

# AFIA

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ALUMINIUM FOIL INSULATION ASSOCIATION INC.

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Standing Committee on Environment,  
Communications and the Arts  
References Committee  
The Senate  
Parliament House  
Canberra ACT 2600

Per e-mail: [eca.sen@aph.gov.au](mailto:eca.sen@aph.gov.au)

Attn: Stephen Palethorpe  
Committee Secretary

Ref: Your letter dated 28 April 2010

May 3, 2010

Dear Sir,

**Re: Fuller Evidence**

I would like to inform you that I am now the President of the Aluminium Foil Insulation Association and will be dealing with this matter in future.

While we have the deepest sympathy for Mr Fuller's loss, I must say that his comments are inaccurate.

I make the following comments:

1. Foil insulation products have been used safely since 1954 in Australia. Since 1979 at least 100,000 houses have been retro-fitted with ceiling insulation in Queensland alone.
2. Foil products do not represent a significant risk in relation to house fires. However, bulk insulation such as fibreglass, installed enveloping light gauge wires in houses over 25 years old, can cause them to overheat and start fires. There have been numerous house fires due to bulk insulation.
3. Electrical safety in Australia is a State responsibility based on the Wiring Rules published by Standards Australia. Foil has been considered by the Standards committee on a number of occasions; no restrictions were placed on the proximity of foil to wiring.
4. Recent instances of live foil and electrocutions involving foil have all reportedly been due to stapling through wires. The Queensland Electrical Safety Office ("ESO") has investigated these incidents and has also considered fears that old decayed wiring could make foil insulation live. The ESO has addressed these issues by requiring non-conductive staples, safety switches and clearances around cables. According to the ESO these are "the strongest possible precautions".
5. Rigid "foil batts", which are not stapled and do not involve a continuous metallic surface, are explicitly excluded from the Queensland ESO's recent safety requirements.

6. According to Master Electricians Australia, a house with foil insulation and safety switches is SAFER than the same house with no foil and no safety switches.
7. Foil insulation is considered by experts such as Professor Richard Aynsley, former Head of the Australian Institute of Tropical Architecture, as the most appropriate insulation material in tropical and sub-tropical climates. Foil insulation has the unique property of being far more effective against heat flow down than against heat flow up. This means that it blocks the heat of the day, but allows buildings to cool down rapidly at night. Foil insulation is effectively a “one-way heat valve”.
8. It has been well documented that condensation in bulk insulation in the humid tropics and sub-tropics can result in extensive structural damage. (A copy of a detailed report on the Gove Township by Macks and Robinson has already been supplied to the Committee.) There is also a serious electrical risk from condensation in association with electrical equipment.

It is our belief that any reasonable person who carefully considers the evidence regarding condensation would strongly recommend that, in these climates, either foil insulation be used; or, if bulk insulation is used, a suitable vapour be installed (e.g. foil sarking). After the Wiring Rules Committee and the ESO have had the opportunity to consider all the evidence regarding condensation, we are confident that they will share this view.

We expect that within the next few years condensation problems with bulk insulation and the more suitable thermal properties of foil insulation in the humid tropics and sub-tropics will lead to a radical re-appraisal by regulators of the appropriate insulation solutions for this climate zone.

A small number of rogue operators are responsible for most of the problems that have beset the insulation scheme. The overwhelming majority of businesses involved in the industry are honest, scrupulous and hard-working people, who now face extraordinary attacks on our hard-earned reputation from the media and, unfortunately, from some of our own MPs and Senators.

Please remember that behind the “easy target” that foil insulation seems to have become, there are families and small businesses which stand to lose everything they own. These are businesses that provide employment to thousands of people.

I urge you, as our representatives, to bring some calm, common sense and truth to this debate. I am happy to discuss any aspect of this letter with you personally. I can be contacted on (02) 9317 4455 or 0421 278 666.

Yours faithfully



Michel Boström  
President  
Aluminium Foil Insulation Association