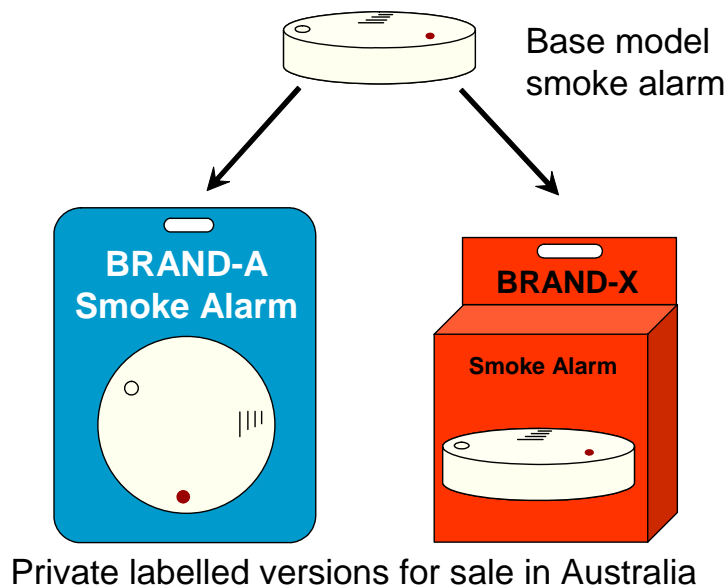


**AS 3786 SMOKE ALARMS**  
**PRIVATE LABELLING OUTLINE**

## 1. BACKGROUND

It is common for manufacturers of smoke alarms to use a number of distribution channels when supplying products into the Australian market. A single model of smoke alarm may be supplied into the market under a number of differing product brands, each with their own unique product designation (refer also to GN-001, 'Verification of conformity, product designation'). This practice is known as 'private labelling' (previously referred to as cross-listing or branding).



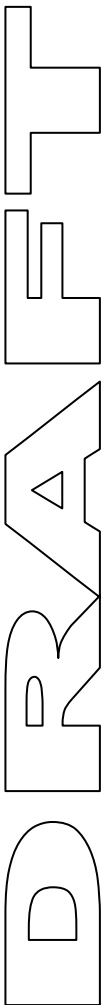
This document provides a guideline for CSIRO's customers wishing to have their smoke alarm products evaluated for conformity with AS 3786, then supplied into Australia under one or more designations.

## 2. EVALUATION FOR CONFORMITY

A listing in CSIRO's ActivFire Scheme requires evidence verifying conformity of the product to the selected criteria. AS 3786-1993 is the current Australian Standard for smoke alarms which is recognised by the Building Code of Australia (BCA) and various State based legislation as the criteria for installation into Australian buildings. The evidence required by ActivFire is usually an evaluation report which provides a 'statement of conformity' for the product.

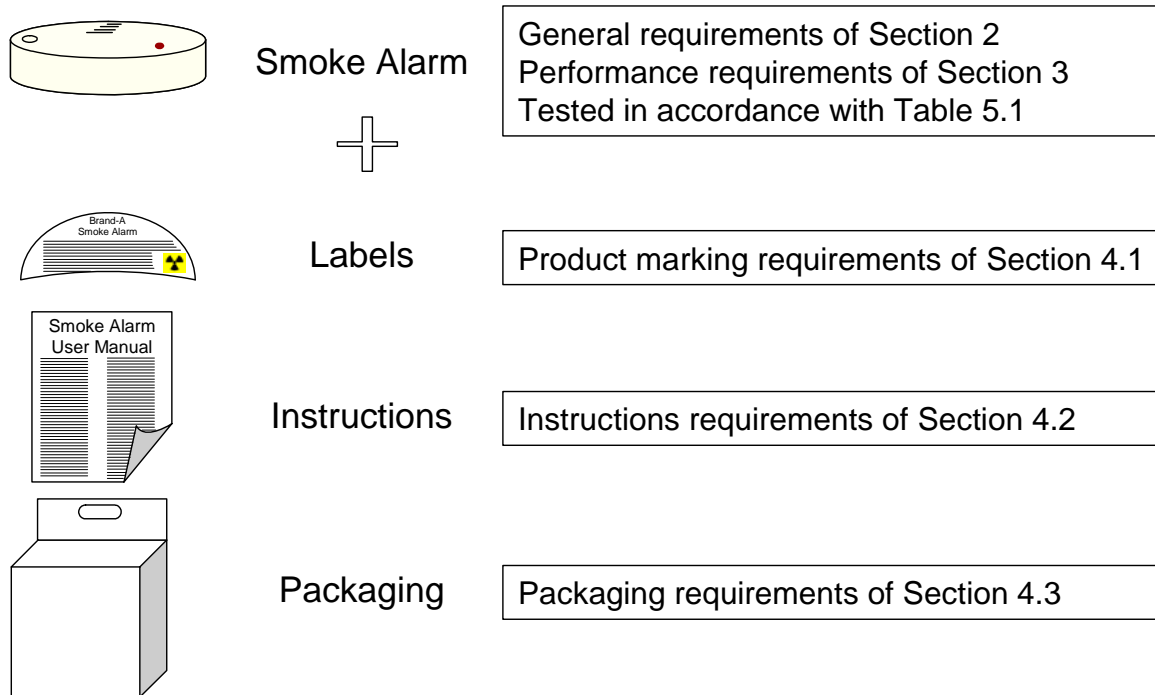
In evaluating a product for conformity to the requirements of AS 3786-1993, the following broad requirements are assessed (see diagram on following page);

- General requirements to Section 2: Evaluates the design and construction of the smoke alarm along with specific features and capabilities.
- Performance of the smoke alarm to the requirements of Section 3 according to the test schedule detailed in Section 5: Covers physical testing of the smoke alarm for sensitivity, electrical requirements, false alarm resistance and environmental performance.
- Product information and Marking to Section 4: Evaluates the marking of the smoke alarm and information supplied with the product (including manuals and packaging).



### 3. TWO STAGE EVALUATION

For products which are to be supplied into Australia under a number of different designations, the evaluation for conformity is typically done in a number of stages (see following diagram)



Typically, a product manufacturer will submit a *root product* for evaluation to the requirements of Sections 2 and 3 of the standard. At this point, the alarm is not compliant with AS 3786, but has been evaluated against part of the Standard.

The *root product* can then be submitted as it will be supplied into Australian market (with the appropriate packaging, etc.) as a *derivative product*. The *derivative product* is then evaluated to the requirements of Section 4 of the Standard, with reference to the original testing of the *root product*. The two reports provide relevant evidence of conformity for listing under CSIRO's ActivFire scheme.

For additional *private labelling* with further product brands, the manufacture need only submit other *derivative products* for evaluation to Section 4 of the Standard.

### 4. ROOT PRODUCT MANAGEMENT

The evaluation procedure above refers to the *root product* and *derivative product*.

- root product* - The basic physical smoke alarm product subjected to the assessments and physical tests required by AS 3786, and detailed in test reports.
- derivative product* - Products which rely on the physical testing carried out on a *root product* as evidence of their conformity. The *derivative product* may be identical to the *root product* (such as in private labelling situations) or a design variant of the *root product*.

When considering design and product changes, manufacturers must be aware of the relationships between their *root products* and *derivative products*. Any change and re-assessment should be carried out on the *root product*, and then applied to the *derivative product* through documentation.

## 5. PRODUCT DESIGNATION

When selecting a designation (brand and model) for *private labelled* smoke alarms, manufacturers should ensure that the product is fully, unambiguously and uniquely identified. GN-001, 'Verification of conformity, Product designation' provides additional information on this matter.

## 6. OTHER CONSIDERATIONS

When considering the private labelling of smoke alarms, manufacturers should be aware of peripheral organisations which may play a role in the supply chain.

### 6.1. Electrical Safety

The Standard requires mains powered smoke alarms to meet electrical safety requirements. CSIRO does not assess the electrical safety aspects of smoke alarms, but requires evidence of assessment by an electrical regulatory body. In Australia, these electrical bodies are controlled by the individual States and Territories across the country. A starting point for information on electrical safety regulation is the Electrical Regulatory Authorities Council ([www.erac.gov.au](http://www.erac.gov.au)).

### 6.2. Radiation Licence

Any ionisation smoke alarms (those containing a radioactive source) are subject to the regulatory requirements of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and individual State Government regulators.

- Under Customs Regulations (Prohibited Imports), a permit from ARPANSA is required for the import of radioactive substances.
- Under individual Australian State and Territory legislation, licenses are required for the storage and sale of ionisation smoke alarms.

It is a requirement of AS 3786 that appropriate licences are obtained. The ARPANSA website ([www.arpansa.gov.au](http://www.arpansa.gov.au)) provides detailed information on the licences required and the procedures involved. This website also includes a link to the individual State and Territory based regulatory bodies.

ARPANSA also offer a useful fact sheet on ionisation smoke alarms (Radioactivity in Domestic Smoke Alarms) available at their website.

### 6.3. Barcoding

While not a requirement of the Standard (and therefore not part of the CSIRO assessment), products which are to be sold through retail distribution in Australia are marked with barcodes to enable scanning at point-of-sale. The allocation of barcodes is coordinated in Australia by GS1 Australia ([www.gs1au.org](http://www.gs1au.org)). Contact GS1 for details of requirements in this area.

## 7. SUMMARY

To assist manufacturers who use alternate brands when supplying products into the Australian market, CSIRO offers a procedure for *private labelling* smoke alarms. The manufacturer's *root product* is assessed to the operational and physical requirements of AS 3786. The *private labelled* (branded) versions of the product are then assessed to the marking and information requirements of Section 4 of the Standard.

When considering *private labelling* of smoke alarms, manufacturers need to consider the regulatory authorities that play a role in the supply of smoke alarms in Australia.

For any questions or additional information, please contact CSIRO - Fire Systems Group on 61 (0)3 9252 6000 or visit the CSIRO's ActivFire web site at <http://www.ActivFire.gov.au>