

How to Improve Your Quality Using Third-Party Testing

By Paul Wraight

Testing your work has always been and continues to be, an important part of your network cabling business. Bear in mind that the testing to be done is only as good as the testing meters or cable scanners you use, and the training and experience you've attained. Under TSB-67, the testing parameters set out by ANSI/TIA/EIA 568-A, you can use testers/scanners of different levels of accuracies. · Level I - measuring NEXT levels in a basic link configuration to an accuracy of ± 3.8 dB; · Level II - measuring NEXT levels in a basic link configuration to an accuracy of ± 1.6 dB; and now, · Level IIE - must identify trouble spots for Giga-speed transmission. Most cable scanners do a pretty good job these days, but testing your own work can present a whole set of unexpected problems that may arise from personal bias. A lack of objectivity towards the quality of your work may prevent you from seeing some weak areas of your job. This may not be particularly reassuring to your customer. In many cases, you may need to let an outside party review what you've done. Third-party testing, that is letting another installer evaluate your work, is an uncomfortable prospect to many; but it can bring to the job something you can't- impartiality. Typically, most network cabling put in place these days is properly installed and meets most of today's cabling standards. On the other hand, we've all also heard horror stories about jobs that just weren't done right. Sometimes these anecdotes serve as cautionary tales; sometimes they are even a bit amusing, especially when it's our competitors that are responsible. However, as an industry of professionals, we should collectively try to put an end to sloppy practices wherever they appear. After all, we are a quality-minded, standards-driven industry; and poor-quality work makes all of us look bad. Here are a couple of scenarios that reflect real-life situations we've all encountered. Each makes a strong case for why we, as installers, should embrace the concept of third-party testing.

The Cat. 5 Cabling Job.

This hypothetical installation was completed about a year ago by a competing cabling company. And while the customer has tried many times over the past month, he just can't seem to get the network speed to jump from 10 Mbps to 100 Mbps. The company that installed the original job is unwilling to come back and take a look at the problem. The customer then decides to call your company to take a look at the problem. The frustrated customer says to you, "They used all Cat 5 components. The jacks are Cat 5, patch panels are Cat 5, and the cable is Cat 5. I've got samples to prove it." After verifying that the components are indeed Cat 5-compliant, your team inspects the installation completed by the previous cabling company. They find cable coils lying on fluorescent lights, pairs untwisted over one inch, evidence that a screwdriver was used as a punch-on tool and generally shoddy termination (i.e., termination only of the pairs needed, to make the old network speed run). These are only a few of the symptoms of a larger problem with the job - no installation standard was followed when installing this cable plant. Remember that a Cat 5 cabling job involves more than just using Cat 5 components. Cat 5 structured network cabling facilities include two components: Cat 5 parts and the Cat 5 installation of those parts. A third-party verification immediately following the job could have avoided this messy issue for the customer right from the start.

Testing as part of the cabling installation job.

Controlling costs is an obsession among business owners; and it has to be so, if profits are to be had. Some cabling companies (obviously, not quality- and/or standards-driven operations) view testing as not included in the price

of their jobs. Some don't even go back to fix failed cables in the network cable plant because it costs time and money to do so. Suppose the customer from the previous scenario calls you to say that they can't add new users because the "future" links they had originally installed are failing. Now, that's a deficiency that goes back to the cabling. The original installers could be responsible for any of the following problems. · They skipped testing the "futures"; all fails were switched over to the future cables. · Or worse still - future cables failed, so they re-tested the previous cable that passed tests, just to get a pass. · Or they even brought a box of cable with them (jacks included) and just tested that box, whenever there was a cable test failure. With any legitimate network cabling company, these testing scenarios are highly unlikely. However, we all know that they do happen. Cat. 5 installation includes testing of all cables installed and the issuance of test results or reports to go with it. Third-party testing could have verified the cables then being used by the customer as well as any cables left for the future. Any failed tests would have been identified and fixed, before final payment of the contract. This is where the verification of your work by a third party can enhance your image with customers. Essentially, what you are saying to your customer is, "I'm so confident that our team's work will pass the cabling standards in place today, that it will pass the same standards testing when someone else looks at our work." Third-party testing has other positive spin-offs too. Where one company's bid may have lost out on the installation portion of the overall job, the same company's bid may win the testing portion of that same job. We do have to be careful however with third party testing - there is the danger of unscrupulous competitors being unfair, even slanderous, in their critiques - to their benefit and your detriment. This is the concept's Achilles heel. However, if everyone cooperates, the system could work. When communicating with the customer as the testing group, it's up to testers to present their findings in a constructive manner. They must be fair when reporting any problems to the customer, and give the installation company a copy of their test results with any explanations needed. Good communication between all parties involved during these projects is very important. Sometimes, though, there are no safeguards against competing companies being less than constructive in their reports on the installer's job. This too is unprofessional, perhaps even just as bad as a shoddy installation. Third-party testing could be a concept that companies in competition may find difficult to work at fairly. However, look at it from the customer's perspective. Here are two cabling companies working together to ensure that only high-quality network cabling jobs are being installed in the community. This could speak volumes for the network cabling profession. As customer faith grows after each installation, so might the sales of installations. Perhaps, after a while, a sort of league of installers and testers could be formed. The customers could access such a list in their area, to find and hire credible network cabling companies looking to fill cabling contracts. Currently, testing is generally part of the package of service a customer pays for, but third-party testing is becoming more popular. Consider ETL's Field Verification Program. Third-party testing has the potential to provide benefits for everyone involved. The customer gets a quality network cabling job, the cabling company is able to build a list of satisfied customers and, finally, the testing companies gain more knowledge and experience. So long as everyone cooperates and behaves fairly, everyone wins. There is an old saying among Bell Canada technicians that went something like this... "Really good installers started as experts in repair work."

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[The Structured Cabling system Verification Program](#)