

1st November 2010

AS/NZS 3760: 2003 has been updated to AS/NZS 3760: 2010

Australian & New Zealand Standard 3760 has been in its current form for the past 7 years & has now been changes & updated to a new version as of October 2010.

Following several drafts that were released for public comment the Standard has undergone some changes & those of you undertaking testing & tagging to this standard need to adhere to the guidelines of the new updated version. The full version of the standard is available for purchase at <u>www.saiglobal.com</u> Those attending our courses will be given this essential information as part of their course material.

The standard has been completely re-written & whilst there are many changes to the wording & certain sections have been moved & edited, there are no major changes to the actual process of testing & tagging & parameters programmed into automated Pass/ Fail portable appliance testing equipment will remain valid. Below is a brief summary of the new or revised content for your guidance.

Responsible Person

AS/NZS 3760:2010 gives greater power to the "responsible person" of the workplace which is normally the owner (or someone who the owner appoints) of the business. The standard now better defines the role of the responsible person & also gives them guidelines to ensure that the knowledge of the person conducting the testing & tagging is sufficient & that they have undergone a level of training to deem them to be a "competent person". Appendix B defines the knowledge required by the competent person (see below)

APPENDIX B (AZ/NZS 3760:2010)

GUIDELINES ON THE ELECTRICAL KNOWLEDGE OF A COMPETENT PERSON

(Informative)

B1 GENERAL

Guidelineson the electrical knowledge and other principles with which a **competent person** is likely to be familiar are provided below on an indicative basis only.

NOTE – Additional information may be available from electrical or OH&S regulators in the various jurisdictions.

B1.1 Basic electrical principles

- (a) Introduction to electricity, AC and DC;
- (b) Electrical units: Amps, Ohms, Volts.

B1.2 Circuit protection

- (a) Fuses;
- (b) Circuit breakers;
- (c) Residual current devices (RCDs).

B1.3 Electrical safety

- (a) Working with electricity;
- (b) Effects of current flow.

B1.4 Inspection and testing to AS/NZS 3760

- (a) Inclusions and exclusions;
- (b) Classes of equipment;
- (c) Types of insulation;
- (d) Protective earth operation;
- (e) **Insulation** resistance;
- (f) Leakage current;
- (g) Correct and safe use of test equipment.

B1.5 Applicable to jurisdictional regulations

Regulatory requirements of country, state or territory.

Changes to test periods as per Table 4.

Essentially the majority of test periods for the different classes of equipment & environments have remained the same with the exception of;

- Time frames for Class I & Class II items in Manufacturing environments have been aligned & are now both required to be tested & tagged every 6 months.
- The Cord extension sets & EPODS column has been removed & these now align with the testing requirements of Class I & Class II
- Equipment used for Commercial Cleaning has been brought into 6 monthly testing & all portable RCD's used in this environment need to have a manual push button test done daily or before each use.

Items that are New to Service

The standard still makes mention that new items are covered under manufacturer's warranty for the first test period but they must now be tagged to say that the item is "New to Service" and has not been tested in accordance with AS/NZS 3760. The tags must also state the date of introduction to service & when the first test is due.

Changes to information on Test Tags

The new version of the standard requires some additional information to be recorded on the Test Tags. The tag must now include a re-test date as well as the test date & there must also be a reference to AS/NZS 3760 on the tag.

Testing Items with functional earthing

Some Class II items may contain a functional earthing connection which is an integral part of the operation of the appliance & not part of its safety mechanism. Conducting an earth bond (not part of a standard Class II test anyway) on these items may place the item in danger. The new standard now defines these items & specifies pass/fail limits for testing purposes.

Leakage Current testing on submersed items.

The standard now specifies a specific testing procedure for all items that are designed to operate underwater (such as pumps) & stipulates that such equipment must have a leakage test carried out whilst submerged. Care should be taken when conducting this test as water & electricity can be lethal if proper care is not taken.

The above are the major changes. There have been some additional diagrams added to certain sections which are designed to illustrate the testing process for various items.

We recommend that all persons carrying out testing & tagging check with the regulatory bodies in their jurisdiction as there are variations in OHS regulations across the States & Territories. Essentially they all refer back to the standard as the basic guideline but they may require different levels of qualification in order to carry out the testing.

For business owners or "responsible persons", we recommend that you ensure that whoever carries out your testing & tagging has the suitable level of training & qualifications required.

If there are any questions regarding testing & tagging to the Australian & New Zealand requirements, please feel free to contact us at Test & Tag Training on 1300 848 302.