STATEMENT

29 February 2016

New Australian Standard on Recessed Luminaires

- Australian/New Zealand Standard published to address luminaire safety
- Aligns with the equivalent international standard with additional requirements based on local conditions and data

Standards Australia recently published the joint Australian/New Zealand Standard AS/NZS 60598.2.2-2016, *Luminaires—Part 2.2: Particular requirements—Recessed luminaires (IEC 60598-2-2, Ed. 3.0 (2011) MOD)*.

Technical committee EL-041, *Lamps and related equipment*, reviewed data obtained from incidents that occurred during the Federal Government's Home Insulation Program, and data supplied by electrical safety regulators and industry participants in relation to thermal insulation placed over recessed luminaires.

The committee identified that updating relevant lighting standards could aid in minimising the risk of ignition.

"The publication will assist manufacturers with achieving the required safety outcomes for their products when used in real building applications," advised Owen Manley, Chairman of EL-041 on behalf of the committee.

This new Australian and New Zealand Standard compliments AS/NZS 5110:2011, *Recessed luminaire barriers*. This earlier standard specifies safety requirements for barriers to provide adequate separation from combustible building elements, insulation, and/or debris. This new edition replaces AS/NZS 60598.2.2:2001 and New Zealand Amendment A 2011.

AS/NZS 60598.2.2:2016 now includes classifications of various types of recessed luminaires suitable for different installation processes. This includes labelling requirements of each classification to assist installers of thermal insulation. The new labelling requirements are specifically addressed in Appendix ZD (attached).

The new edition aligns with international standard IEC 60598-2-2:2011, *Luminaires – Part 2.2: Particular requirements – Recessed Luminaires* with some additional requirements relevant to issues identified from Australian and New Zealand data.

Stakeholders from government, regulators, industry associations, consumers, academic institutions, testing and research bodies constitute EL-041. This Standard has been developed with input from Australia and New Zealand Stakeholders to align the requirements in both countries.

ENDS.

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APPENDIX ZD

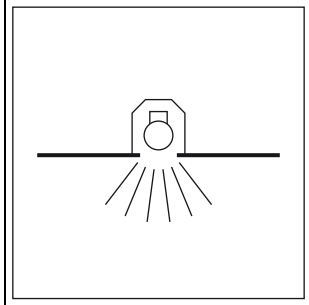
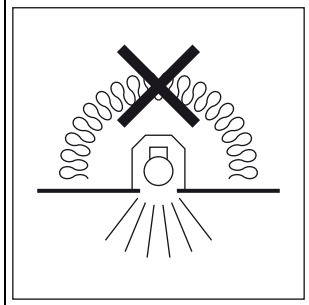
GUIDANCE ON CLASSIFICATIONS

(Informative)

This Appendix provides information and guidance on the classifications, symbols, applications and general restrictions on recessed luminaires.

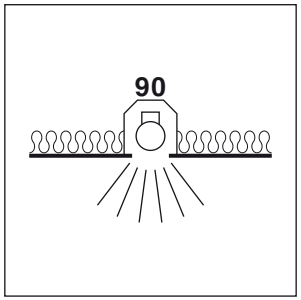
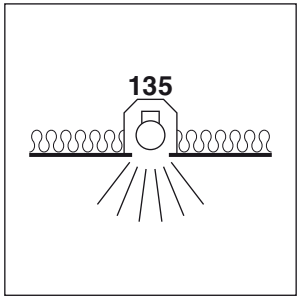
TABLE ZD1

GUIDE TO RECESSED LUMINAIRE CLASSIFICATION, SYMBOLS, APPLICATION AND GENERAL RESTRICTIONS ON USE

Type	Symbol	Abutted*	Normal use†—Covered	Use with insulation‡	Accessibility to high temperature parts§	Surface of luminaire normal operating temperature limit	Comments
Non-IC		No	No	No	Fully accessible	No limit on side or top surface of luminaire Mounting surface of luminaire limited to 90°C	Suitable for use in Australia and New Zealand—Intended for commercial industrial use only. Not for residential use. Not for use in residential dwellings or other places where building insulation may be installed (now or in the future). These luminaires have not been tested for use with building insulation.
Do-Not-Cover		No	No	Yes	Fully accessible	No limit on side or top surface of luminaire Mounting surface of luminaire limited to 90°C	Currently prohibited from installation in residential locations in New Zealand by AS/NZS 3000. Suitable for residential or commercial use in Australia. Cannot be covered. Manufacturer's stated clearance distances from sides of luminaire to insulation, and clearance above luminaire, will be in the installation instructions supplied with the luminaire, indicating clearances have to be observed at all times for correct installation. These luminaires have been tested to show that they are for use with building insulation present, observing manufacturer's stated installation clearance distances. They cannot be covered with building insulation, however, they have been tested to show that if inadvertently covered they should not become a fire hazard.

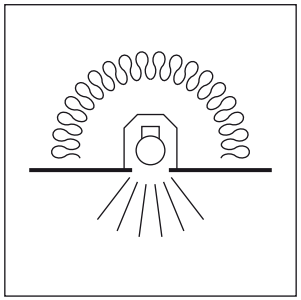
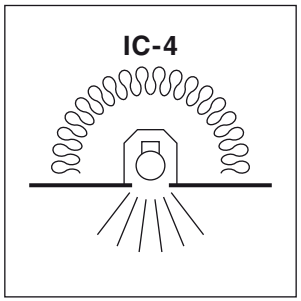
(*continued*)

TABLE ZD1 (*continued*)

Type	Symbol	Abutted*	Normal use†—Covered	Use with insulation‡	Accessibility to high temperature parts§	Surface of luminaire normal operating temperature limit	Comments
CA90		Yes	No	Yes	**Limited access** In this Standard, this is assessed for access to high temperature parts by use of a 5.6 mm probe to side and top of luminaire	90°C limit on side or top or mounting surface of luminaire	Suitable for residential or commercial use in Australia and New Zealand. Cannot be covered. Insulation can be placed against the sides of the luminaire. Manufacturer's stated clearance above the luminaire will be in the instructions provided with the luminaire, indicating clearance has to be observed for correct installation. These luminaires have been tested to show that they are for use with building insulation present and placed against the sides of the luminaire. They cannot be covered in building insulation, however, they have been tested to show that if inadvertently covered they should not become a fire hazard.
CA135		Yes	No	Yes	**Some access** In this Standard, this is assessed for access to high temperature parts by use of a 50 mm probe to side and top of luminaire	135°C limit on side or top surface of luminaire Mounting surface of luminaire limited to 90°C	Suitable for residential or commercial use in New Zealand only. Not permitted for use in Australia. Cannot be covered. Insulation can be placed against the sides of the luminaire. Manufacturer's stated clearance above the luminaire will be in the instructions provided with the luminaire, indicating clearance has to be observed for correct installation. Cannot be used where building materials or insulation is not rated for exposure to constant temperatures of 135°C (cannot have such building material or insulation touching the sides of the luminaire). These luminaires have been tested to show that they are for use with building insulation present and placed against the sides of the luminaire. They cannot be covered in building insulation, however, have been tested to show that if inadvertently covered they should not become a fire hazard.

(*continued*)

TABLE ZD1 (*continued*)

Type	Symbol	Abutted*	Normal use†—Covered	Use with insulation‡	Accessibility to high temperature parts§	Surface of luminaire normal operating temperature limit	Comments
IC		Yes	Yes	Yes	**Limited access** In this Standard, this is assessed for access to high temperature parts by use of a 5.6 mm probe to sides and top of luminaire.	90°C limit on side or top or mounting surface of luminaire	Suitable for residential or commercial use in Australia and New Zealand. Used where some air transfer is allowed or desired between living space and roof space (there will be some air transfer between the spaces if the luminaire is not fully covered in insulation). These luminaires have been tested to show they are suitable for normal use when covered in building insulation.
IC-4		Yes	Yes	Yes	**Restricted access** In this Standard, this is assessed for access to high temperature parts by use of a IP4X—1 mm probe to sides, top and front face of luminaire.	90°C limit on side or top or mounting surface of luminaire	Suitable for residential or commercial use in Australia and New Zealand. Used where air transfer is not permitted or not desired between living space and roof space (there will be no air transfer between spaces even if there is no insulation covering the luminaire). Typical use is passive house design where no air transfer is allowed. These luminaires have been tested to show that they are suitable for normal use when covered in building insulation.

(*continued*)

TABLE ZD1 (*continued*)

Type	Symbol	Abutted*	Normal use†—Covered	Use with insulation‡	Accessibility to high temperature parts§	Surface of luminaire normal operating temperature limit	Comments
No Marking		No	No	No	No		Not verified as tested/compliant to Australian/New Zealand standards. Marking is required by standards—no marking indicates non-compliance. Installation instructions specifying any clearance distance is required by this Standard. Do not install any luminaire that does not have one of the marking symbols or instructions specifying any clearance distances. NOTE: For luminaires installed prior to the publication of this Standard (AS/NZS 60598.2.2:2016), which do not have marking and/or installation instructions with clearance distances specified, refer to AS/NZS 3000.

* May be abutted against normally flammable building elements or insulation.

† Intended and tested for use under building insulation as part of normal operation.

‡ May be used where building insulation may be installed (now or in the future).

§ Classification and probe to determine access of insulation etc., to high temperature parts.