Introduction

Fake cables manufacturers make low-quality products, label them with the name of a legitimate company, pack them in a box and sell them at a fraction of the real prizes, making it impossible for legit manufacturers to compete them.

After spending thousands of dollars, the consumer, ends up installing slow networks that don't deliver their specifications for voice, video and data passing. Corporations and homeowners are susceptible to other risks because these cables don't comply with adequate fire and current ratings.

Credit: https://beyondtech.us/blogs/beyond-blog/detect-counterfeit-cables

Using steel or aluminum instead of copper

Copper-clad-steel or copper-clad-aluminum is a classic method manufacturers use to save money. It consists of using an aluminum or steel core instead of costly copper, which causes high attenuation and poor signaling. In the long run, network speed will be affected.

Substituting jacket material

Manufacturers replace CMP and CMR flammability ratings with inferior non-fireproof jacket material. Not every application requires these standards, but when they are needed it is critical for cables to have them.

Using re-ground plastic

RJ-45 connectors that don't pass the quality test at the factory and turn out as rejected can be re-ground back to pellets and added to the plastic used to make new connectors. This process is legitimate, but it can have bad consequences when too much re-ground plastic is used, because it lowers combustion rating. If the connector body has yellowing or foggy plastic, it means that low-quality plastic was used in its making. Another thing manufacturers have been doing with connectors is to replace the nickel and gold parts on the metal contact with "gold flash" or "selective plating" - materials that corrode quickly..

Counterfeit Cable Burn Test

Video: http://youtu.be/9sx0PhGlofE

What happens when a counterfeit cable gets put to a burn test. In the video, a cable that passes itself off as being plenum-rated is subjected to the Steiner Tunnel test, which a cable must pass in order to qualify for the plenum rating. To say the cable fails the test is a significant understatement.

UL mark

The first step of course is to check for the UL mark (or a mark from one of the other NRTLs on OSHA's list) on the product. Since UL is the most common of these, that's the mark we're focusing on with this particular article. If it's not there, it's a safe bet that your goods are at best not up to the standards they should be, and at worst straight-up knock-offs. Once you've located the rating, there are steps to take to make sure it's genuine.

UL marks come in many forms: it might be a label, or it may be die-stamped, silk-screened or molded into a product. Whichever the method of application, there are FOUR design elements that need to be verified to make sure the UL listing is legit:

◼The UL trademark: the letters "UL" arranged diagonally (descending left to right) within a circle, with a small ® symbol directly below the U. If the "UL" letters are level with each other, side by side, then you're looking at a phony symbol.

◼The word "listed" printed either below or beside the circle in all capital letters: LISTED.

◼A 4-character alphanumeric control number, or a 4 to 6-digit issue number. In the case of the issue number, it may or may not be preceded by the phrase "Issue No." as well as 1 or 2 letters.

◼A product identity phrase that concisely names what the product is.

If any of these elements are missing or does not match the configurations listed above, the UL mark is about as real as Santa Claus, the Tooth Fairy and Snuffalupagus