

# builder's mate

## INDUSTRY NEWS

### New standards for plumbing, wiring, log burners

Updated versions of some key standards have just been published:

- AS/NZS 3000:2018 *Electrical installations* [the Australian/New Zealand Wiring Rules]
- AS/NZS 3500:2018 *Plumbing and drainage*, in four parts that cover water services, sanitary plumbing and drainage, stormwater drainage and heated water services
- AS/NZS 2918:2018 *Domestic solid fuel burning appliances – Installation*.

There are long roll-outs. Existing versions of standards must normally be used until regulations can be updated to cite the latest version of a standard. This can take many months. See [www.standards.govt.nz](http://www.standards.govt.nz).

### Texture-coated cladding guide updated

BRANZ has just released a third, updated edition of Good Practice Guide *Texture-coated Claddings*. The book covers design, detailing, installation and on-site construction practices. Available in printed or digital versions. See [www.branz.co.nz](http://www.branz.co.nz).

### Tiiiiimmmmbbbbeeerrrr!

The BRANZ *Talking Timber* seminar is being taken around the country from Invercargill to Kerikeri over August-September. See [branz.arlo.co/find-a-course](http://branz.arlo.co/find-a-course).



## TREATING A CUT IN FINISHING TIMBER

The end grain of cut timber is a vulnerable spot where water can be more readily absorbed and rot can start if the timber remains wet. When you're on site and making cuts to painted or stained timber that will be exposed to moisture – weatherboards, bargeboards and fascias – treating the cut end the right way is crucial.

Under the New Zealand Building Code, claddings must be durable for at least 15 years with normal maintenance. Homeowners will naturally expect much longer than that.

NZS 3602:2003 *Timber and wood-based products for use in building* requires radiata pine weatherboards, external fascias and trims to be treated to hazard class H3.1 as a minimum and protected with three coats of alkyd or acrylic paint.

These H3.1 treated timber products usually arrive on site preprimed on all surfaces. After they are cut to length, cut ends must always be reprimed, preferably with two coating applications because of the greater porosity of timber end grain. Repriming after cutting is a requirement of NZS 3602:2003 (and also Acceptable Solution E2/AS1). Notches and holes cut in the timber should also be fully sealed. >



A Milwaukee tool organiser pocket with tools worth \$300!

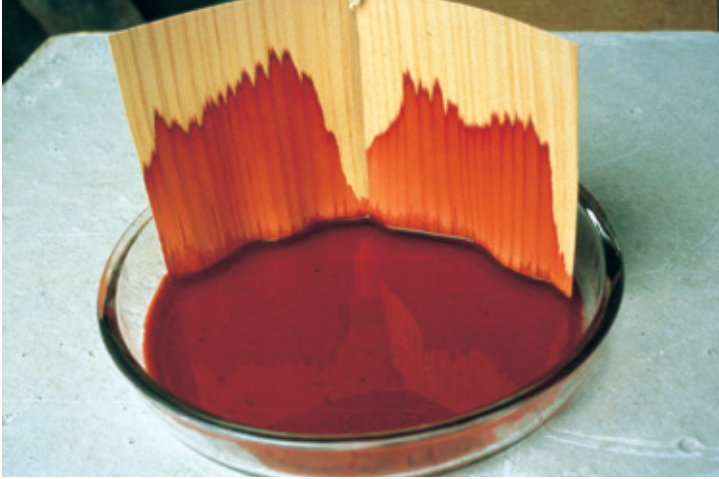
WIN!

the Tool Shed

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## HAMMER 'N' NAILS





The end grain soaks up more moisture than the face.



BRANZ recommends two coats of sealer to the cut ends.

Because primers have a short life, primed weatherboards not immediately installed may need repriming – check the supplier's installation instructions for the maximum time primed surfaces can be exposed to the weather.

While sealing cut ends is especially important for H3.1 timber weatherboards and trims, it also applies to weatherboards made from H3.2 treated timber or cedar that are painted or stained, fibre-cement, compressed hardwood fibres and some other materials. Check the manufacturer's requirements – they typically require cut ends to be sealed with an acrylic sealer. Some proprietary products (including H3.1 radiata pine products) require a proprietary sealant to be used on cut ends.

There are also treatment requirements for other types of cladding cut on site. For example, E2/AS1 requires that:

- where fibre-cement sheet claddings are cut on site, cut edges are sealed with paint including 100 mm across the back face from each edge
- where plywood sheet claddings are cut after treatment, the cut edges are brushed with a solution of 12.5% copper naphthenate in white spirits or mineral turpentine.

### H5 treated timber piles

Timber piles must be durable for at least 50 years under the Building Code. Where piles are cut on site, whether cutting to length or notching and rebating, the cut ends must always be treated. The cut surface should

be dry to the touch and then have a liberal application of timber treatment brushed on. Manufacturers will recommend treatment in their documentation, but it will usually be something like zinc naphthenate, TBTO or TBTN.

The cut ends of piles must not be placed in the ground. Some manufacturers go further and specify that cut ends should not be closer than 150 mm or 300 mm to the ground.

Product warranties may no longer apply if the requirements around treating cut ends are not followed.



## Mouthpiece

### ITAB carpentry apprenticeships

The Industry Training Association – Building (ITAB) apprenticeship scheme, a partnership between 14 polytechnics and the New Zealand Certified Builders Association, has record numbers of trainees undertaking carpentry apprenticeships. This is a healthy sign for the future of carpentry within the building industry.

This positive signal is encouraging, together with similar record numbers being recorded by BCITO and other providers including other trades in the sector, but we can and need to do more. The shortage of skilled people in the workforce is a topic that is frequently in the media, and any progress of the KiwiBuild initiative will likely only exacerbate the shortage. There are frequent reports of many builders wanting to expand and invest in their business. However, they are hampered not by lack of money or effort or will or construction demand but by a lack of available tradespeople with the necessary skill level. There is a certain irony in this position, as often the building industry is criticised as being dominated and fragmented by the smaller-size companies.

There is a wide range of reasons why we are in this position, including industry boom/bust cycles. There is a wide range of levers that can be pulled by both government and industry to try and provide solutions to solve this.

ITAB has been active over the last couple of years in lifting the profile of the building industry and its attractiveness as a career. This has included engaging with current employers to encourage them to employ more people and providing financial support to those in need through scholarships and grants. ITAB has also partnered with aspirational Kiwis such as Tom Walsh, the current world champion in shot put, who was an ITAB apprentice. Another positive initiative is the Building Professionals Programme in conjunction with ITM that has seen first-year ITAB apprentices get a hand up by the supplier with a range of free hand tools.

These are just a few of the things being done to lift the industry and its apprentices – but there are many, many opportunities to encourage trainees into this fantastic industry we all belong to.

**Grant Florence**  
Chief Executive, NZCB

# THINKING BIGGER – 140 MM FRAMING

Warmer homes typically use thicker insulation, and this requires bigger wall framing. While R2.8 insulation is the highest practicable insulation value that can be used with 90 mm framing, R4.2 insulation can be used in 140 mm framing.

There are slightly different rules around 140 mm wall framing in NZS 3604:2011 *Timber-framed buildings*:

- Stud heights can be increased over 90 mm framing at the same centres.
- 140 mm studs can be installed at wider spaces. For example, with loadbearing walls in extra high wind zones, a 140 x 45 mm stud up to 3.0 m length [height] can be used at a maximum spacing of 600 mm – twice the stud spacing of a 90 mm wide stud [see NZS 3604:2011 Table 8.2]
- The maximum size of a hole or notch is 38 mm compared to 25 mm for 90 mm framing. [In each case, the measurement is 27% of the timber depth. The actual 38 mm figure doesn't appear in NZS 3604:2011 – it is derived from that.]
- 140 mm trimming studs can be made with a built-up thickness of 2/70 mm or 6/35 mm.

- Where there is built-up framing with up to six framing members nailed together, for framing 140 mm or more, there must be at least two rows of nails across the member width.

Apart from allowing thicker insulation, 140 mm wall framing offers designers more flexibility around the size and position of plumbing and electrical services.

The 140 mm framing and R4.2 insulation comes at a cost. One researcher looking at actual houses being built calculated additional costs of \$6,200–8,700 per house above the typical construction of 90 mm framing/R2.8 insulation. That would help achieve an 8-Homestar rating, however – considerably higher than most houses built today [see BRANZ Study Report SR391].



# build

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## ADVISORY HELPLINES

For the building and construction industry:

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For the homeowner and public enquiries:

**0900 5 90 90**

Calls cost \$1.99 per minute plus GST

[branz.nz](http://branz.nz)

# Competition

Here is a tool



What is it?



## A Milwaukee tool organiser pocket with tools worth \$300!

This gold pack from Milwaukee is a bucketless tool organiser pocket with screwdrivers, stapler and other items. Incredibly useful!

The prize is provided courtesy of The ToolShed. All you need to do is tell us the name of the mystery tool at the top of the page.

Email your answer to [buildersmate@branz.co.nz](mailto: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 14 September 2018. Details will be posted on the BRANZ Ltd website ([www.branz.nz](http://www.branz.nz)) and in the next edition of *Builder's Mate* due out on 1 October 2018.



Winner of *Builder's Mate 89* Barrie Sinclair of Invercargill receives his prize.



Winner of *Builder's Mate 90* is Stefan Kolaczynski of Upper Hutt. Stefan wins a De Walt drill/driver and impact driver kit. The mystery tool was a framing nailer.

**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 14 September 2018. The prize is not transferable for cash. The judge's decision is final. No correspondence will be entered into.

# + BUILDERS' APPS

In this series, we 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](mailto:buildersmate@branz.co.nz).



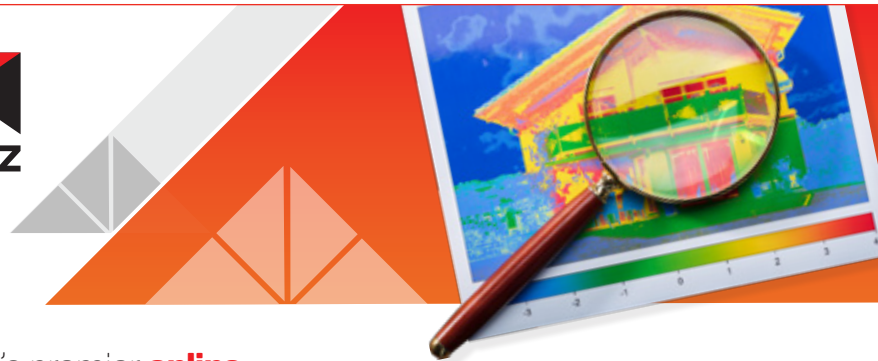
## MUSIC STREAMING

Music streaming can be great on site. The best apps have millions of songs and let you customise playlists. Spotify and Google Play Music are examples.



## HUNTING BARGAINS

Everyone likes to save cash. Some price comparison apps are very specific (Gaspy just looks at fuel) while others such as PriceSpy cover appliances and more.



BRANZ's premier **online thermal analysis tool ALF** has just got hotter.

Use ALF results with building consent applications to demonstrate Building Code clause H1 *Energy efficiency* compliance.

## So what's new?



Single My BRANZ login



Improved energy gains and losses



Helpful data-entry tips



New construction materials included



Share projects with other ALF users

Create professional reports for your next project

COMING SOON

Although BRANZ has made every attempt to ensure the accuracy of its information, it provides generic advice only, and BRANZ accepts no liability for any loss or damage incurred. Opinions expressed in *Builder's Mate* do not necessarily reflect the views of BRANZ. Standards referred to can be purchased from Standards New Zealand. Tel: 0800 782 632 or [www.standards.co.nz](http://www.standards.co.nz).

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