

# BC Update 188: Ban on installing or repairing foil insulation in residential buildings

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The Chief Executive of the Ministry of Business, Innovation and Employment (MBIE) has declared a ban, under section 26 of the Building Act 2004, on retrofitting or repairing foil insulation.



The ban is specifically on the following building methods:

- the installation of foil insulation into residential buildings with an existing electrical installation (retrofitting foil insulation), and
- the repair of foil insulation in residential buildings with an existing electrical installation (e.g. stapling ripped or damaged foil back onto the floor joists of a building).

The ban follows strong feedback on the need to eliminate the risks posed by foil insulation products. These concerns were raised by submitters during consultation on proposed changes to the Residential Tenancies Act 1986 (that will require insulation and smoke alarms in rental properties).

The risk with retrofitting foil insulation is that the person installing it could accidentally pierce a live electrical cable with the fasteners (e.g. staples or nails) that they are using to attach the foil to the building structure. The foil, being metallic, conducts electricity and can become live if it comes into contact with live electrical wiring – potentially enlivening the entire underfloor of a building. To date, there have been five reported deaths in New Zealand caused by electrocution associated with foil insulation in a residential building, as well as one reported non-fatal electric shock.

The changes to the Residential Tenancies Act are expected to require about 180,000 properties to be insulated by July 2019. This will result in much more widespread insulation activity over the next few years - which could increase the use of foil insulation and therefore the chance of injury or fatalities.

MBIE considers that a ban is necessary to reduce the likelihood of any further injuries or deaths, and to ensure buildings are safer to use.

The ban comes into force on 1 July 2016 and will remain in place until amended or revoked by the Ministry. It is an offence under the Building Act to breach a ban and anyone who breaches the ban may be liable to a fine of up to \$200,000.

As the Residential Tenancies Act will require landlords to assess the extent of insulation in their buildings, we expect landlords and tenants will be getting under their floors to conduct checks on existing insulation. This could pose an electrocution risk as there could be cases in existing buildings where previously installed foil insulation is electrically live (e.g. if foil insulation has been installed with the power off and not tested for safety once power was restored).

WorkSafe NZ has also developed some guidance, as part of its functions as the regulator of electrical safety under the Electricity Act 1992. Its Electrical Code of Practice is publicly available and sets out how to protect people and property from harm due to improperly installed foil insulation. The Code of Practice will enable building owners and the industry to better manage electrical safety risks associated with existing foil insulation.

Anyone concerned about how to work around foil insulation should consult WorkSafe's guidance or engage the services of a licensed electrical

worker.

Foil insulation ban (2016/001) (<https://www.building.govt.nz/building-code-compliance/warnings-and-bans-on-building-products/foil-insulation-ban/>) has more information.

See the public register of electrical workers on the [Electrical Workers Registration Board \(http://www.ewrb.govt.nz/\)](http://www.ewrb.govt.nz/) website.

Download a copy of the [Electrical Code of Practice \(https://worksafe.govt.nz/laws-and-regulations/standards/electricity-standards-and-codes-of-practice/\)](https://worksafe.govt.nz/laws-and-regulations/standards/electricity-standards-and-codes-of-practice/) from WorkSafe's website.



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