

Consultation submission - VEET Insulation Administrative Requirements

Comment to VEET Scheme including insulation in ceilings and floors

Graeme Doreian

as at Jan 18, 2017

Introduction

Victorian Government

Proposing another Home Insulation Scheme using their VEET (Victorian Energy Efficiency Scheme) “platform.”

Attempting for anyone just doing their job entering roofs spaces, that these be electrically safe.

Refer to the Standard for Installation of Insulation AS 3999 – 2015, yet proposing protocols that question provisions of AS 3999 – 2015.

Standards Australia

Have failed to act on some of the most important recommendations from the 2006 Productivity Commission into Standards, thus continuing “the boys club” image.

Standards Australia, Committee BD 58

Acknowledged correspondences regarding the failure of flexible ductwork insulation, electrical issues raised at the 27 million dollar Royal Commission Home Insulation Program, and are reluctant to act to ensure roof spaces are safe to enter.

Immediately after the 2014 Royal Commission Home Insulation Program Report, BD 58 defied public comment warnings during the revision of AS 3999 -2002, and enacted AS3999 -2015 which has gross deficiencies.

Proceeded to enact AS3999- 2015 which has conflicting electrical issues when BD 58 were aware that Standard AS/NZS 3000 Wiring Rules was in revision. So much so AS 3999 - 2015 has to have important fire issues amongst other matters revised. NOTE: Standard AS/NZS Wiring Rules public comment had 2000 submissions during 2016.

Victorian Government

What the Victorian Government have demonstrated in their Consultation Report for VEET that they have made an effort to address the electrical issues exposed at the 2014 Royal Commission Home Insulation Program, prompted I believe by my (Graeme Doreian) various submissions to VEET.

The Federal Government have stepped back seeking solutions to the 2014 Royal Commission Home Insulation Program, preferring to hide behind the COAG Agreement “system” I believe.

The Consultation Paper quotes Standard AS3999 – 2015 yet has included more positive objectives to make roof space safe

Standards Australia, Committee BD 58

Below I quote recommendations from

Recommendations

Standard Setting and Laboratory Accreditation

Productivity
Commission
Research Report

November 2006

Standard setting

These recommendations that I quote throughout this document that Standards Australia have mostly failed to implement especially concerning Committee BD 58 in an attempt by Governments and industry to place the public of Australia, in this case electrical issues to death by deception.

Further from undisclosed “sources” I quote sections of BD 58 Meeting minutes that completely

- justify AS 3999 2015 must not be referenced by the Victorian Government when attempting to include insulation in the VEET Scheme.
- that the insulation, air conditioning flexible ductwork and electrical Standards are completely reviewed by truly independent bodies /individuals with their time paid for who have no affiliations to Governments and unions, industry bodies.
- the 2013 Queensland Coronial Inquiry, and the 27 million dollar Royal Commission Home Insulation Program failed to act to protect the people who paid I believe some of the legal profession to liaise with industry to pervert the real truth of why those young workers died.
- Standards Australia, and Government “bodies” make regulations to address the issues.

RECOMMENDATION 8.4

Standards Australia should continue to apply the consensus decision making model for the development of Australian Standards. Standards Australia should make the standards development process more accessible to the general public, including by:

- ***promoting and providing better opportunities for public comment and guaranteeing minimum time periods for consultation; and***
- ***making all significant documents and other information readily accessible via the internet.***

“Making all significant documents and other information readily accessible via the internet”.

Should Standards Australia wish to conduct “a witch hunt” of my source of Standards documents after forcing committee members to sign confidentiality paperwork, would be in

contravention of recommendation 8.4, and this” witch hunt” must be stopped, and the recommendation enforced.

This 2006 Productivity Commission Report was enacted and paid for by the Federal Government of the time.

Governments can't interfere in Standards.

- Does this mean the actual Standards we all have to follow that Governments refer to as the Victorian Government are for the VEET Scheme?
- OR does this mean that the Victorian Government can give directions to the Executive of Standards Australia who then rectify any administrative misdemeanour OR simply, archaic behaviour that the “boys club” of industry who constitute the various committees that make Standards to suit their profits and agenda?
- Should Standards Australia wish to take this “witch hunt “action I will find out, and there are many avenues that can be pursued to ensure the taxpayers of this great country Australia are protected from the issues of questionable Standards and Governments that enact the Standards in regulation etc.
- Of course, we then have the political issues of policing and enforcing Standards that is another issue, which will be questioned and remedies pursued.
- Because these minutes below had diagonally printed my sources name amongst other scare tactics to keep the minutes “in house.”
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MINUTES OF MEETING

STANDARDS

Australia

Committee Number	BD-058	
Committee Name	Thermal Insulation	
Meeting Number	027	
Meeting Details	Tues 10 May - Wednesday 11 May 2016	
Meeting Time	09.30 to 17.00	
Location	Tuesday	Wednesday
	Standards Australia	Standards Australia
	Level 10 / 20 Bridge Street	Level 10 / 20 Bridge Street
	Sydney, NSW 2000	Sydney, NSW 2000

Chair Ralph Garbutt

Project Manager Ron Pulidio

Committee BD 58 proceeded to enact AS3999- 2015 which has conflicting electrical issues when BD 58 were aware that Standard AS/NZS 3000 Wiring Rules was in revision.

So much so AS 3999 - 2015 has to have important fire issues amongst other matters revised.

NOTE: Standard AS/NZS Wiring Rules public comment had 2000 submissions into 2016.

The fire issue downlight clearances

AS3999 - 2015 which is now in force

DOWNLIGHT CLEARANCE TO BULK INSULATION 50MM

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NOTE DOWNLIGHT CLEARANCE TO BULK INSULATION 100MM

Both Committees have completely disregarded the clearance of 200mm for halogen downlights which are still used in previous Standards. WHY?

You will read in BD 58 minutes below that both committees it appears have agreed to omit halogen downlight clearances in the upcoming Standards. WHY?

Quoting from BD 58 minutes point 3.6.1.1

What are the "significant differences that will impact the community and industry"?

What about the fire risks ?

Bigger downlight clearances mean for

Industry: Questionable bulk insulation sales.

Community: More running costs for heating and cooling?

Even with reduced downlight clearances heat will still escape into the roof space, more lights more loss.

What about a fire proof covers over the downlights?

During the failed Home Insulation Program, downlight covers were compulsory for fire safety and reducing heat loss. Why didn't BD 58 address this issue for AS 3999- 2015?

Where in AS 3999- 2015 is there a clause mandating fire proof downlight covers that allow insulation to be placed over the downlight.

Does BD 58 really demonstrate any concern for building energy efficiency. NO.
Just selling bulk insulation it appears.

Commenting on BD 58 minutes point 3.6.1.2

The insulation industry aided by industry ICANZ Insulation Council of Australia and New Zealand whose representative has substantial influence on all aspects of the Standards Committees regarding building energy efficiency has I believe pushed Standard AS3999 - 2015, knowing that the Wiring Rules Standard AS 3000 was due for revision in 2016.

I believe that ICANZ must have convinced someone to reduce downlight clearances from some old research they commissioned. Can be provided on request. Perhaps no one outside of Standards Committees would care to connect the two Standards.

The sad issue for the Wiring Standards Committee is they have failed their duty of care in the Wiring Rules draft because they excluded halogen downlight clearances which were 200mm because of their heat output in the to be reviewed/revised Standard. WHY?

There are still halogen downlights being sold and unless they have greater clearances they are a fire waiting to happen.

What people are not aware of ICANZ paid for a research program to justify reduced downlight clearances(25mm) in the Standard AS 3999 – 2002.

One or two tests where for 240mins (4hrs)
Some for 180mins (3hrs) and the majority 120 mins (2)hrs.

That being the case the research is fatally flawed as there is no consistency of testing procedures.

Why didn't they have stepped time periods to reveal the real truth of potential fire issues.

One would expect the longest period of operating time, say 12 hours for 7 days would expose any issues, if people say they don't operate that long, great ALSO test for four hours for 7 days.

Most downlights in homes operate longer, then especially in commercial premises new/converted residential properties operating downlights for extremely long periods.

ICANZ would have been aware of these times.

Reason I believe the tests were completed as they were:

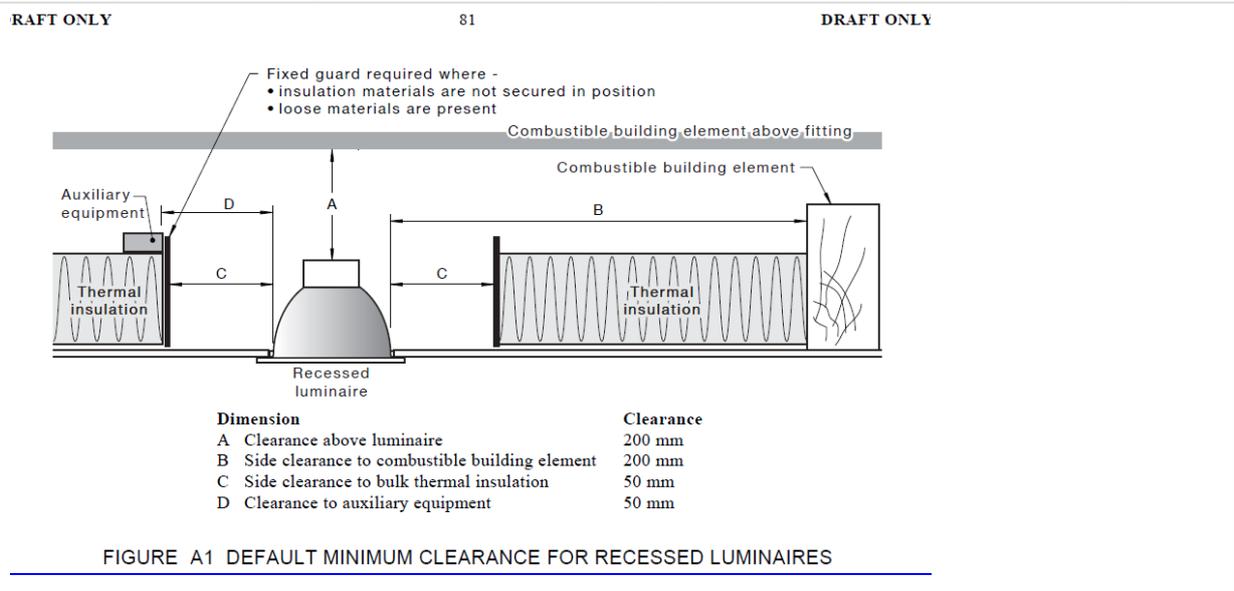
- ICANZ knew that downlight openings reduced the effectiveness of bulk insulation products by at least 40%, not worrying about creating more greenhouse gases and increased running costs for the consumer.
- The sad matter is other Government Departments allowed this twisting of the research to remain.
- Who influenced the Wiring Rules committee now to virtually pervert the rule of justice, and place people's lives at risk by decreasing, no eliminating halogen downlight clearances from their diagrammatic illustration.
- Also this applies to clearances for combustible products in the building structure.

Commenting on BD 58 minutes point 3.6.2.1

It would be logical for both Standards to "harmonise".

This will mean amending both Standards along with many other issues.

Knowing AS3000 Wiring Rules was in revision, why was AS 3999 – 2015 rushed through?



Above is the draft AS3999 - 2015 which is now in force

NOTE DOWNLIGHT CLEARANCE TO BULK INSULATION 50MM

DRAFT ONLY 215 DRAFT ONLY

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100322 AS3999 Ballot Draft 20150423 - 23/04/2015 11:35:48

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NOTE DOWNLIGHT CLEARANCE TO BULK INSULATION 100MM

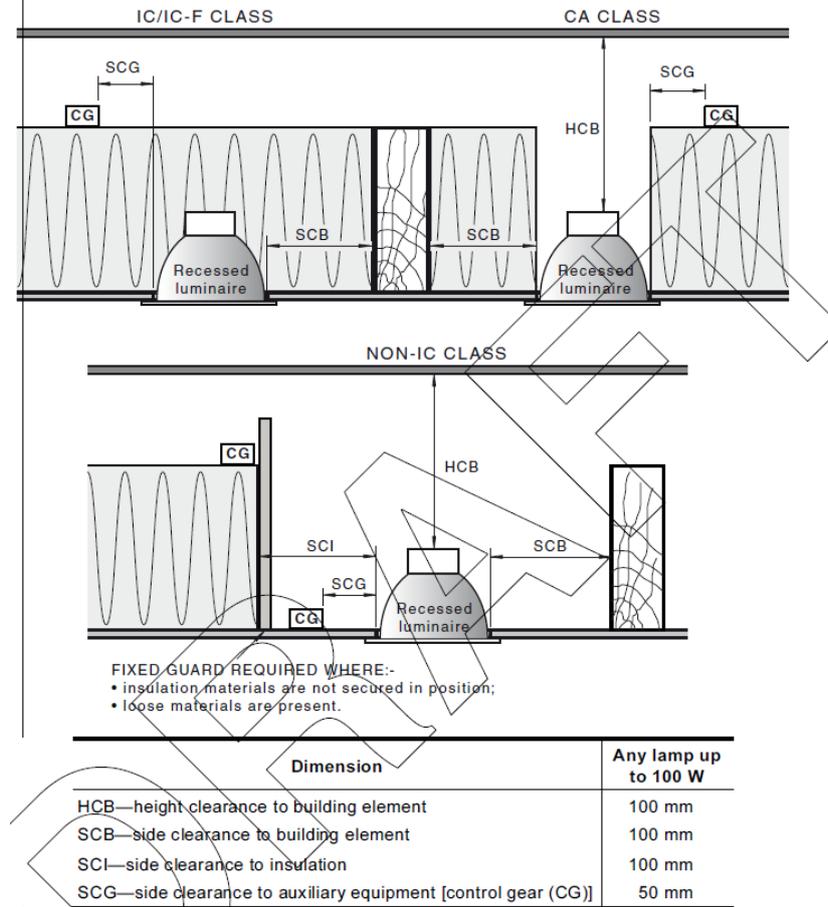


FIGURE 4.10 DEFAULT MINIMUM CLEARANCES FOR RECESSED LUMINAIRES

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Excerpt below from BD 58 Minute May 10, 11, 2016

MINUTES OF MEETING

STANDARDS

Australia

3.6 Discuss impacts of AS/NZS 60589.2.2 – 2016 Luminaires- Part 2 Particular requirements – recessed luminaires

3.6.1 Discussions

No Description

3.6.1.1 The Committee reviewed the changes in AS/NZS 69589 2.2- 2016 and DR AS/NZS 3000 In line with the related provisions to AS 3999 and noted that there were significant differences that will impact on the community and industry

3.6.1.2 The Committee is unhappy that they were not consulted regarding AS/NZS 3000 as the provisions that were agreed to through collaboration between EL- 001 and BD- 058 with research and evidence have been changed. Ralph will write to the EL-001 Committee on behalf of the BD-058 Committee expressing their concerns

3.6.2 Decisions

No	Description	Who
3.6.2.1	There is a significant need to harmonise the new version of AS/NZS 3000 and AS/NZS 60598 2.2 with AS 3999	BD 058

3.6.3 Action Items

No	Action	Who	Status
3.6.3.1	Committee to individually provide public comment on AS/NZS 3000 with focus on Section 4.	BD 058	Open

NOTE: Comment Closes: 20 June 2016

3.6.3.2	Ralph will write to the EL – 001 Committee on behalf of The BD – 058 Committee expressing their concerns	Ralph Garbutt
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Standards Australia Committee BD 58 overseeing a number of Standards have failed to address the electrical issues exposed at the 2014 Royal Commission Home Insulation Program in Standard AS3999 – 2015 which then fails to make roof spaces safe to enter.

An number of excerpts from Consultation statement below regarding Standard AS3999 – 2015 contradicts what the Victorian Government propose for VEET.

Is the paper attempting to sway people to allow the use of Standard AS3999 – 2015 because it is not as complicated as what the Victorian Government propose for conditions when receiving free money to insulate in the VEET Scheme?

However when one views other Acts as below the Victorian Government procedures are very reasonable, however Standard AS3999 – 2015 has only made an effort to Safe Work Method Statement. WHY? Why not list other Acts?

Further information:

The installation of insulation in Victoria is governed by the best practice standard, AS 3999:2015. The standard includes detailed procedures and requirements for pre-installation site assessment, insulation installation and safety considerations, as well as appendices covering particular site environment and insulation issues.

The standard AS 3999:2015 was developed by a Standards Australia Technical Committee. This committee comprised representatives of industry associations, consumer organisations, government regulators, public health and safety officials, as well as academic and scientific institutions. The new standard was significantly revised and updated for the following areas:

- updated advice on personal safety for insulation installers
- updated requirements aimed at improving the performance of installed insulation and information on new products and technologies, and
- the introduction of comprehensive detailed drawings to complement the text and to help demonstrate what compliant installations could look like.

For more information, please see – www.standards.org.au/OurOrganisation/News/Pages/New-revised-standard-for-installation-of-bulk-thermal-insulation.aspx

A site will only be eligible to create VEECs if an LEI has passed it as low risk and a satisfactory post-installation risk assessment report has been created. This includes the report stating that the installation complies with AS 3999:2015 and all activity requirements including any relevant aspects of the:

- *Electricity Safety Act 1998*
- *Gas Safety Act 1997*
- *Occupational Health and Safety Act 2004*
- *Building Act 1993*, or
- regulations under any of these Acts.

RECOMMENDATION 7.1

Standards Australia's justification process for the development of new or amended standards and the setting of priorities should be made more transparent and robust including by the publication of reasons for decisions, the establishment of a more open formal appeals process, and ensuring that the primary decision criterion is a net benefit to the community as a whole.

Standards Australia have I believe failed to address this Recommendation 7.1 above

I have pursued Standards Australia regarding insulation and electrical concerns.

I was lead to believe I was going to address Committee BD 58 regarding electrical issues after sending a paper on the issues.

- I was asked to reduce this to two pages, for the Project Chairman of BD 58 to present to the members of BD 58.
- How do I know what discussions took place if I was not present or on tele conferencing.

I forwarded a letter regarding the failure of Flexible Airconditioning Ductwork after another colleague of mine, Tim Renouf forwarded a letter plus some customer letters, one being Neil Myhre's on the subject to Committee BD 58 .

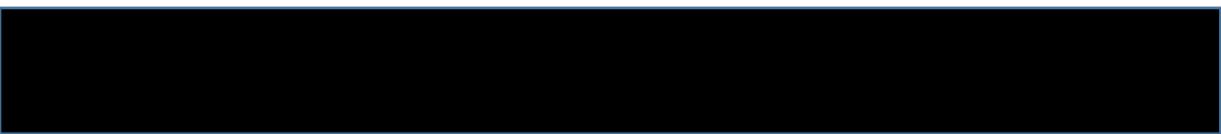
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3.4 Review and discuss letters from Neil Myhre

3.4.1 Discussions

No	Description
3.4.1.1	The Committee reviewed and discussed Neil Myhre's letters to Standards Australia and determined that normative provisions in the form of a normative appendix for a test method on duct performance should be included.
3.4.1.2	The Committee discussed the points surrounding R-values in the letter and came to the conclusion that this may be something that the ABCB needs to look at and not something that the Committee can address
3.4.1.3	The letters raised valuable points regarding AS/NZS 4859.1 that lead to the agenda item to develop a strategy to revise the Standard
3.4.1.2	The Committee discussed the points surrounding R-values in the letter and came to the conclusion that this may be something that the ABCB needs to look at and not something that the Committee can address

The reference in **3.4.1.2** above to the ABCB, is insulting AND MISLEADING as what was discussed by Tim was how fibrous bulk insulations physically fail to protect chilled air through flexible ducts. WHICH IS A BD 58 MATTER because it is physically how fibrous insulation functions to insulate something.



The 'R' value is determined by a flawed test method that is called up in Standard AS/NZS 4859.1 that BD58 have jurisdiction.

The International test method tests a piece of insulation basically for 4 hours at a mean temperature of 23°C. This like asking for the sun to shine for fours per day, and heat the roof space to 23°C, which anyone would laugh.

In the end at the next BD 58 meeting, Tim addressed Committee BD 58 by teleconference, and asked after his address for any question from the BD 58 Committee. NOTHING I believe.

However, Tim was not allowed to be present by tele conference when the Committee addressed his letter, if Tim had the BD 58 Committee would have been strongly challenged.

That is why video conferencing to the public of Standards technical committees MUST BE ALLOWED.

In fairness I have been advised Standards Australia will use video conferencing this year?

This facility must be allowed to be viewed by the public, BUT THE PUBLIC HAVE NO INPUT.

RECOMMENDATION 7.2

For standards that are to be referenced in regulation, or for significant amendments to standards that are already referenced in regulation, rigorous impact analysis must be undertaken by the Australian Government and other governments in compliance with the requirements of the relevant jurisdiction (or COAG requirements for intergovernmental action). In order to best facilitate consideration of other regulatory and non-regulatory alternatives, impact analysis should be commenced at the earliest practicable opportunity.

Below I present evidence from **Victorian Energy Efficiency Target Scheme- Insulation Administrative Requirements CONSULTATION PAPER Dec 2016** that Standards Australia have failed again in attempting to implement Recommendation 7.2 above.

The problem Governments can't influence Standards, therefore the 2006 Productivity Commission into Standards Australia recommendations cannot be enforced?

If this is the case any Government "body" must not sit on a Standards Committee and be privy at this point to Committee material

These representatives are active participants on BD 58 and have voting rights and in direct contact with large companies I believe.

CSIRO Government funded

ABCB Australia Building Codes Board

ERAC Electrical Regulatory Advisory Council comprises amongst its membership all State and Territory Electrical Safety Offices

The points from the **Victorian Energy Efficiency Target Scheme- Insulation Administrative Requirements CONSULTATION PAPER Dec 2016** are absolutely a positive step to make roof spaces electrically safe in Victoria, and must be enacted to become law.

In a court case in Victoria or the Victorian Coroners Court what takes precedence, State Acts or Standards?

SWMS forms for Victoria do not I believe differentiate between electrically conductive insulation (basically foil insulations) of bulk insulations, it's about the electrical safety.

Standards and State Acts surely be worded the same to make roof spaces electrically safe.

I believe that is what the Royal Commissioner from the 27 million dollar 2014 Royal Commission Home Insulation Program wanted.

PROBLEM

This requirement for a pre-installation assessment is also included in section 4.3 of AS 3999:2015, with the standard stating that the assessment shall be used for input into the Safe Work Method Statement (SWMS) completed for the site.

Standard AS 3999 - 2015 referenced in this consultation is in conflict with the Victorian Government intentions to make roof spaces electrically safe in Victoria.

AS 3999-2015 is confusing and contradictory, the requirements below sections 4.2 clash with 4.3

4.2 GENERAL SAFETY REQUIREMENTS

Safe practices contained in federal and state WHS legislation shall be followed.

C.4.2 Installation of insulation in existing structures may present a more aggressive environment principally due to elevated temperature, dusty environment and higher risk of electrocution.

There are specific requirements in some state legislation regarding the installation of all types of insulation including electrically conductive insulation such as the foil faced bulk thermal insulation. Refer to relevant state electrical safety legislation.

An appropriate safe work method statement (SWMS) shall be completed before commencing any work. If the risks are found to be high, then no work should commence until these risks have been managed to a low level.

The appropriate personal protection equipment (PPE) shall be selected to meet any requirements identified in a SWMS as well as insulation manufacturer’s instructions (e.g. use of leather gloves, dust masks, rubber soled shoes and safety harnesses).

Excerpts from Safe Work Method Statements

High risk construction work:	<input type="checkbox"/> Where there is a risk of a person falling more than two metres.
	<input type="checkbox"/> At workplaces where there is any movement of powered mobile plant.
	<input type="checkbox"/> On or near energised electrical installations or services.
	<input type="checkbox"/> Involving demolition.
	<input type="checkbox"/> Involving tilt-up or precast concrete.
	<input type="checkbox"/> Involving removal or likely disturbance of asbestos (note: preparation of an asbestos control plan is taken to be preparation of a SWMS).

<input type="checkbox"/> On or adjacent to roadways or railways used by road or rail traffic.	<input type="checkbox"/> In, over or adjacent to water or other liquids where there is a risk of drowning.
<input type="checkbox"/> Structural alterations that require temporary support to prevent collapse.	<input checked="" type="checkbox"/> In an area where there are artificial extremes of temperature.
<input type="checkbox"/> Involving a trench or shaft if the excavated depth is more than 1.5 metres.	<input type="checkbox"/> On or near pressurised gas distribution mains or piping.
<input type="checkbox"/> Involving a confined space.	<input type="checkbox"/> On or near chemical, fuel or refrigerant lines.

<input type="checkbox"/> On telecommunications towers.	<input type="checkbox"/> Involving diving.
<input type="checkbox"/> In an area that may have a contaminated or flammable atmosphere.	<input type="checkbox"/> Involving the use of explosives.
	<input type="checkbox"/> Involving a tunnel.

These three statements from Safe Work Method Statements sum up the issues in roof spaces.

Excerpt from AS 3999-2015 4.2 General Safety Requirements

There are specific requirements in some state legislation regarding the installation of all types of insulation including electrically conductive insulation such as the foil faced bulk thermal insulation. Refer to relevant state electrical safety legislation.

When there are electrical issues in roof spaces these affect the installation of ANY TYPE OF INSULATION.

BD 58 choose to attempt to place in people’s minds there are problems with the use of foil, AND DISCOURGE IT’S USE. WHY?

In the Standard AS 3999 – 2015 should state any type of insulation installed

Excerpt from AS 3999-2015 4.2 General Safety Requirements

An appropriate safe work method statement (SWMS) shall be completed before commencing any work. If the risks are found to be high, then no work should commence until these risks have been managed to a low level.

Why isn’t there detailed some of the risks such as unprotected cabling over tops of ceiling joists that can be stepped of knelt on.

Should these exist call a licensed electrician

Quote these point from the Safe Work Method Statement sheet even include this in the Standard at the rear of the Standard

- On or near energised electrical installations or services.
- Involving a confined space.
- In an area where there are artificial extremes of temperature

Excerpt from AS 3999-2015 4.2 General Safety Requirements

The appropriate personal protection equipment (PPE) shall be selected to meet any requirements identified in a SWMS as well as insulation manufacturer’s instructions (e.g. use of leather gloves, dust masks, rubber soled shoes and safety harnesses).

Standard AS 3999 – 2015 can include the above in this section why not more life threatening issues. UNPROTECTED WIRING OVER TOPS OF CEILING JOISTS.*

4.3 ELECTRICAL SAFETY

When insulation is to be installed in an existing building or in a new building after electrical wiring or equipment has already been installed across ceiling joists, the following procedures apply:

- (a) Prior to installation a risk assessment shall be conducted by a competent person in carrying out an assessment of the electrical risk from the installation of insulation.

NOTES:

- 1 The risk assessment need not be done by a licensed electrician unless required by state regulations.
- 2 It is recommended that a record of the on-site assessment is kept for at least 5 years after the assessment is conducted.

- (b) Prior to entering a ceiling space, how to de-energize circuits located in the roof space shall be identified.

If warning signs on recessed luminaires in accordance with Appendix A are not present, then they should be installed on each access point to the ceiling.

Before commencing installation:

- (i) Before entering into the ceiling, map the position of downlights and other appliances on a sketch plan of the building as they may be difficult to see once in the ceiling.
- (ii) Check and note the location of electrical cables, electrical equipment and accessories in the area to be insulated.

- (iii) Check and note the location of any cabling that cannot be de-energized at switchboard, e.g. mains supply and some solar PV wiring.

NOTE: Unprotected electrical cables should not be positioned in locations where they are vulnerable to damage, such as over the tops of joists.

- (c) The power to the work area that can be de-energized shall be switched off and, if required, an alternative safe power supply shall be provided for lighting and other work equipment.

NOTES:

- 1 Based on risk assessment further actions may be required to de-energize circuits located in the work area that cannot be de-energized from the switch board.
- 2 Residual Circuit Devices (RCDs) provide added protection but should not be relied upon during installation.
- 3 Alternative lighting may include natural lighting or use of batteries.
- 4 The use of lock out arrangements and signage should be provided to avoid inadvertent re-energization of the circuit.

- (d) Where it is suspected or ascertained that electrically conductive insulation has been installed across the ceiling joists, the ceiling space shall not be entered. Before any work in the ceiling space commences, an electrical contractor shall make an electrical safety assessment, and issue a written statement stating the contractor has inspected the installation and tested the electrically conductive insulation to establish it is not energized.

- (e) Risk assessment outcomes:

- (i) If the cabling or electrical equipment is suspected to be faulty, then the owner shall be advised.
- (ii) If the electrical insulation or equipment appears to be inadequate, the installation shall not proceed until the installation is assessed and if required made safe or rectified by an electrician.
- (iii) If installation is to proceed, all circuits that cannot be de-energized at switchboard, e.g. mains supply and some PV solar wiring, shall be identified.

NOTE: Based on the risk assessment, further actions may be required to de-energize circuits located in the work area that cannot be de-energized from the switchboard.

- (f) Equipment and fixings:

- (i) All equipment used for installing insulation shall be designed to minimize the risk of electric shock. Only tools (knives, screwdrivers, etc.) that are non-conductive or have electrically insulated handles shall be used. Clothing or protective equipment that are non-conductive shall be worn.
- (ii) If fasteners are required to be used, non-metallic, non-conductive fasteners shall be used.

- (g) During installation:

- (i) When stapling or cutting insulation, ensure that there are no cables or other electrical equipment in the vicinity.

NOTE: Cutting may be done on a kneeling board, not with the insulation in place.

- (ii) When installation is complete, the correct operation of the electrical device shall be checked again. If a fault is detected, that was not present at the start of the work, then an electrician is needed to rectify the situation.

- (h) Where bulk insulation materials are faced with aluminium foil, which can conduct electricity, the installation process shall ensure that the foil facing does not become energized through contact with electrical wiring and equipment.

NOTE: These requirements, which apply generally to all installations where electrical equipment or cabling is present, are particularly important when installing foil-faced bulk insulation.

- (i) Where pre-existing electrical cables are installed, electrically conductive insulation shall only be installed on top of ceiling surfaces or ceiling joists and under subfloors where—
 - (i) permitted by the relevant State regulation; and
 - (ii) installed in accordance with Appendix K.

APPENDIX K

ELECTRICALLY CONDUCTIVE BULK INSULATION

(Normative)

K1 GENERAL

Electrically conductive bulk insulation proposed for location on top of ceiling surfaces or ceiling joists, and under subfloors, where pre-existing electrical cabling is installed, shall meet the following additional requirements before installation commences.

K2 ELECTRICAL SAFETY INSPECTION AND ASSESSMENT

Before the start of the installation in a building of electrically conductive ceiling and subfloor insulation, a written statement shall be obtained conforming that—

- (a) the existing electrical installation in the ceiling structure and/or subfloor of the building has been inspected and assessed in accordance with the requirements of this Standard; and
- (b) the existing electrical installation in the ceiling and/or subfloor structure of the building is electrically safe.

NOTE: It is recommended that this written statement is kept for at least 5 years after the employer or self-employed person is given the written statement.

K3 FOR APPROVED SAFETY SWITCH OR PERMANENT MARKING FOR ELECTRICAL CIRCUITS

Before the start of the installation in a building of electrically conductive ceiling or subfloor insulation, a written statement shall be obtained confirming that each unprotected circuit located in the area to be insulated is identified and clearly marked. An unprotected circuit is clearly marked only if the unprotected circuit is permanently marked—

- (a) in a way that distinguishes the unprotected circuit from protected circuits located in the area to be insulated; and
- (b) at intervals of not more than 1 m, to the extent that it is reasonably practicable.

This written statement shall explain the way in which unprotected circuits have been permanently marked to distinguish them from protected circuits.

If a protected circuit has been marked with durable high visibility tags, the certificate shall explain this.

NOTE: It is recommended this written statement is kept for at least 5 years after the employer or self-employed person is given written statement.

K4 INSTALLATION REQUIREMENTS FOR UNPROTECTED CIRCUITS

Electrically conductive ceiling and subfloor insulation installed in a dwelling shall—

- (a) not cover, in whole or in part, any unprotected circuit; and
- (b) be installed at least 25 mm away from any unprotected circuit.

Should all Governing Acts concerning electrical Safety be as one so there are no loop holes for justice not to be served, as was the case in the 2013 Queensland Coroners Home Insulation Inquiry.

I believe foil is being targeted in AS 3999 -2015 as a questionable product to use in favor of bulk insulations because of Safety which is demonstrated in Appendix K has been relegated to the rear of the Standard when in fact this should be part of the main Standard.

AGAIN the roof space has to be made safe so anyone entering just doing their job. It doesn't matter what type of insulation is used the roof space must be made safe and AS 3999 -2015 denigrates the use of foil. WHY?

The biggest issue with AS 3999- 2015 is that the main aim of the Standard should be roof space safety, more so alerting the reader to the hazards mores so electrical to make that space safe for anyone entering the roof space to do their job and exit alive.

AS 3999 -2015 appears to favor the use of bulk insulations and not foil. All insulations perform their task, and must be used in the appropriate climate for optimal performance.

The VEET requirements would be appropriate to be referenced in AS 3999 and plead with the Victorian Government to campaign Standards Australia that AS 3999-2015 be revised to reference the VEET requirements to make roof spaces safe.

The points from the **Victorian Energy Efficiency Target Scheme- Insulation Administrative Requirements CONSULTATION PAPER Dec 2016** are absolutely a positive step to make roof spaces electrically safe in Victoria, and must be enacted to become law.

These proposals should be implemented when AS 3999- 2015 is revised as Standards BD 58 Minutes reveal below which will be different I would say to what Standards Australia told the Victorian Government when they contacted Standards Australia

NOTICE OF MEETING AND DRAFT AGENDA

STANDARDS
Australia

Committee Number	BD-058	
Committee Name	Thermal Insulation	
Meeting Number	028	
Meeting Date(s)	Tuesday 16 August - Wednesday 17 August 2016	
Meeting Time(s)	09:30 to 17:00	
Location	Tuesday	Wednesday
	Standards Australia	Standards Australia
	Level 10, 20 Bridge St	Level 10, 20 Bridge St
	Sydney, NSW, 2000	Sydney, NSW, 2000
Chairperson	Ralph Garbutt	
Project Manager	Ron Pulido	

1 Purpose of the meeting

The purpose of the meeting is:

- Kick-off for 103938: AS/NZS 4859.1
- Finalise AS/NZS 4200.1
- Finalise AS 4200.2
- Discuss future revision of AS 3999
- Discuss relocation of proposed AS/NZS 4859.2: Design
- Discuss the need to revise AS 3999 and AS/NZS 4200.1 in line with the revised AS/NZS 3000.

4 Current work items

4.1 Day 1

- Kick off for AS/NZS 4859.1
- Finalise AS/NZS 4200.1
- Finalise AS 4200.2
- Discuss future revision of AS 3999
- Discuss relocation of proposed AS/NZS 4859.2: Design to go in to AS 3999, as it should be with the installation Standard and not with the Product Standard.
- Discuss the need to revise AS 3999 and AS/NZS 4200.1 in accordance with the updated requirements in the proposed AS/NZS 3000 revision.

Excerpts from the **Victorian Energy Efficiency Target Scheme- Insulation Administrative Requirements CONSULTATION PAPER Dec 2016**

2.3 INSTALLATION PHASE

The installation of insulation is in the highest risk category for a VEET activity. During installation, installers may encounter electrical or environmental hazards and/or make incorrect installation decisions that could result in hazardous situations. The outcomes of the HIP RC showed how harmful insulation related incidents can be to the lives of installers and householders.

As stipulated by the Regulations, insulation installations must be undertaken in accordance with the requirements outlined in the standard *AS 3999:2015 – Bulk thermal insulation – Installation*.

2.3.1 PRE-INSTALLATION ASSESSMENT

To assess if any installation hazards exist at a site, the Commission is proposing that a pre-installation assessment is conducted before any VEET insulation activity is undertaken. Requiring a pre-installation assessment will aid in assuring the Commission, APs, installers, householders, stakeholders and the general public that an insulation installation at that site can be undertaken in a work environment that has been assessed as low risk (taking into consideration any electrical risks, hazardous materials, or other health and safety risks).

Excerpts from the **Victorian Energy Efficiency Target Scheme- Insulation Administrative Requirements CONSULTATION PAPER Dec 2016**

The regulations for both Schedules 11 and 12 require that the area to be insulated (minimum of 20m²) must not have been previously insulated. Should evidence of previous insulation be identified during the pre-installation assessment, this detail will be recorded in the pre-installation assessment report. Evidence of previous insulation will impact on the ability of the AP to create VEECs for a site.

The assessment is to be carried out by a Licensed Electrical Inspector (LEI) licensed by Energy Safe Victoria (ESV). An LEI is a class of electrician licensed by ESV to inspect electrical installation work of one of the respective classes of prescribed or non-prescribed electrical installation work.⁹ An AP will need to select and engage an LEI to conduct a pre-installation assessment of each proposed VEET insulation site, with the costs of this assessment to be borne by the AP.

If an LEI identifies an immediate electrical safety risk, the insulation installation must not proceed until this risk is removed or not at all (depending on any recommendations from the LEI), with risk details to be included in the pre-installation assessment report. It is proposed that following an assessment at a site, the LEI will be requested by the Commission to provide a copy of the pre-installation assessment report to the householder and AP, with the AP to provide this report to each installer for their information and planning at least three days prior to an installation. Each of these parties (including each installer) will be required to sign and date this report to confirm their receipt of it prior to the installation, as well as provide their consent for the disclosure of personal information to certification and regulatory bodies should the installation for VEET proceed.

Should an LEI reasonably form the view that the installation of insulation is likely to make a site electrically unsafe, installation must not proceed until this risk is removed or not at all (depending on any recommendations from the LEI), with risk details to be included in the pre-installation assessment report.

If risks are found to be high, and site remediation works are undertaken to reduce the risks to a low level, the site shall be subject to subsequent assessment(s) and a resulting report(s) until an LEI is satisfied that the risks have been reduced to a low level. The cost of any additional assessment(s) will be borne by the AP.

If requested, the completed pre-installation assessment report shall be provided to the Commission at least three days prior to a VEET insulation installation being undertaken at a site. The AP will be required to provide the signed and dated pre-installation assessment to the Commission as part of the documentation pack for Victorian energy efficiency certificate (VEEC) assessment. A site will only be eligible to create VEECs if an LEI passed it as low risk, and a satisfactory pre-installation assessment report was created, signed and dated by all relevant parties prior to the installation being performed.

This requirement for a pre-installation assessment is also included in section 4.3 of *AS 3999:2015*, with the standard stating that the assessment shall be used for input into the Safe Work Method Statement (SWMS) completed for the site.

2.3.2 INSTALLATION REQUIREMENTS AND RANDOM, REAL-TIME INSPECTIONS

An inspection will assess the installation according to any applicable safety, *AS 3999:2015* or abatement requirements, and may involve a review of relevant documentation (including accreditations and certifications), product usage and adherence to OHS or electrical safety requirements.

2.4 SUMMARY - PROPOSED ADMINISTRATIVE REQUIREMENTS

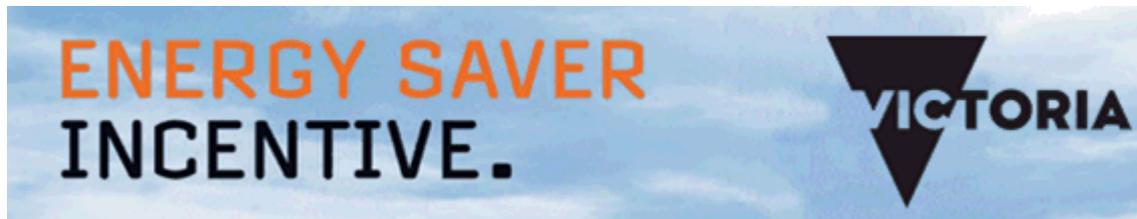
The HIP RC identified failings in a number of areas associated with administration of a program that involved the installation of insulation. This experience has demonstrated that the processes and procedures to properly monitor, police and regulate insulation installation undertaken under the VEET scheme must be rigorous and robust. They must ensure the safety of insulation installers, householders and the general public, the quality of installations, and assist in confirming that the correct level of abatement required by the Regulations has been achieved.

2.6 SUBMISSIONS

Stakeholders are invited to comment and provide feedback on any aspect of this consultation paper. Submissions must be received no later than **5:00pm Friday 3 February 2017**, in electronic format if possible.

AN IMPORTANT REQUIREMENT THAT HAS BEEN OMITTED FROM THE DISCUSSION PAPER AND MUST ENACTED AND INCLUDED IN THE VEET

At Oct 28,2016 meeting which I attended



Dear VEET participant,

The Essential Services Commission will hold the next public forum for the Victorian Energy Efficiency Target (Energy Saver Incentive) scheme on **Friday 28 October 2016**.

Presentations will provide important information on the administration of the scheme and highlight recent key developments.

The forum will also offer the opportunity to network with VEET participants and representatives from the energy efficiency field

It was stated at this meeting above that date marked photographs would be required at each inspection stage when providing insulation under the VEET Scheme.

I believe there must be a requirement specified that the subject being photographed, be correctly illuminated to provide clarity and a quality images of the subject.

This then implies for both ceilings and underfloors.

NOWHERE in this consultation paper and in the Workplace Health and Safety Act 2007 does this requirement exist, **AND MUST.**

I request that any Victorian Government regulation etc

- insert into the legislation that photos of electrical installations require time dated photo correctly illuminated
- for pre electrical inspection and
- final inspection of the rectification of electrical issues
- before any insulation is installed.

Why, because when the insulation is installed there is no way of substantiating the rectification works are completed correctly

A PICTURE TELLS A THOUSAND WORDS

Example a picture (BELOW) where Mathew Fuller was killed as per the 2013 Queensland Coroners Home Insulation Report was referenced, AND WITHHELD FROM THE PUBLIC, WHY?



This photo demonstrates the electrician who did the electrical installation failed to adhere to the Wiring Rules Standard AS 3000 -2007 This photo was referenced in my EARLIER 48 page submission to VEET

VEET Proposed Activity Regulation Changes June 2016

Submission (2) Schedule 12 UNDER/SUB FLOOR INSULATION

Submission Graeme Doreian July 22, 2016 **e mail** doreians@tpg.com.au **Mob** 04 1987 3495

Further I note

- The Queensland Electrical Safety Office failed to
 - police the compliance with the Wiring Rules by the electrician completing the Wiring installation.
 - alert the Queensland Coroner that the wire that killed Mathew Fuller was in contravention of the Wiring Rules
- Nowhere in the Queensland Coroners 2013 report was the Queensland Electrical Safety Office questioned regarding the unprotected wire in the roof space that killed Mathew Fuller.
- Even though the electrical industry body NECA President James Tinslay, “by admission of the fact,” alerted the Coroner on the stand, under oath to the fact that the wire that killed Mathew Fuller was basically in breach of the Wiring Rules AS 3000 – 2007, did the Coroner acknowledge this during questioning of Mr Tinslay, and ACT by including the fact in his Final Coroners Report. Read the 2013 Queensland Coroners Inquiry Home Insulation Program actual Court transcript (sorry not available to the public) not even via the 2014 Royal Commission Home Insulation Program notes, or transcripts. WHY?.

IN CONCLUSION

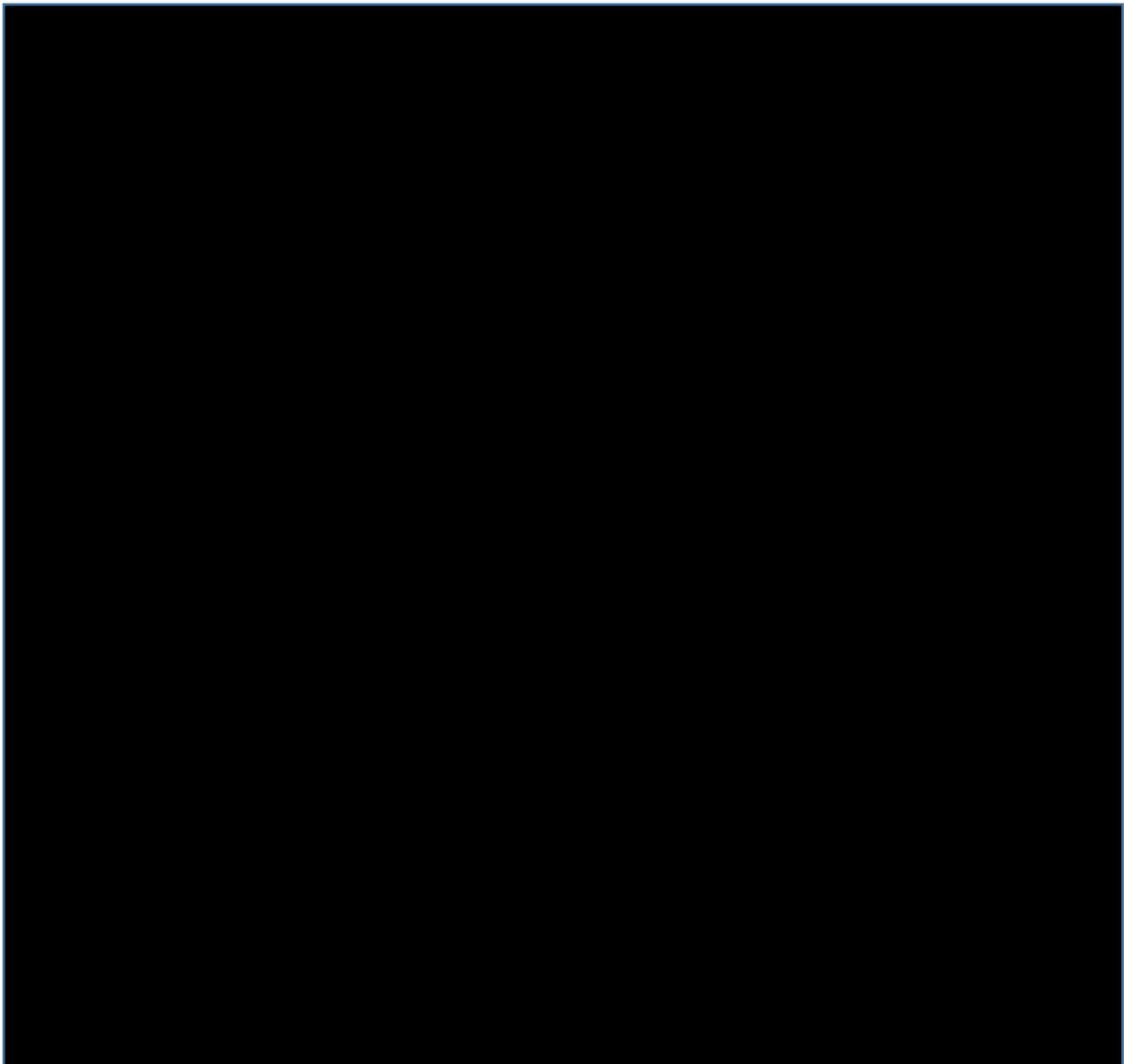
This VEET submission as at January 18 has been forwarded to the Senate Inquiry Non-Conforming Building Products and Products under the Category of other related issues FOR ONE REASON.

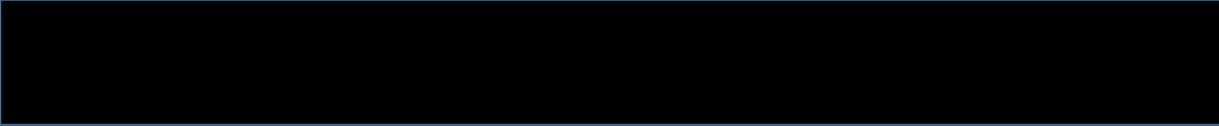
Standards Australia **AFTER 10 YEARS** since the 2006 Productivity into Standards Australia, a Coronial Inquiry and Royal Commission have failed the public, and only implemented few recommendation from that Productivity Inquiry.

I request the this Senate Inquiry place a big “hurry up” to Standards Australia to clean up their Act, because they won’t, as demonstrated in this VEET submission, and people’s risk of death is imminent because I believe Standards Australia’s IN ACTION to follow their own “charter objectives” at times borders I believe, in willful negligence.

AS I was one of seven only fully independent individuals to give on the stand evidence under oath and quoted 13 times in the final report of the 2014 Royal Commission Home Insulation Program, I strongly suggest that I give evidence at the new Senate Inquiry non – conforming products.

I have much more evidence to expose that will support the recalling of this Senate Inquiry in the National and Public Interest to expose the REAL TRUTH, regarding issues that are stifling our ability as a country to “grow.”





Graeme B. Doreian

Building Energy Consultant

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Victoria

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Mob 04 1987 3495

FURTHER ADDITIONAL CORRESPONDENCES

e mail to veet@esc.vic.gov.au subject below

Consultation submission - VEET Insulation Administrative Requirements

Scheme Administrator:

I submitted my VEET Submission Jan 18, 2017 to the Senate Inquiry Non-Conforming Building Products, without the following Comments below which forms additional information to my submission and again repeated in my Jan 29, 2017 VEET submission with the attachment.

From: Graeme Doreian [mailto:doreians@tpg.com.au]

Sent: Wednesday, 18 January 2017 8:28 PM



Subject: 2017 Submission Senate inquiry into non-conforming building products

Good day,

Please find enclosed my closing date 2017 Senate Inquiry Submission to the extended Senate Inquiry into non-conforming building products.

Could you note I have forwarded a submission **Comment to VEET Scheme**

including insulation in ceilings and floors which forms part of my Senate submission.

A confirmation of acceptance and when I would be able to address the Senate Inquiry in person would be much appreciated.

Regards

Graeme B. Doreian

e mail doreians@tpg.com.au

Mob 04 1987 3495

FURTHER COMMENTS

I remind the reader of this VEET submission DATED Jan 18, 2017, of the intent of the Victorian Labor Government in 2005 to make roof spaces electrically safe.

“ VEET: Proposed Activity Regulation Changes June 2016

Submission (1)Schedule 12 underfloor insulation submission by Graeme Doreian July 22, 2016

e mail doreians@tpg.com.au **Mob** 04 1987 3495

Case for pre electrical inspection for all insulations installed in roof/floor spaces”

Victorian Government history supports **as outlined in my submission above:** “Case for pre electrical inspection for all insulations installed in roof/floor spaces “

To implement a pre-electrical inspection for all insulations installed in roof/floor spaces, **irrespective** of the initiatives for the proposed 2017 VEET scheme.

I ALSO stress, I personally gave a copy of this submission, “Case for pre electrical inspection for all insulations installed in roof/floor spaces” to VEET team member Jack Weeks responsible for insulation incentives at the Energy Saver Incentive Oct 28, 2016 VEET meeting.

I mention this, because the consultation paper “Insulation Administration Requirements” I am commenting on here Jan 18, 2017, the Victorian Labor Government give the impression they want to make roof spaces electrically safe for anyone one entering that space, just doing their job.

I trust the Victorian Labor Government follow their own initiatives to make roof spaces electrically safe when all types of insulations are installed in roof spaces to the point they

“press” Standards Australia DIRECTLY to use the Victorian State Government electrical safety proposed VEET initiates to Committee BD-058 before public comment in the up and coming revision of AS 3999-2015.

PLEASE do not see these Victorian initiatives including photographic evidence “watered down” to be included in the Installation of Insulation Standard AS 3999, as the existing AS 3999-2015 guidelines fail to make roof spaces electrically safe again are not satisfactory favoring bulk fiberglass type insulations.



Graeme B. Doreian

Building Energy Consultant

63 Fig Street

DROMANA 3936

Victoria

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Mob 04 1987 3495

Attachment:

VEET: Proposed Activity Regulation Changes June 2016

Submission (1)Schedule 12 underfloor insulation submission by Graeme Doreian July 22, 2016

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Case for pre electrical inspection for all insulations installed in roof/floor spaces

