

6th December 2012

**A guide to Catholic Education Office of Sydney's additional requirements
for the testing of twisted pair and fibre installation.**

Background

This document has been prepared by VTI Services and approved by Catholic Education Office of Sydney to provide guidelines to the additional requirements for the testing of Catholic Education Office of Sydney sites.

Document Limitation

This document is provided for guidance only. All care has been taken in the creation of the document; however no claim that any or all issues have been identified and no responsibility will be accepted for its use. This document reflects VTI Services understanding of Catholic Education Office of Sydney's requirements at the time of publication; however should there be conflict between this document and the Catholic Education Office of Sydney's requirements, Catholic Education Office of Sydney's requirements takes precedence. The testing requirements of Catholic Education Office of Sydney may change at any time without notice. Specifications should be read to determine testing requirements before testing is undertaken.

General Requirements

Independent test result analysis

Catholic Education Office of Sydney require on nominated projects that the fibre and twisted pair test results be submitted to an approved NATA accredited inspection body for evaluation. The associated "Statement of Compliance" and report form part of the acceptance requirements of the project.

Catholic Education Office of Sydney's approved NATA Inspection body

VTI Services
16 Banbury Crescent
Chipping Norton.NSW.2170
Telephone: 61-2-98242412
Email: office@vti.net.au
Contact: Murray Teale

Test Equipment

All test equipment must be in calibration at time of testing

Twisted Pair Requirements

Test Requirements

- Permanent link testing shall be carried out to the compliance requirements of AS/NZS3080 Permanent Links.
 - Until the publication of Class EA Permanent Links with Australian Standards or amendments
 - Testing shall be carried out to the latest Class Ea Permanent link draft standard.
 - Compliance shall be established against class Ea (draft) and class E permanent link requirements- Class E requirements can be established from class Ea test data with full plot data recorded without the need for retesting
- Correct adaptors must be used for all testing (Channel adaptors are unacceptable for permanent link testing)
- Marginal/Conditional Passes (Pass*) are not acceptable
- Full Plot Data must be present
- Test results must be provided electronically

Approved Testers

- Twisted pair testers utilised for testing of Catholic Education Office of Sydney's installations must meet defined requirements.
- Testers meeting these requirements which have been approved by Catholic Education Office of Sydney include
 - Fluke DSP4100- Fluke DSP4300-Fluke DTX1200-Fluke DTX1800
 - Wirescope 350 and Wirescope PRO

Please note: - Support for the Fluke DSP 4xxx range of testers ends 31/12/2010 for both fibre and twisted pair

Fibre Requirements

- Permanent link testing shall be carried out to the compliance requirements of AS/NZS3080 for all fibre cores.
- LSPM testing shall be carried out in two directions and at two wavelengths on all installed links
- LSPM Test results will be provided electronically in the testers' native format along with VTI Services fibre reporting sheet completed (www.vti.net.au)
- All fibre cores shall **additionally** be tested with an OTDR utilising a launch and a tail cable in one direction and at both wavelengths
- All OTDR testing shall be presented in a Bellcore format
- No mated connectors are to have an optical attenuation loss exceeding 0.75dB-Analysis by two point LSA method on the OTDR trace.
- No mated connector shall meet the following minimum optical return loss requirements
 - 20 dB for Multi-mode
 - 35 dB for Single-mode
- The pass fail criteria will be that specified within AS/NZS ISO/IEC 14763.
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Note: Catholic Education Office of Sydney requirements include a copy of all reports generated associated with their projects be sent to Catholic Education Office of Sydney on the creation of a report.