

PASSIVE FIRE & SMOKE CONTAINMENT SYSTEMS: TRAINING, ACCREDITATION & LICENSING OF INSTALLERS, REPAIRERS & CERTIFIERS.

A paper prepared for the AIRAH – Active and Passive Smoke Control conference, November 28th, 2003 by John Rakic for the Alliance for Fire & Smoke Containment

Abstract

The quality control of workmanship and the ultimate reliability of correctly specified fire and smoke containment systems can be improved if they are installed, repaired, maintained and regularly certified as in “good working order” by COMPETENT workers. Although this statement is pretty straightforward, and not too many of us would argue with it, the reality is that many installations are not installed to manufacturer’s specifications and/or are not maintained in “good working order” and therefore they pose a risk in the advent of a fire. In terms of Passive Fire and Smoke Containment systems, not unlike other fire safety systems, one could argue that part of the reason is that the legislation in ALL states and territories until recently in Queensland only, and only for some specific systems, did not have any mandatory training, accreditation or most importantly licensing of installers of these systems.

Passive Fire and Smoke Containment systems, and other fire safety sub systems for that matter, are installed for life safety purposes and in some cases for the added protection of the property or the business itself, and these systems should in the view of the Alliance for Fire and Smoke Containment and the author himself, be subject to some stringent legislative control over who can and cannot install, repair and certify them.

This paper will provide an overview and update on the National competency based training initiatives coordinated by the Australian National Training Authority, (ANTA) and how they apply to Passive Fire & Smoke Containment Systems. It will attempt to explain how these National competencies and the associated Nationally endorsed National Training Packages may be successfully integrated into future State and Territory Legislative changes, requiring licensed installers, repairers and certifiers of these systems. The current status of the Property Services Training Australia’s, DRAFT Training Packages and its application to Passive Fire and Smoke Containment systems will be discussed as well as the status of licensing in this area for Queensland, New South Wales and Victoria.

The National Training Framework – What is it and how does it all work?

Vocational Education and Training (VET) - What is it?

Vocational Education and Training, VET, is ‘education and training for work’. It exists to develop and recognise the competencies or skills of learners.

It has traditionally been seen as post-secondary, non-university education and training, focusing on apprenticeships. But reforms in the past decade now see vocational education and training programs offered in secondary schools, stronger links with university study options and six levels of qualifications offered in most industries, including high growth, new economy industries

ANTA – Who are they and what do they do?

The Australian National Training Authority, (ANTA), is a Commonwealth statutory authority providing a national focus for vocational education and training.

The ANTA Agreement brings together Commonwealth, State and Territory governments to provide the policy and regulatory frameworks for the VET system. Governments implement the National Training Framework (which includes Training Packages and the National Quality Training Framework) to enable consistency, quality and national recognition of provider services. Governments also provide approximately half the funds for the system - the other half being provided by enterprises and learners themselves.

Vocational Education and Training in Australia is an **industry-led system**, through the leadership of an **industry** ANTA board and through the development of **industry-recognised** training packages by representative bodies.

AQTF – What is it and what is it made up of?

The Australian Quality Training Framework, (AQTF), was developed by the National Training Quality Council of the Australian National Training Authority, (ANTA) in conjunction with the Commonwealth and industry and endorsed by Ministers for vocational education and training on 8 June 2001.

The key objective of the AQTF is to provide a basis for a nationally consistent, high quality vocational education and training system.

The AQTF provides a framework for registration of training organisations, (Registered Training Organisations, RTO's), and registration of associated training packages and/or training courses.

Mutual recognition is critical to the operation of a nationally consistent vocational education system and is a key principle underlying the AQTF and ensuring decisions in relation to vocational education and training have national effect.

Under mutual recognition, each State and Territory has agreed to recognise the decisions of all other States and Territories in registering training organisations and in accrediting training packages and courses.

Registered Training Organisation (RTO)

A training organisation must be registered with ANTA if it wants to issue AQTF qualifications in the vocational education and training sector and to deliver the associated training and/or undertake the associated assessment of individual's competencies. To obtain and maintain ANTA registration, RTO's must meet the stringent Standards for Registered Training Organisations.

What is a training package?

Training packages are a key feature of vocational education and training in Australia. They are an integral part of the National AQTF that aims to make training and regulatory arrangements simple, flexible and relevant to **industry needs**.

Training Packages are developed by industry for industry.

The Australian National Training Authority (ANTA) funds National Industry Training Advisory Bodies (ITABs) and Recognised Bodies to develop Training Packages. Extensive consultation occurs during development to ensure that the Training Package is relevant and useable. And

before the completed Training Package is endorsed for use, the developer or ITAB must validate it and show that it has ***broad industry support***.

Training Packages encourage training at work.

Training may occur at the workplace, off the job, at a training organisation, during regular work, or through work experience, work placement or work simulation. Usually it involves a combination of these methods, depending on what suits the learner and the type of learning and particular vocational outcome.

Training Packages provide many pathways to competency.

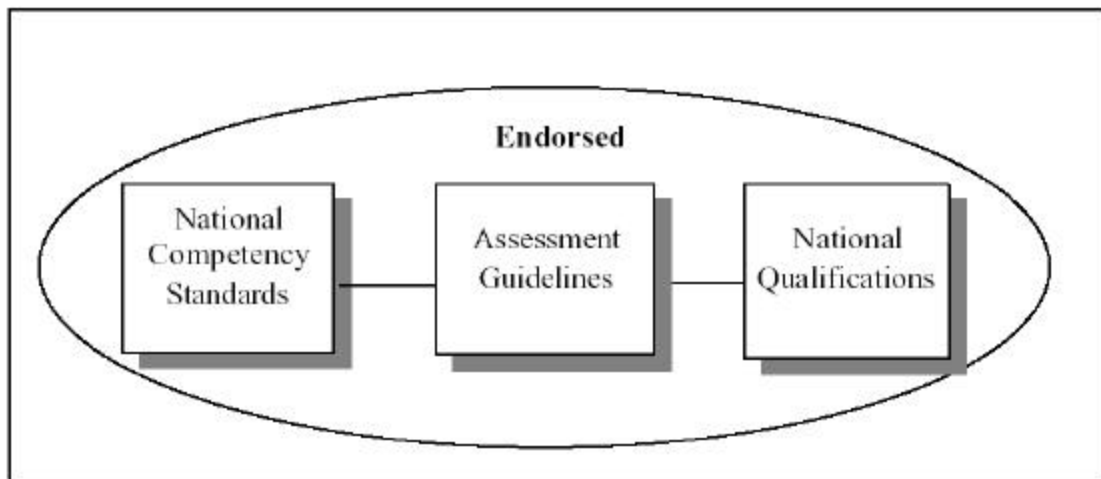
Australians can achieve vocational competency in many ways. Training Packages acknowledge this by emphasising what the learner can do, not how or where they learned to do it. For example, some experienced workers might be able to demonstrate competency against the standards and gain a qualification without completing a formal training course.

Training package components

A Training package consists of endorsed materials and support materials.

Endorsed materials

There are three ANTA endorsed parts: competency standards, national qualifications, and assessment guidelines.



Competency standards

These provide an industry benchmark for training and assessment. They specify the scope of knowledge and skills to be covered in the Training Package. They enable enterprises to accurately define particular roles within industry, and are a useful guide when designing job classifications, workplace appraisal, and skill development. They are the basis for designing vocational education and training courses and assessment approaches for delivery off the job by registered training providers.

Key features

- Each unit of competency identifies a discrete workplace requirement.
- Units incorporate the knowledge and skills that underpin competency. They encompass relevant values and attitudes, language, literacy and numeracy, and Occupational Health and Safety requirements.
- Key competencies are identified at the unit or qualification level.

- Units are flexible in how they can be applied, but they are sufficiently detailed to guide Registered Training Organisations (RTOs) and assessors, and to provide consistent outcomes.

National qualifications

Within Australian Qualifications Framework (AQF), National qualifications are awarded when a learner (who might be an employee) has been assessed as achieving a combination of units of competency that provides a meaningful outcome at an industry or enterprise level. Each qualification consists of a number of core and/or elective units of competency that industry representatives consider workers require to perform a particular job. Where an individual achieves one or more units of competency without completing a qualification, a Statement of Attainment is issued that recognises their achievement.

Key features

- Each qualification (comprising specified units of competency) is aligned directly against the AQF.
- The qualifications covered within a Training Package may range from Certificate to Advanced diploma, and will include the national title for each qualification.
- New Apprenticeship pathways will be identified within the Training Package.
- The qualification will display the Nationally Recognised Training logo.

Statement of Attainment

These are issued to individuals who have been assessed and deemed competent against a unit of competency. Statements of Attainment issued by one RTO must be recognised by other RTOs. Accrual of specified Statements of Attainment can eventually lead to a learner meeting all the requirements of a qualification.

Key features

- Statements of Attainment will identify the units of competency for which the individual has been assessed and is deemed competent by the RTO.
- They will display the Nationally Recognised Training logo.
- They will identify the RTO.

Assessment guidelines

These provide a framework for accurate, reliable and valid assessment of the applicable competency standards. They ensure that all assessments are thorough, consistent and valid. They provide important quality assurance in the issuing of qualifications.

Endorsed components of a Training Package may be complemented and supported by the development of optional learning strategies, assessment tools and professional development materials.

Support materials

Support materials to be used in conjunction with a Training Package can be produced by RTOs, private and commercial developers, Department of Education, Science and Training (DEST), State Training Authorities or through ANTA. They can consist of:

- **learning strategies/delivery guides** that assist training providers to design specific training programs that will help trainees attain the required competencies

- **assessment materials** that can be used by assessors to gather sufficient evidence of competency to make reliable judgments about whether a person has met the required competency standard
- **professional development materials** that provide information, hints and resources for trainers and assessors that will help them successfully implement the Training Package

RTOs will usually develop their own supporting resources. They can also draw upon any other resources developed specifically to support the Training Package.

National Competencies for Passive Fire & Smoke Containment Systems

Property Services Training Australia (PSTA) is one National Industry Training Advisory Body (ITAB), which has been active in the development of training packages that are or will become ANTA endorsed.

The author, through his involvement with both the Fire Protection Association and the Alliance for Fire & Smoke Containment, has been involved in the promulgation of some competencies in the area of Passive Fire and Smoke Containment, which have been included in DRAFT training packages by PSTA which are close to final endorsement by ANTA at the time of writing, (November 2003).

The competencies that have been developed include:

- Installation, maintenance and repair of fire & smoke doors, fire protection coatings and fire stopping systems within the Asset Maintenance Training – Fire Protection Equipment FINAL DRAFT Training Package, and
- Certification of fire & smoke doors, fire protection coatings and fire stopping systems within the Asset Maintenance Training – Fire Safety system Inspections FINAL DRAFT Training Package.

It is envisaged that these training packages will both be endorsed by ANTA towards the end of 2003 or early in 2004. This will result in the “foundation” for training, accreditation and licensing in the Passive Fire & Smoke Containment systems area, and Registered Training Organisations can develop training materials / courses to compliment the competencies and issue certificates of attainment for those individuals whom are deemed competent in these areas, from which accreditation and licensing can be articulated.

Note – The DRAFT training packages can be viewed on line at www.pstrain.com.au

Queensland - Passive accreditation and licensing system

On the 1st of July 2001, through some enacted amendments to the Queensland Building Services Authority (BSA) Act & associated Regulations, in the State of Queensland, it became mandatory for those wanting to contract in Passive Fire & Smoke Containment areas to require a BSA license. The licensing categories in the revised 1992 BSA Regulations at that time covered installation, repair and certification of fire doors & roller shutters, and “drywall” wall & ceilings only.

In terms of the Passive Fire & Smoke Containment industry sector, and many other fire related contracting disciplines, Queensland became the first state to require licensing to contract in the particular disciplines, and the author applauds Queensland for taking the initiative. Other States and Territories have been taking a watching brief and to date have not made company licensing in the Passive Fire & Smoke Containment industry sector mandatory.

On July 1st, 2003, with the enactment of the new BSA 2003 Regulations, an additional license category for installation, repair and certification of penetration and joint seals was introduced to compliment those existing for fire doors & roller shutters and “drywall” wall & ceiling linings.

In terms of technical qualification requirements, which form an integral part of the BSA licensing requirements, along with managerial qualifications, experience requirements and financial requirements, in the absence of ANTA endorsed training packages, the BSA Queensland has had to rely on regional accreditation based on in some cases “ad hoc” regional training courses and in the case of penetration and joint sealing, statements of competence from the manufacturers of the products themselves.

The Queensland BSA patiently awaits ANTA endorsed training packages delivered by Registered Training Organisations so they can alter the technical qualification requirements within the local BSA Regulations. Of course this will “underpin” the whole accreditation and licensing process from which BSA can then issue licenses and which will of course qualify for mutual recognition status with other States and Territories.

New South Wales – Passive accreditation and licensing

As discussed above, NSW does not currently have any mandatory licensing in the Passive Fire & Smoke Containment area.

The Parliamentary enquiry into the Quality of Buildings in NSW and the Campbell report produced at the completion of the enquiry identified a number of recommendations and one important one has seen the formation of the NSW Home Building Service (HBS). The HBS has jurisdiction to license all practitioners who contract for residential building work and Specialist work as defined in the NSW Home Build Act and Associated Home Building Regulation.

The Alliance for Fire & Smoke Containment is currently having discussions with key personnel at HBS to ensure, for high-rise residential apartments, that those contractors involved in the installation, repair and certification of Passive Fire and Smoke Containment require licensing. As the HBS has only been in operation for a short period and are coming to grips with establishment and other key priorities, we obviously all need to be patient, but we are prepared to help make this important development happen in a timely and professional manner.

The creation of the NSW Home Building Service may in fact be the precursor for an all encompassing and peak body responsible for contractor licensing in the Building Industry, akin to the QLD BSA.

Victoria - Passive accreditation and licensing

As discussed above, Victoria also does not currently have any mandatory licensing in the Passive Fire & Smoke Containment area.

There is however in Victoria, a peak body, namely the Building Commission, which deals with building practitioner registration or licensing.

At the time of writing, the Building Commission has published an Industry Discussion paper, which is open for comments before the end of 2003, The title of the discussion paper is “Review of the categories and classes of building practitioner in Victoria, 30 September 2003” and it can be obtained from the Building Commission’s web site.

Discussion paper Issue number 6, deals specifically with the issue of whether or not every practitioner discipline that has a specific qualification, should in fact have a category or class of registration created.

This is a good opportunity for the Alliance for Fire & Smoke Containment, AIRAH, FPA Australia and other key stakeholder, industry groups and the like to orchestrate its views to the Building Commission.

So what does the future hold in terms of Training, Accreditation and Licensing for the Passive fire and smoke containment industry?

Licensing of practitioners through State and Territory Governments is not a new concept, Residential builders have been licensed in most States and Territories for many years, and in some instances other practitioners are licensed, and in Queensland in more recent times, as discussed above, most companies involved in the building industry, including those who install, repair and certify Passive fire and smoke containment systems require licenses.

Licensing, underpinned by effective accreditation bodies and nationally endorsed competency based training, provides the consumer with confidence that the contractor has the correct skills and financial resources / insurance policy to provide the necessary services to fulfill their contractual obligations.

The development and implementation of the necessary building blocks for licensing in the Building Industry; this is the nationally accredited training package, the formation and administration of the accreditation bodies, and the licensing reform legislation is a large project, requiring close working liaison by Government and the relevant key industry stakeholders. In the Fire Protection / Life Safety area, and in particular in the Passive fire and smoke containment area, the author strongly believes that this is a project that should be supported in all States and Territories. The Queensland Government and industry should be commended for initiatives and progress to date in this area.

The involvement / support of each of the key stakeholders is summarized below:

Government / Regulators

The respective Government department responsible for Building Control is governed by the need to protect lives and/or operate on a simple Cost – Benefit analyses scenario for all reform initiatives it implements. In terms of licensing of Passive fire and smoke containment systems, as long as the benefits have significant implications on life safety and/or they provide an overall and significant benefit to the community at large, and at a marginal cost increase, the initiatives should be supported.

Key industry bodies

Key industry bodies, such as AIRAH, FPA Australia and the Alliance for Fire & Smoke Containment, whose members are actively involved in the Passive fire and smoke containment industry sector, need to help the respective Governments with understanding both the potential effects on life safety and the overall benefits to community, of developing, implementing and maintaining a licensing system for this important area of the overall fire safety systems in our building stock.

The key industry bodies will need to work together to develop and administer the peak accreditation body or bodies and the necessary training packages necessary for the overall licensing system to work.

The proposed nationally endorsed competencies for Passive fire and smoke containment being coordinated by Property Services Training Australia, once endorsed, will provide the necessary foundation for the whole process.

Time is of the essence, and work needs to start now in relation to forming the peak accreditation body and bodies and developing the endorsed training packages.

The author would hope that this paper and this AIRAH conference may act as the catalyst to start off the process of melding the key industry groups into one cohesive Group / Voice to work with Government and drive this initiative forward and to completion.

Industry practitioners

The specialist Passive fire and smoke containment contracting organisations themselves have an important role to play in the overall process.

They need to support the key industry groups such as the Alliance for Fire and Smoke Containment as one example only, by helping with resource both financial (memberships) and their expertise (development of training packages). Many of the specialist contractors in this area in NSW, with the support of sponsoring supplier / manufacturer members, have already accepted the challenge and have become sponsoring installer / essential service provider members of the Alliance for fire and smoke containment. Both membership categories and the respective companies who are members can be found at www.pfpa.com.au and readers are urged to take a minute and visit this web site that has been developed as part of the Alliance for fire and smoke containment.

What is also seen as of paramount importance is the development and implementation of an initial *voluntary* third party accreditation scheme for practitioners in the Passive fire and smoke containment area. One such scheme is Certifire Australia. Certifire Australia is a voluntary scheme that has been around for a number of years now and up until now it has not been supported very well by industry. Perhaps it needs a different focus and more overall industry support, and then it may be a vehicle for this initial voluntary third party accreditation.

Why is this important?

If a voluntary accreditation scheme is functional, and has the support of most key contractors, then the Government Regulators will find it easier to conclude that the overall cost increase to legislate for licensing / accreditation will be minimal as it already exists and consumers are already paying for accredited contractors to provide these services. One needs to have the vision and see this path as a necessary milestone in the overall process.

Conclusion

The Federal Government, with the support of the respective State and Territory Governments developed and introduced the Australian Quality Training Framework and the Australian National Training Authority is operational. In relation to the Passive fire and smoke containment industry sub sector, some DRAFT national competencies have been developed through Property Services Training Australia, and once nationally endorsed will provide the necessary foundation for the subsequent development of State and Territory accreditation bodies and endorsed competency based training packages which will underpin licensing in this area.

Key industry stakeholders, such as the industry groups / associations and the practitioners themselves, must work together to support the necessary reform in this area and the Alliance for fire and smoke containment has been formed to take a lead role in this initiative and to help coordinate an uniform approach. Government regulators will embrace the assistance of industry in area that inevitably will become a priority item for them.

The overall effect will provide consumers with some confidence that the licensed contractor they choose will be competent and will be financially secure and have the relevant insurance to enable

quality and reliable installation, repair and certification of Passive fire and smoke containment systems. After all, we are talking about essential fire services that are designed to *save life, property and the built environment*. We cannot sit back and expect it to happen. We must all get involved.

About the Alliance for fire and smoke containment

The Alliance for Fire and Smoke Containment (The Alliance) was formed in early 2002 with the support of founding members to provide a uniform and coordinated approach for the passive fire protection industry.

The Alliance allows members to deliver relevant information to all building professionals via a web site, writing and disseminating technical papers, seminar presentations, quarterly newsletter and relevant electronic email updates.

Consultants, designers, installers, manufacturers, suppliers and maintenance providers are all encouraged to support and actively participate to improve best practice in the passive fire protection industry by becoming financial Alliance members. Please refer to the opposite page for our membership structure

Shared Goals

- *Promote passive fire protection as part of a total fire safety design approach*
- *Promote property protection and public welfare as well as life safety*
- *Promote fire fighter safety and facilitate fire fighting activities*
- *Disseminate technical information to the Fire Safety Community*
- *Promote competency based training, accreditation and licensing*

About the Author

John Rakic is the founder and current Executive Officer of the Alliance for Fire & Smoke Containment, managed by his own consulting company J-RAK Consulting.

John has an under graduate degree in Mechanical Engineering from Swinburne University, an MBA from Deakin University and a Master in Fire Safety Engineering from VUT/UWS. He has worked for BHP Steel, James Hardie, Tyco and Lorient with varying roles accumulating experiences in both commercial and technical areas and across many countries.

John is one of our active Australian Nationally elected delegates to International Standards Committee ISO TC92 SC2 (fire and smoke containment) as well as a member of Australian Standards Committees FP18 (Fire Safety Engineering and Fire Testing), FP19 (Passive Fire Protection), and ME62 (Ventilation & Air Conditioning). John is also a member of FPA Australia's National Technical Advisory Committee and Convenor of FPA Australia's Technical Committee, TC18 dealing with Passive Fire Protection.