

Installation of Recessed Luminaires and Loose-fill Insulation

Lighting Council New Zealand - Position Statement

1 May 2023

Installation of all types of bulk thermal insulation in residential building ceilings needs to be undertaken in compliance with NZ Standard **NZS 4246:2016 Energy efficiency - Installing bulk thermal insulation in residential buildings**.

This is a free-issue SNZ standard funded by the Energy Efficiency and Conservation Authority (EECA).

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Loose-fill insulation used in conjunction with recessed luminaires (sometimes called recessed downlights) in ceilings needs to be installed within specifically defined physical configurations, as described in NZS 4246.

NZS 4246 requires protective guards or barriers to be used to provide separation between the recessed luminaire and the loose-fill insulation, and with non loose-fill insulation used for abutting and/or covering the luminaire, where appropriate.

See NZS 4246, Section 4 Lighting, Part 4.2.2, **Installing insulation near recessed luminaires in ceilings** “Follow the specified clearances of the recessed luminaire manufacturer where they are known. Ensure that the insulation product is compatible with the recessed luminaire”

See Table 1, for “Loose-fill installation only” detailed subnotes in the applicable luminaire category.

See diagram: Figure 4, Page 37

“Installing new loose-fill ceiling insulation around recessed luminaires of the type CA-80, CA-90, and CA 135, where the luminaire manufacturer’s instructions are not known”.

See diagram: Figure 7 Page 38

“Installing new loose-fill ceiling insulation around recessed luminaires of the type IC , IC-F and IC-4, where the luminaire manufacturer’s instructions are not known”.

It is not permitted to place independent controlgear directly on top of loose-fill insulation.

It is the responsibility of the building designer to specify the detailing of the insulation and recessed luminaire configuration for the particular building concerned.

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Lighting Council New Zealand is the industry association for lighting manufacturing, importing, and distribution companies in New Zealand, and associated lighting industry participants.