

builder'smate



YOU CAN'T FOIL ME

There is now a ban on retrofitting or repairing foil underfloor insulation. It is also likely that, within a few months, foil will no longer be included in Acceptable Solution H1/AS1 for use in new construction.

Foil sheeting (usually aluminium) has been used as underfloor thermal insulation for decades. In the 1970s, it was almost the standard form of insulation under suspended timber floors. Foil doesn't have any thermal resistance itself (unlike bulk insulation such as polyester, fibreglass or polystyrene), but its reflective surface can reduce heat loss as long as the air in the space between the foil and the floor is still. While its use in new construction has reduced greatly in recent years, it is still used occasionally in both new builds and retrofits.

There have been two major problems with foil:

- If great care is not taken during retrofits, the whole underfloor insulation can accidentally become live if a steel staple hits an electricity cable when the foil is being installed. Five people homeowners and tradespeople have died in New Zealand when coming into contact with live conductive foil.
- After a while, foil's ability to provide insulation falls away. It gets torn or damaged and no >

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INDUSTRY NEWS

Carports don't need consent

New free-standing carports no longer require a building consent so long as they are on ground level and no more than 20 m². Before the change, the exemption applied only to attached carports.

Clean Air from WorkSafe

WorkSafe has launched the Clean Air programme, with the goal of reducing illnesses caused by breathing in silica dust and organic solvents. The programme raises awareness of the health risks of these substances and how they can be eliminated or controlled. The programme will expand to the risks of breathing welding fumes and wood dust, which can also cause serious illnesses. You can find more info at www.business.govt.nz/worksafe/information-guidance/work-related-health/clean-air-programme

Good Repair Guides

There are now 26 BRANZ Good Repair Guide titles. Available in hard copy or Epubs, these practical guides take building professionals step by step through repairs in all areas of a house. New titles in 2016 include Leaking Basement Walls and Overlay Flooring.





BRANZ recommends bulk insulation for all suspended floors.



BRANZ has seen many cases where torn or damaged foil no longer provides effective insulation.

longer provides a still air space (or possibly never provided a still air space). The reflective surface gets dusty, and its effectiveness is greatly reduced. BRANZ house condition surveys regularly find foil that is no longer providing effective insulation.

The ban on retrofits is largely to do with a law change that requires rental properties to be insulated by 1 July 2019. This means that around 180,000 homes are likely to be retrofitted with insulation in the next 3 years. The government decided that the risks and problems plus a lack of verifiable performance with foil meant that it should be removed as an option.

The ban was made under section 26 of the Building Act. This gives the Chief Executive of the Ministry of Business, Innovation and Employment (MBIE) the power to warn about or ban a building method or product if they believe it could lead to building work that fails to comply with the Building Code. This is the first ban issued under the Building Act.

While the ban will remove the risk from new installation, there is still a potential risk from existing faulty installations. These could pose a danger to anyone inspecting existing underfloor foil insulation or removing it. WorkSafe has provided some updated guidance on this.

The key step is to ensure all power is switched off at the main switchboard before you start any work, and take good battery lighting under the floor with you. Be cautious when working in any confined spaces close to electrical wiring.

New buildings

The 1 July ban applies only to the use of foil in existing residential buildings. However, MBIE is also planning to change Acceptable Solution H1/AS1 (for example, in Table 1, note 4). At the moment, this allows foil draped over floor joists with no other insulation as a way of complying with the New Zealand Building Code for underfloor insulation. The change to take foil out of H1/AS1 could happen later this year.

BRANZ has advised against the use of foil for some years.



Mouthpiece

It is great to be back in the construction sector after a couple of years away. While some things move on, others stay the same. One of those things that has stayed the same is the volatility that the construction sector faces as it goes through its economic cycles.

Now, I get the current apprenticeship model. Being an employment-based regime means it self-regulates. Thus, in theory, we only employ what we need, and we can supplement skill shortages through the skills shortage lists of Immigration New Zealand until we catch up.

This works for short-term volatility so some form of equilibrium is maintained. However, in an extended recession, the industry essentially restructures itself to cope with lower demand levels, and no-one wants to take on an apprentice with no work on the horizon. Therefore, when the bounce comes, it is impossible to produce enough of them in time. And of course, when the economy tanks, large numbers of apprentices are let go, which is an enormous waste.

What the sector wants is what I call the 4 Rs – the right number of apprentices in the right place at the right time to the right standard. At the BCITO, we chase apprentices when times are good and employers when times are bad. The former are heavily influenced by the latter, so if we could incentivise employers to take on [or retain] apprentices during bad times, we won't need to find as many during good times. So, do we need to revisit the existing model? I think we do.

Warwick Quinn

Chief Executive Building and Construction Industry Training Organisation (BCITO)

Penetrations in sheet wall bracing

There are strict limits on the size and location of holes you can cut for service penetrations in sheet wall bracing such as plasterboard. If a hole is too big or too close to the edge of the sheet, the sheet loses its bracing capacity.

There are different proprietary systems with different materials, such as plasterboard, plywood, fibre-cement or MDF (mediumdensity fibreboard), so understanding the literature from the individual manufacturer is crucial. Here are a few requirements for different systems available in New Zealand.

Two fibre-cement systems

Holes up to 100 x 100 mm no closer than 200 mm to the edge of a sheet or to another hole.

One plasterboard system

Small openings 90 x 90 mm or less may be placed anywhere except within 90 mm of the edge of the bracing element.

One MDF system

Small openings of 90 x 90 mm or less may be placed anywhere except within 90 mm of the edge of the bracing element.

Another plasterboard system

Small openings of 90 x 90 mm or less may be placed anywhere except within 90 mm of the edge of the bracing element. Holes of a maximum diameter of 125 mm may be placed in the body of the sheet a minimum of 300 mm from the edge of the bracing element.

One plywood system

Small openings for services of up to 90×90 mm may be placed no closer than 90 mm to the edge of the bracing element. Service penetrations up to a maximum of 150 mm diameter may be placed no closer than 150 mm from the sheet edge without affecting the bracing rating of the panel.

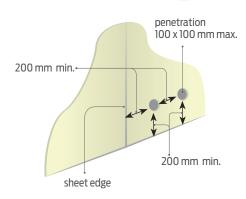


Figure 1. Manufacturer limits on penetrations in two fibre-cement systems.

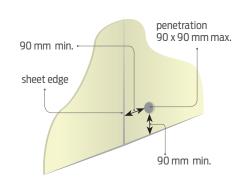


Figure 2. Manufacturer limits on small penetrations in two plasterboard systems, one MDF system and one plywood system.

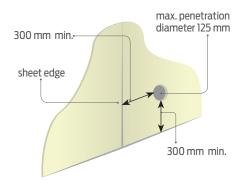


Figure 3. Manufacturer limits on larger penetrations in one plasterboard system.

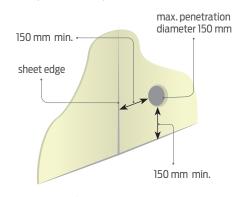


Figure 4. Manufacturer limits on larger penetrations in one plywood system.

build

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Competition Here's a tool





+ BUILDERS' APPS



In this series, we'll introduce some great apps and tools for your smartphone. The apps can be found in the iPhone store and/or the Android store. If you know any you'd like to recommend, email us the details at buildersmate@branz.co.nz.



R.A.C (REPORT-A-COWBOY)

This app lets you quickly report cowboys [unlicensed people doing restricted work] to the Plumbers, Gasfitters anwd Drainlayers Board. Allows you to include photographs. Fast access to more information. Free.



SOUND METERS

These apps give an indication of sound level that could be an early part of a health and safety assessment. Look for one that allows calibration. Will be limited by the quality/range of your smartphone microphone.









This high-grade, full grain tanned and oiled leather apron has pockets and pouches riveted for extra strength. Leather belt with stainless steel buckle. (Tools not included.)

The prize is provided courtesy of The ToolShed.

All you need to do to win is tell us the name of the mystery tool [above].

Email your answer to **buildersmate@branz.co.nz**. Put "August Competition" in the subject line. The message should include your answer, your name, postal address and phone number. One entry per entrant please.

Don't forget to tell us where you picked up your copy of *Builder's Mate*! The winner will be the first correct entry drawn at 9 am on Friday 16 September 2016. Details will be posted on the BRANZ Ltd website [www.branz.nz] and in the next edition of *Builder's Mate* due out on 1 October 2016.



The winner of **Builder's Mate 78** competition was Yvonne McKee of Opunake. Yvonne wins a Toolshed Trade Brad Nailer worth \$179. The mystery tool was a cordless screwdriver.

Terms and conditions:

Entry is open to all New Zealand residents except employees and immediate families of BRANZ and The ToolShed shops. The competition will close at 9 am on Friday 16 September 2016. The prize is not transferable for cash. The judge's decision is final. No correspondence will be entered into.



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** www.maintenanceschedules.c

Maintenance Schedule

Welcome to the BRANZ Maintenance Schedule tool. Here you can create a maintenance schedule for a new house, print a copy for the owners, and save a copy for your own files.







Maintenance Schedule

Free to builders

BRANZ Maintenance Schedule is now available as a **free** web-based tool that allows you to simply select the materials and finishes used in a building via dropdown boxes.

With its enhanced features, the tool creates a professional maintenance schedule for a new or renovated home which can be supplied to clients or local authorities.

- Record in one handy place all materials used in a building
- Give your clients a comprehensive maintenance guide.

Go to:

www.maintenanceschedules.co.nz

branz.nz | Technical Helpline 0800 80 80 85

Inspiring the industry to provide better buildings for New Zealanders

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Standards referred to can be purchased from Standards New Zealand. Tel: 0800 782 632 or www.standards.co.nz.

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