



What is the difference between "Component" and "Channel" Verification?

In both cases, products are provided to the laboratory for testing to ISO and EIA/TIA cabling standards. Within these standards documents are performance requirements for both a channel, as found in most cabling installations, and for the components, which make up these channels.

So, for example, a manufacturer can provide the lab with a number of individual components - cable, keystone, patch panel, patch cord - and request that these be tested in isolation against the requirements of the standard. This is component level certification.

Alternatively the manufacturer may provide a set of these components terminated in their factory to a 4 connector channel model as typically found in the field.

A review of the market will show that a reasonable number of cabling system manufacturers can provide channel compliance certificates.

Channel compliance is an easier certificate to gain, as manufacturers can 'tweak' the performance of certain components to compensate for poorer performance elsewhere in the channel. For example, a cable could be designed to perform well above the standard to compensate for a keystone jack that does not meet, or marginally meets the required specification.

With component certification there is no hiding place. Each product is tested to meet the standard and this really is the ultimate performance test for a manufacturer looking to promote third party verification as a key feature of its systems' performance and quality standards.

The conclusion therefore is to make sure that the solution that you install is independently verified to meet both channel and component compliance.

Cat 6A, Cat 6A or Cat 6a?

After many years of Network Mangers having a fairly apathetic approach to network cabling, the advent of a new standard has created a great deal of confusion and "scratching of heads" in the IT community. We are not even entirely sure what to call it; is it Cat6A, Cat 6A or Cat 6a?

The "A" refers to augmented and there are different terms used for the "channel", "permanent link" and "component" depending on whether it relates to the international (ISO/IEC), American (TIA) or European (CENELEC).

The table below breaks the differences down:

Standards Body	Terminology	Configuration
ISO/IEC	Class EA Class EA Cat 6A	Channel Permanent Link Component
CENELEC	Class EA Class EA Cat 6A	Channel Permanent Link Component
TIA	Augmented Category 6 or Cat 6A Augmented Category 6 or Cat 6A Augmented Category 6 or Cat 6A	Channel Permanent Link Component

With international or European standards based installations, categories or components make up classes of links or channels. So for example in a CENELEC compliant installation you would have a "Class EA Permanent Link" and in a TIA compliant installation you would have an "Augmented Category 6 Permanent link (shortened to Cat 6A). Not only is there a difference in the terminology, there is also a difference in performance requirements; the ISO/IEC and CENELEC channel requirements are far more stringent than the TIA.

If you still have questions around the standards, or have an imminent cabling project that you want to discuss simply click on the link below to arrange a meeting with one of the J Brand technical team.

Please contact me to discuss the standards in more detail