most sparks prefer it.
Flex	Flexible cable with many fine strands, for appliances and pendants
MICC	**Mineral insulated copper clad**: copper sheath with magnesium oxide powder inside. Very tough and expensive, but moisture from sweaty hands or breath on the ends ruins it. **White sheath** = emergency lighting (e.g. listed buildings, schools, churches). **Red sheath** = fire alarms.
SWA	**Steel wire armoured**, with 3, 4 or 5 cores. Used commercially and industrially, and for outside sockets, lights and outbuildings. The armour can be used as the CPC. It's not the same as the DNO supply cable.

Marks of conformity show a product meets the required standards:

- **CE** is the EU mark.
- After Brexit, **UKCA** is used in Great Britain and **UKNI** in Northern Ireland.
- You'll also see **BASEC** (cables), **ENEC**, **BEAB** and the **Kitemark**.

> **Electrician's Guide to the Building Regs** · 2.2.2 Conformance to equipment standards: UKCA / UKNI marks · **p.35**

> **Messy doesn't mean non-compliant**
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> A common sight: T&E draped loosely across loft joists with a single clip. It's ugly and poor workmanship, but it isn't against the rules, because it's clipped direct. A better job would drill through the joists (following Part A) or clip at every joist.

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