



Friday, December 11, 2020

Association of Accredited Certifiers/Australian Institute of Building Surveyors,

Re: Designing mechanical fire and smoke control systems: Advice when considering the competency of mechanical engineers

New requirements have been introduced for fire safety practitioners in NSW*. The previously named competent fire safety practitioners (CFSP) are now called Accredited Practitioners (Fire Safety), or APFS, and must be accredited under the Fire Protection Accreditation Scheme (FPAS) where this is applicable.

Alternatively, for design of non-FPAS disciplines (such as mechanical services), there is scope for the certifier to independently assess a practitioner's competence and experience. This is currently the case for mechanical engineers working in fire safety aspects of HVAC design.

But how does a certifier assess whether a practitioner is competent? Without any independent accreditation scheme in place, this becomes a difficult undertaking with considerable risk.

In the absence of a qualification or accreditation, the NSW government has recommended that registration in the class of "engineer-mechanical" with NSW Fair Trading (previously known as C9) should be accepted. However, this class of registration has not been widely taken up since its introduction in the early 2000s. Only 30 or so mechanical engineers have it. Nor is it the best measure of an engineer's competence in this area of design.

The Australian Institute of Refrigeration, Air Conditioning and Heating (AIRAH) is Australia's peak membership body for mechanical engineers working in HVAC&R and building services. AIRAH members are experienced practitioners and often experts in fire safety design for mechanical services. AIRAH also has provided training in fire safety design for around 20 years to our members and other practitioners.

AIRAH will work with the FPA Australia to develop educational content to address the accreditation concerns, this is planned to be released in the first quarter of 2021.

Until then, AIRAH as well as the Air Conditioning & Mechanical Contractors' Association (AMCA), Facility Management Association of Australia (FMA) and Fire Protection Association Australia (FPA Australia), recommend that a selection of criteria below is likely to reflect a mechanical designer's experience and competency in this particular field of design. We offer this to certifiers as our recommendation for consideration in their assessment for a competency certificate:

- Has 4 or more years' experience (within the last 10 years) in the design of fire safety requirements of mechanical services
- Has demonstrated a comprehensive understanding of the National Construction Code and all referenced standards, as well as other relevant technical codes, standards and regulations
- Has completed relevant continuous professional development by a reputable provider in the past 3 years, such as AIRAH's [Smoke Control and Fire Dampers course](#)

- Has appropriate independent industry accreditation, relevant to their field of design, for example under:
 - AIRAH's [ARPEng program](#) (HVAC-specific registration scheme) or
 - Engineers Australia's National Engineers Register (NER) in areas of practice of Mechanical Engineering, Building Services Engineering and Fire Safety Engineering.

Although the regulatory changes are intended to strengthen the building industry and instil confidence among consumers, they are currently discouraging trustworthy practitioners from participating in this work, and placing the burden of responsibility and risk on certifiers.

We hope that the above advice helps provide a consistent, non-biased approach and offers a way for industry to bridge the gap until formal pathways are available in these areas.

If you would like to discuss these matters further, we would be very happy to arrange a meeting.

Regards,

Tony Gleeson – AIRAH Chief Executive

Scott Williams – AMCA Chief Executive

Nic Burt – FMA Chief Executive

Nathan Semos – FPA Australia Chief Executive

Australian Institute of Refrigeration, Air Conditioning and Heating (AIRAH)

Air Conditioning & Mechanical Contractors' Association (AMCA)

Facility Management Association of Australia (FMA)

Fire Protection Association Australia (FPA Australia)

* For more information about the new rules for fire safety practitioners, we recommend [this article](#) from AIRAH's official journal, *Ecolibrium*, and [this webinar](#) from AIRAH's Streamline series.