

# BUILDER'S MATE

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## Temporary bracing during construction

**Wind damage during construction can cause cost blow-outs and weeks of delays. Getting the temporary bracing right is crucial.**

### Concrete walls

Support concrete masonry on both sides of the wall until the units are filled and the grout has set. For 20 series blocks, propping is required for walls:

- 1 m or higher where wind gusts above 90 km/h are possible
- 2.4 m or higher where wind gusts over 60 km/h are possible
- with any tall narrow elements such as isolated columns or panels between window and door openings.

For 15 series wall construction, more propping is required as it doesn't take as much wind to make thinner walls unstable. BRANZ recommends that you provide props for 15 series walls more than 1 m high where wind gusts above 60 km/h are possible.

NZS 3109 references Australian Standard AS 3610 as a useful guide to the design, detailing and propping of formwork.



**Win!**

**A Makita 18 volt Li-ion Cordless Drill/Driver**

**Worth \$499!**

## INDUSTRY NEWS

### Code of practice for torch-on membranes

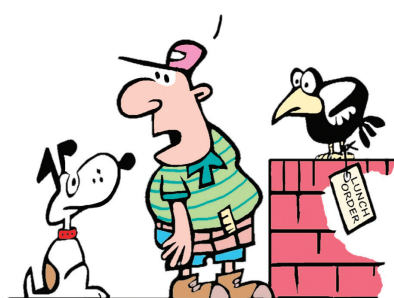
Torch-on membranes are an alternative solution to the New Zealand Building Code Clause E2. A group of supply and installation companies, the Membrane Group New Zealand, has released a Code of Practice for Torch-on Membrane Systems for Roofs and Decks which focuses on double-layered or multiple-layered torch-on membrane systems.

The document provides guidance on the group's recommended best practice for the selection and weathertight detailing of torch-on membrane cladding to roofs, decks and gutters etc. It is available from the Membrane Group's website: [www.membrane.org.nz/publications](http://www.membrane.org.nz/publications). The publication is not part of the DBH's Compliance Documents or guidance documents.

BRANZ has also recently released *Weathertight Solutions* Volume 6 giving details for junctions and openings in membrane roofs (to obtain a copy phone 0800 80 80 85).

## HAMMER 'N' NAILS

AND SHE KNOWS IT IS THE PIE SHOP IN THE HIGH ST, NOT THE ONE ON THE CORNER?



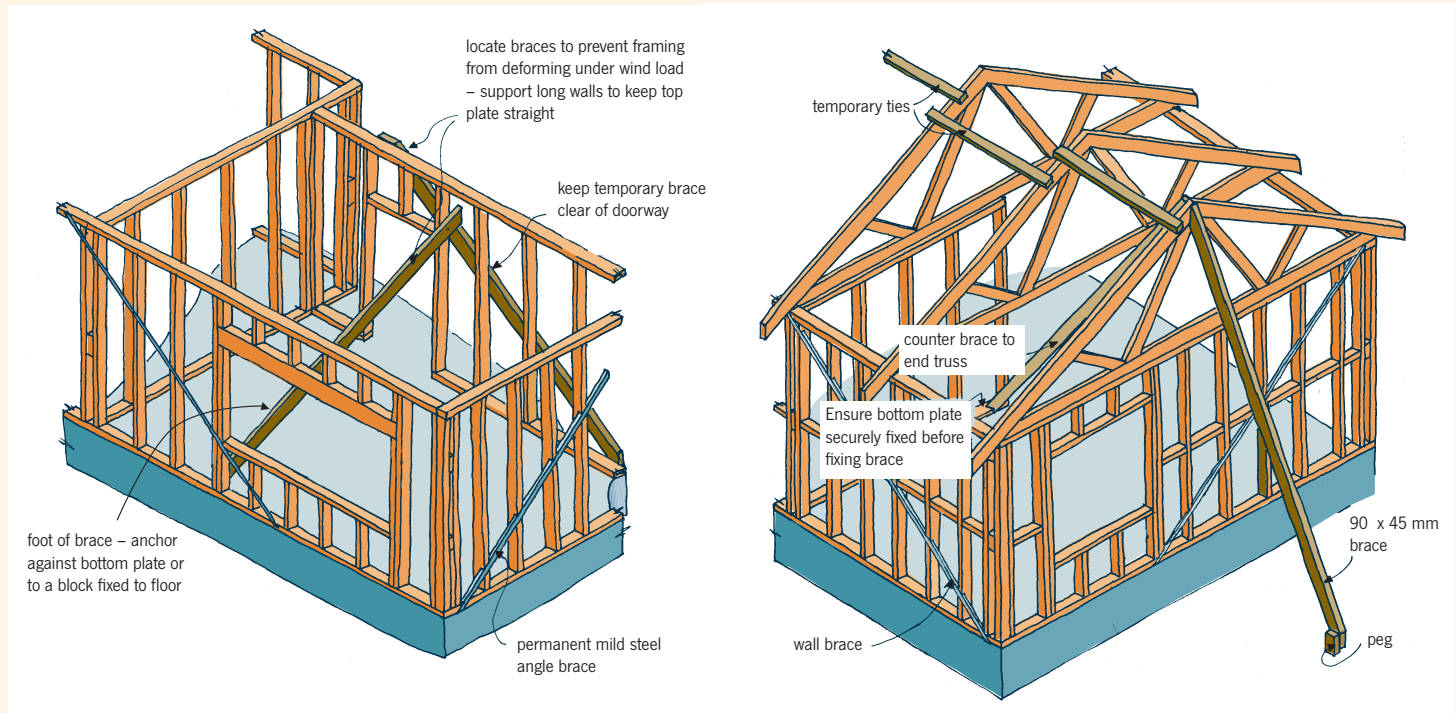
➤ Continued from previous page

This standard is based on in-situ concrete, not concrete masonry.

Lintels obviously need temporary support until the grout is strong enough for the

lintel to be self-supporting. Neither NZS 4229 nor NZS 4210 give information about propping. NZS 3109 gives a minimum propping time for in-situ

reinforced concrete beams and slab soffits of 18 days under good drying conditions and at least 24 days in cold conditions (between 5°C and 12°C).



## Dribblings from the Old Geezer



I've been to a couple of sawmills lately and they're not the 'gung ho' places that I recall from occasional visits 20 years ago. They are very automated now: the workers hardly touch the timber, the owners fully aware that they must provide a safe working environment.

I was also impressed with how seriously the potential dangers of timber treatment are taken. Even though the workers handle the end product less than the average builder does, they are provided with two lockers, one for work clothes and one for home clothes. The work clothes are considered contaminated and workers are not permitted off-site wearing them.

What about you? Do you go home, hug the wife and smother the baby with kisses in your work clothes? I hope not! Do you always wash your hands before smoking or eating? I hope so!

What about wearing goggles when cutting or sanding treated timber to protect your eyes against flying particles, and a mask to avoid inhaling the dust? Surely you've seen the posters. That clobber isn't just for sissies ... it is needed. The danger is invisible and real. Skin and eye irritation, breathing problems, perhaps more serious illnesses ... scary stuff. Gloves can also save your hands from cuts and splinters with very dry timber. How about aiming for a long life as well as a good life? Follow the rules.

**Des Molloy**

**BRANZ**

## ADVISORY HELPLINES

For the building and construction industry

➤➤ **0800 80 80 85**

For the home owner and public enquiries

➤➤ **0900 5 90 90**

Calls cost \$1.99 per minute plus GST

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### Timber-framed construction

Timber framing bends in the wind and can blow over. 90 x 45 mm braces should be located to prevent framing from deforming under wind load. Support long walls to keep the top plate straight.

The foot of a brace inside a structure can be anchored against the bottom plate, or to a block fixed to the floor. The foot of a brace outside a structure can be fixed to a peg in the ground. Temporary ties must be used between roof trusses (see drawings) – as they are installed.

Temporary bracing should be kept for as long as possible – until lining or sheet bracing is fixed in place.

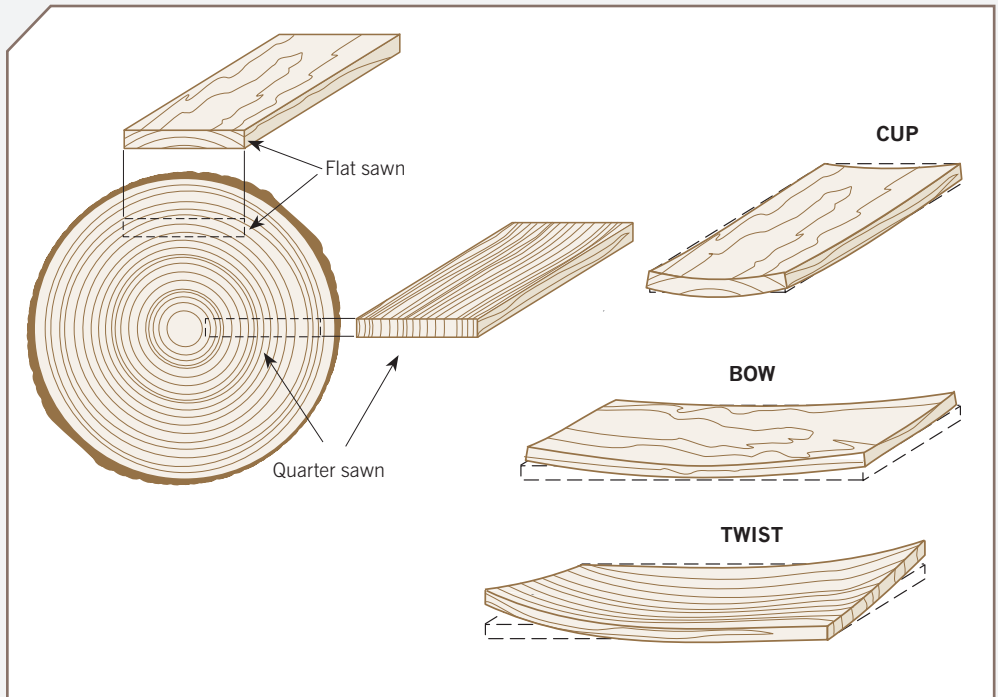
Don't rely just on metal cut-in bracing, as this requires the sheet material to perform in compression.

With two-storey construction, the lower storey should be very strongly braced before cladding is fixed to the upper storey.

## At a glance

# Timber terminology

When someone talks about cupping or bowing of timber, do you know exactly what they mean? Do you know how quarter-sawn boards are cut from a log? Here is a simple guide.



# Substitution

Using a different material to the one specified in the plans can seem like a good idea, but you need to keep the paperwork straight, and get the OK of the building consent authority (BCA), designer and owner.

On site you may be tempted to swap a specified product for one which is easier to get, is cheaper, or more familiar to you.

But if you want to make this sort of change, you'll need to get the approval of the local building consent authority (BCA). It may just give you a site note or letter if the substitution is considered of minor importance, such as using a different brand of flashing tape.

But you are likely to need an amendment to the building consent if the product is significant for achieving compliance with a Building Code clause. This is likely where the materials have an impact on:

- structural, fire or acoustic performance
- thermal efficiency
- weathertightness
- safety or access.

In these cases, the issues considered are the same as that for obtaining the original building consent. With a different cladding, for example, the BCA will need to reassess the joinery details, the bracing and thermal insulation calculations, as well as looking at the adequacy of the proposed new cladding itself.

The BCA will probably charge fees for its work. There may be construction delays: the BCA has up to 20 working days to approve or reject the amendment.

Regardless of how big the substitution is, you should get approval for it before you install the new product. If you don't do this, you could end up getting a notice to fix that may require remedial work, or the product may have to be removed and work on the job may be stopped.

And it goes without saying that you should also get the approval of the designer, and the owner who is ultimately paying for everything.



*Many building components need to be specified in the documentation. Substitution isn't something to be taken lightly.*

# COMPETITION Win!



**A Makita 18 volt Li-ion  
Cordless Drill/Driver  
Worth \$499!**

This great Makita tool is lightweight but has a powerful 4-pole motor and 2-speed all metal gear construction. 13mm single sleeve keyless chuck enables quick one-handed bit changes VSR 0-400/0-1,500rpm; Built-in LED job light; Max. torque of 50Nm; 20 minute fast charger; 2 x 1.5Ah Li-ion batteries. Comes in carry case

The prize is provided courtesy of The Tool Shed.

All you need to win is tell us the name of the mystery tool (above right) and what it's used for.

Send us your answer plus your name, address and telephone number on the back of an envelope. Post it (you don't need a stamp) to: Builder's Mate 33, Mystery Tool Competition, FREEPOST BRANZ, Private Bag 50 908, Porirua City 5240. 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 9 January 2009. Details will be posted on the BRANZ Ltd website ([www.branz.co.nz](http://www.branz.co.nz)) and in the next edition of *Builder's Mate* due out on 1 February 2009.

#### Terms and conditions:

Entry is open to all New Zealand residents except employees and immediate families of BRANZ Ltd, BRANZ Pty, Building Research and The Tool Shed shops. The competition will close on Friday 9 January 2009. The prize is not transferable for cash. The judge's decision is final. No correspondence will be entered into.



What is the name of this plane  
pictured below and what is it used for?



## BUILDER'S MATE WINNERS

Photograph: The winner of the BM 31 competition, Rex Marshall, receives his Leica Disto D2 from Karen Reynolds at The ToolShed, Christchurch.

The winner of the BM 32 competition was Rowena Hayes of Waiheke Island. The mystery tool was a saw set, used for setting the teeth on a saw. The prize was a Powerbuilt socket set and barbecue.

# BLOKES on the job

## DAVE FORRESTER

Building in Pt Chevalier, Auckland.



### Favourite tool

Dog bar.

### Favourite tip

Always have sharp tools.

## ROSS WILLIAMS

Building in Pt Chevalier, Auckland.



### Favourite tool

New skill saw with light.

### Favourite tip

The sign of a good builder is one who can fix the stuff ups.

## JONATHON GARDNER

Building in Westmere, Auckland.



### Favourite tool

The recently-released skill saw with light.

### Favourite tip

Use quality gear.



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Tel: 04 498 5991 or [www.standards.co.nz](http://www.standards.co.nz).

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Know someone on the job? Send us details of his or her favourite tip and tool and you could win \$50-worth of BRANZ books.