

At Fluke Networks, we recognize that there are uncertainty and ambiguity around structured cabling standards and applications. Based on our industry expertise and experience, we recommend the following checklist for cable testing to guide you through some of the uncertainties. For more technical details, please use our Statement of Work (SOW) documents as general guidelines to help you prepare RFQs or contractual specifications for testing twisted pair copper cabling installations.

Check	Category	Recommended by Fluke Networks	Reasoning	Additional resources
<input type="checkbox"/>	Twisted pair copper cabling	Specify Permanent Link or Channel testing	Channel test is easier to PASS; Test Specs need to specify Permanent link or Channel	<a href="http://www.flukenetworks.com/blog/cabling-chronicles/dumb-thing-1-specifying-channel-testing-when-installing-permanent-links">http://www.flukenetworks.com/blog/cabling-chronicles/dumb-thing-1-specifying-channel-testing-when-installing-permanent-links</a>
<input type="checkbox"/>	Twisted pair copper cabling	Specify whether marginal passes are acceptable or not	Unless you specified otherwise, a PASS * is a PASS	<a href="http://www.flukenetworks.com/blog/cabling-chronicles/dumb-things-2-and-3-neglecting-agree-upon-marginal-test-results-and-specify">http://www.flukenetworks.com/blog/cabling-chronicles/dumb-things-2-and-3-neglecting-agree-upon-marginal-test-results-and-specify</a>
<input type="checkbox"/>	Twisted pair copper cabling	Test DC Loop Resistance	The DC Resistance shall be reported for all four pairs; Is not to exceed 6.4 $\Omega$ for all four pairs per ANSI/TIA-568.2-D Section 6.3.1.	<a href="https://www.flukenetworks.com/knowledge-base/dtx-cableanalyzer/dc-loop-resistance-measurement-and-testing">https://www.flukenetworks.com/knowledge-base/dtx-cableanalyzer/dc-loop-resistance-measurement-and-testing</a>
<input type="checkbox"/>	Twisted pair copper cabling	Test DC Resistance Unbalance within a pair	The DC Resistance Unbalance within a pair shall be reported for all four pairs; Is not to exceed 200 m $\Omega$ or 3%, whichever is the greatest per ANSI/TIA-568.2-D Section 6.2.2.	<a href="http://www.flukenetworks.com/knowledge-base/dsx-cableanalyzer-series/dc-resistance-unbalance-within-pair-dsx-cableanalyzer">http://www.flukenetworks.com/knowledge-base/dsx-cableanalyzer-series/dc-resistance-unbalance-within-pair-dsx-cableanalyzer</a>
<input type="checkbox"/>	Twisted pair copper cabling	Test DC Resistance Unbalance between pairs	The DC Resistance Unbalance shall be reported for the following pairs a) 1,2-3,6 b) 1,2-4,5 c) 1,2-7,8 d) 3,6-4,5 e) 3,6-7,8 f) 4,5-7,8 Is not to exceed 120 m $\Omega$ or 7.5%, whichever is the greatest per ANSI/TIA-568.2-D Section 6.3.3.	<a href="http://www.flukenetworks.com/knowledge-base/dsx-cableanalyzer-series/dc-resistance-unbalance-between-pairs-dsx-cableanalyzer">http://www.flukenetworks.com/knowledge-base/dsx-cableanalyzer-series/dc-resistance-unbalance-between-pairs-dsx-cableanalyzer</a>
<input type="checkbox"/>	Twisted pair copper cabling	Specify plot (graphical) data	Without Plot Data, fault identification in the frequency domain is a challenge; With plot data, TDR can help to find the cause of failing results Alien Crosstalk requires plot data from your in-channel tests. Without plot data, you'll be re-testing those links	<a href="http://www.flukenetworks.com/blog/cabling-chronicles/dumb-thing-5-forgetting-enable-plot-data">http://www.flukenetworks.com/blog/cabling-chronicles/dumb-thing-5-forgetting-enable-plot-data</a>