

Design brief for consultants specifying works for Building and Asset Services (BAS)

The following documents contains minimum requirement for Building and Asset Services (BAS).

All work is to meet the requirements specified within **BAS specifications xxxx**

Notwithstanding the requirements contained within BAS specification all telecommunication cabling shall meet or exceed the following:

1. All telecommunication cabling shall comply to AS CA S009
2. All telecommunication cabling products shall comply to AS/CA S008
3. All laser safety labelling associated with telecommunication shall comply to AS/CA S009
4. The telecommunication outlet cabling shall be a minimum of category 6
5. All telecommunication outlets, harness cabling and backbone Twisted Pair cabling shall be tested utilising a AS/NZS ISO/IEC 61935-1 compliant tester suitable for the cable under test
 - a. Permanent link testing is to be carried out
 - b. Conditional/marginal passes are deemed as non-compliant to BAS requirements
 - c. A Statement of conformance shall be provided for all 6_A, 7 and 7_A to address alien crosstalk
6. All Optical Fibre cables shall be tested with a Light Source and Power Meter (LSPM).
 - a. LSPM shall be carried out to AS/NZS ISO/IEC 14763-3
 - b. LSPM testing shall be carried out in two directions and at two wavelengths
 - c. In accordance with AS/NZS ISO/IEC 14763-3 the modal condition at the output of the light source test cord shall meet encircled flux requirements
 - d. All LSPM test documentation shall comply with documentation requirements specified within AS/NZS ISO/IEC 14763-3
 - e. All LSPM shall utilise a one test cord referencing method
7. Optical Fibre cables exceeding 100 metres shall additionally be tested with an OTDR in accordance to AS/NZS ISO/IEC 14763-3
 - a. OTDR testing is required to produce a Signature trace only
 - b. OTDR testing shall utilise a launch and a tail cord
 - c. All test equipment is to be in calibration at time of testing
 - d. OTDR signature traces requirement.
 - i. Tested in one direction and at two appropriate wavelengths
 - ii. Optical attenuation of a mated connector shall not exceed 1.5 dB
 - iii. The ORL of a mated connector shall not exceed
 1. -35dB for Single-mode installation and
 2. -20dB for a Multi-mode installation
 - iv. The optical attenuation of mated connectors (including the associated splice) shall not exceed 1.5 dB
 - v. The optical attenuation of a splice shall not exceed 0.6 dB
 - vi. The optical attenuation of an embedded event shall not exceed 0.2 dB
8. All test data is to be verified by an approved NATA inspection body

References

BAS Specification	
AS/CA S008	Requirements for Customer Cabling Products
AS/CA S009	Installation requirements for Customer Cabling (Wiring Rules)
AS/NZS ISO/IEC 14763-3	Telecommunications installations – Implementation and operation of customer premises Cabling – Part 3: Acceptance testing for Optical Fibre cabling
AS/NZS ISO/IEC 61935-1	Testing of balanced communication cabling in accordance with ISO/IEC 11801 Part 1: Installed Cabling