

26<sup>th</sup> DECEMBER 2013

Project No: F1011

Quill Essential Services  
Unit 25, 17-25 Bowden St  
Alexandria, NSW 2015

Attention: Tony Power

Dear Tony,



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**Re: Quill Essential Services (Quill) – Smoke Safe Damper**

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AE&D Fire have undertaken an assessment of the Smoke Safe Damper developed by Quill.

AE&D Fire are able to make the following recommendations for the product;

- That the closing mechanism can be retro-fitted to an existing installation without compromising the integrity of the installation.
- The product is a suitable and cost effective solution in lieu of rectifying existing fire dampers (with the provisions of a Fire Engineered Solution under the Performance Requirements of the Building Code of Australia (BCA)).
- The product is suitable to provide ease of maintenance to existing dampers when retrofitted.
- The product when installed in-conjunction with existing dampers, exceeds BCA requirements.

The product is suitable for new and existing developments and its application is suitable to a broad range of project types including residential, commercial and industrial. In particular, this system is ideal for retrofitting into residential apartments.

The smoke damper system provides increased fire safety and minimises the spread of smoke and fire and will activate in a rapid response to the detection of smoke. This ability is a superior system to that required by the BCA, which activates to only restrict fire (not smoke) spread once a high temperature is reached at the damper. Therefore, the Quill smoke damper acts early in a fire scenario to immediately close upon detection of smoke in a ceiling space.

**Benefits of the Smoke Safe Damper**

It is our professional opinion as Accredited and Qualified fire safety engineers and building surveyors, that the Quill smoke safe damper provides the following benefits:

- 1/ Protection of life
- 2/ Fast acting and additional fire integrity with aluminium barrier
- 3/ Asset protection i.e. stops smoke damage to hotel rooms, apartments etc.

We also note that the smoke safe damper has a double fail safe

- (i) Damper will close on power shut down
- (ii) Damper will close on receiver board low battery power

The damper will either operate in fire mode or be closed and therefore is fail safe in terms of a fire situation.

## **Market for the Smoke Safe Damper**

It is our opinion that the smoke safe damper could provide increased fire safety for a variety of buildings, including residential, aged care, tourist accommodation and hospitals.

It is our opinion also that the Smoke Safe Damper could be promoted to insurers for upgrade projects or to enhance fire and life safety in buildings.

Full details of the system and its implementation/installation can be obtained from Quill. If Fire Engineering Alternative Solutions are required, AE&D Fire Pty Ltd, can assist with the development of suitable fire engineering solutions to comply with the BCA.

Any queries in relation to this letter should be directed to the undersigned.

Regards



**Nathan Halstead**

**Director for AE&D Fire Pty Ltd**

MAIBS, M Build Surv (UWS), Grad Dip Fire Eng (VU)  
Accredited Certifier / Principal Certifying Authority (Building) - Grade A1  
Accredited Certifier - Fire Engineering Compliance C10  
Accreditation No. BPB No. - BPB0161  
AIBS National - Accredited Building Surveyor