



## **Test Plan**

Date: 09/11/2015

Project: Short Title

Testing the cabling infrastructure is performed by using an organized, systematic method to verify that the installation has been completed in accordance with all terms and conditions of the contract and industry standards per TIA-568-C.1, TIA-568-C.2 and TIA-568-C.3. See Spec Section 16050, Spec 3.02. This method is made up of three distinct phases which are:

- Phase 1 - Visual verification and inspection of cables
- Phase 2 - Performance cable testing with the various test equipment as required for each type of cable
- Phase 3 - Documentation

### **Phase 1**

The visual verification shall include an inspection of all pathways and spaces (where possible), telecommunications Closet and cables installed. Items to be inspected shall include:

- Infrastructure
- Cable placement
- Cable markings for UL or third party certification markings
- Cable termination to confirm to color code for T568A pin assignments per TIA-568-C.1, TIA-568-C.2, TIA-568-C.3
- Visual confirmation for Category 5e and CATV cables, marking of outlets, cover plates, outlet/connector and patch panels
- Grounding and bonding
- Compliance with codes, standards, and regulations

### **Phase 2**

Once the visual verification has been completed and all discrepancies corrected, performance testing shall be conducted with the necessary equipment required for each cabling type. Tests will be performed per Spec 16050, Section 3.02.A and Section 3.02.B and Section 3.02.C. The following is a list of field test parameters and equipment that will be used:

- Length
- Insertion Loss
- NEXT, PSNEXT, ELFNEXT, PSELFEXT
- Return Loss
- Propagation Delay
- Delay Skew

Equipment for testing:

- Fluke DTX-1800, Cable Analyzer

**Phase 3**

Documentation shall be provided showing tests performed are in compliance with TIA-568-C.1, C.2 and C.3