# BUBICON FREE TO ALL BUILDERS

# Verandars – keeping the lid on

Any verandah you build needs to cope with the uplift forces of wind. That means getting the right post-to-beam connections, and making sure the posts are securely anchored to the ground.

The details of how to do this are in the New Zealand Standard NZS 3604:1999 *Timber framed buildings*.

Table 9.1 in the Standard sets out the amount of concrete required for each post footing depending on roof type, wind zone and area of roof being supported.

The Standard also tells you how to construct the postto-beam connections to match the uplift. The area of roof being held down is the important factor here. Figure 9.1 shows how to work this out. The size of beam required to span between the posts to support the rafters is obtained from Table 10.8, while Figures 9.2 and 9.3 show the footing and beam connections. Here's an example. Let's say the verandah extends 1.8 m from the wall, the posts are 3.6 m centre-tocentre, and the roof just extends to the posts. It is a light roof in a high wind zone. From Figure 9.1, we find that each post supports a roof area of 1.62 m<sup>2</sup>. Table 9.1 doesn't have a value for this, so we need to use the next highest square metreage. This indicates a footing of at least 0.1 m<sup>3</sup> of concrete is needed. This is a big lump of concrete, typically 600 mm square and 300 mm deep.

For the top of the post, go to Table 9.2. Here we see that the capacity of the fixing connecting the post to the verandah beam must be at least 2.9 kN. All three options given in Figure 9.3 exceed this and can be used.

(Continued on p2)



Win! a Dynamic 2.5 hp compressor worth over \$500!

# Industry News House condition

January 2006

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BRANZ inspected 565 houses to see what shape our homes are in. Booming new house numbers and improvements in older homes mean that the average condition is better than it was when the last survey was done six years ago.

But older doesn't automatically mean more run down – the average condition of pre-1920's houses was similar to that of houses built 50 years later.

A telephone survey found that the average household spends less than \$1300 per year on house maintenance – that's not usually enough to keep a house in good condition.

## Bug watch

If you spot an unusual bug which may have hitched a ride on imported timber or packaging from overseas, there is a website you can check to see if it is an unwanted pest: www.biosecurity. govt.nz.

Termites, spiders, borers, ants and other unwanted visitors can put our buildings or our environment at risk.



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This just leaves the size of the beam which is found in Table 10.8. This shows that a 250 x 75 mm member is needed.

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### Verandah post-to-beam connections 60 mm min 60 mm min butt joint in beam beam 00 6 mm bracket welded fix bracket with M12 bolts - provide washers where 100 mm min 0 bolts bear on timber 60 mm min post 60 mm min 50 mm min beam 0 8 6 mm steel strap D fix bracket with M12 bolts - provide 50 x 50 x 3 mm or 50 Û 100 mm min dia. x 3 mm washers where bolts bear on timber 60 mm min post 100 mm of post to remain above top bolt so that the bolts don't split the top of the timber post 0 fix beam with 2/M12 bolts and (applies to all figures) 50 x 50 x 3 mm washers. 0 Bolts 60 mm min apart rebate not required for light roofs post NOTE -(1) See section 4 of NZS 3604 for 75 mm min durability requirements. (2) Capacity of fixings shown 9.8 kN.

Need a hand? If you've got a building problem that needs fixing, get on the blower to Eddie Bruce at BRANZ advisory helpline!

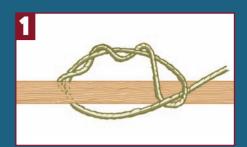
Builders call **0800 80 80 85.** Home owners call **0900 5 90 90** (0900 calls cost \$1.99 per minute, plus GST)

# Next issue: Insights into insulation.

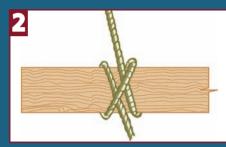
Builder's Mate 16 out 1 March 2006. Don't miss it!

# **Get knotted**

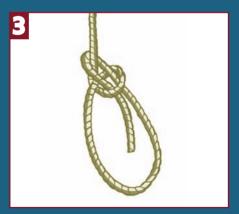
When you're tying timber or other materials together to lift or transport them, using the right knots can make life safer and more convenient – and make it easier to undo the rope when you're finished.



The timber hitch is a useful knot because it doesn't slip when a load is applied and is very easy to undo. When used in conjunction with a half hitch, timber can be hoisted vertically or heavy timbers dragged along the ground.



A clove hitch is a simple tie that tightens when pressure is applied, but is still easy to undo. It is vital that the rope goes twice around the object being tied. ۲



A bowline is a good knot for making a loop that doesn't slip yet is easy to undo.



A sheet bend is ideal for tying two ropes together.

# The Consumer Guarantees Act

A lot of building work falls within the range of the Consumer Guarantees Act. Understanding this law can help you avoid some expensive pitfalls.

The Act covers goods and services ordinarily bought for personal, domestic or household use. That means that as well as covering things bought by households, it can also cover items like furniture in commercial buildings. A builder supplying domestic goods may contract out of the Act.

Some of the guarantees that suppliers such as builders have to meet are that materials and/or services provided will be:

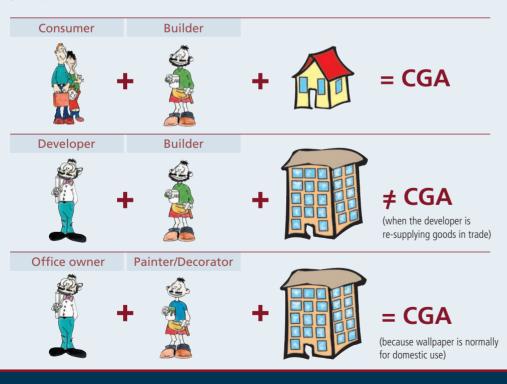
- of acceptable quality
- fit for the purpose
- carried out with reasonable care or skill
- completed within a reasonable time
- completed for a reasonable price, if no price is agreed.

To be of acceptable quality, goods must be acceptable in appearance and finish, free from minor defects, safe and durable. When considering durability, the price and any claims made about the goods by the seller are taken into account. Goods selected must be fit for any purpose which the consumer asks for, or the builder states they are fit for.

If the Act is breached, the owner can insist that the builder fix things. If the problem cannot be fixed in a reasonable time, or is substantial, the owner can reject the goods. They can ask for a refund or cancel the service contract, pay only for work properly done, and get someone else to finish the job.

A builder or other supplier may also have to pay for any reasonably foreseeable loss which the owner suffers as a result of the initial problem. For example, if a wrongly installed heater causes fire damage to surrounding wallpaper, the electrician may face a bill for new wallpaper as well as heater repairs.

To avoid pitfalls, keep good documentation, tell the owner about the limits of the goods or services you're supplying, and use products from a reliable source.





Want to know more? Get BUILD magazine. Published every two months, BUILD is THE industry magazine for building-related issues. Subscriptions cost #54. FREE to building company owners and sole building traders. VISIT www.branzconz to find out more.



# Dribblings from the old geezer

I've had the good fortune to travel recently and whilst travelling of course I couldn't help but observe building standards in the countries being traversed. My informal findings show that the more money builders are paid, the better their workmanship. Clearly German builders are paid more than Mongolian chippies and their work is accordingly much better. Simple eh! But there is more to it than that.

Workmanship in third world countries tends to be amazingly appalling. In-situ concrete stairs may vary 50 mm in step height. You're forever falling up stairs, nothing is ever true, or plumb, or level etc. You cannot understand how badly things are done ... except when structures of religious significance are being built or repaired. Look at a temple, church, synagogue or mosque and you will find exquisite workmanship to the highest standard imaginable. It is because the workers have great pride in constructing or repairing these buildings.

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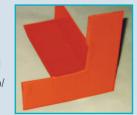
So is it remuneration <u>or</u> pride that achieves high standards? What about paying your workers a bit more money as an experiment to see if they work better? Mmmm. Or look for a way to make them proud of doing the job. Trust me. It does work.

Des Molloy, BRANZ technical writer

# Product Information

Corner moulded piece

Thermakraft have produced a piece of moulded plastic which can be nailed or stapled into jamb/ sill intersections to prevent moisture



damage. The piece is designed to be used in combination with flashing tape. For more information: www.thermakraft.co.nz A Dynamic 2.5hp compressor worth over \$500!



Send us your answer (one entry per entrant please) on the back of an envelope and post it (you don't need a stamp) to: Builder's Mate 15, Mystery Tool Competition, FREEPOST BRANZ, Private Bag 50908, Porirua City.

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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 10 February 2006. Details will be posted on the BRANZ Ltd website www.branz.co.nz and in the next edition of *Builder's Mate*, due out on 1 March 2006.

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

NIN

Here's a useful prize: a Dynamic

2.5hp compressor, complete with

a 36 litre tank, inflatable tyres,

moisture trap and regulator. This

is ideal for the small to medium

running nail or staple guns along

mystery tool and what it's used for.

with any other smaller volume tools requiring

All you need to win is tell us the name of the

The compressor is provided courtesy of The Tool Shed.

size carpenter or builder for

compressed air.



Terms and conditions: Entry is open to all New Zealand residents except employees and immediate families of BRANZ Ltd, BRANZ Inc, BRANZ Pty and The Tool Shed shops. The competition will close on Friday 10 February 2006. The prize is not transferable for cash. The judge's decision is final. No correspondence will be entered into. BRANZ Ltd may. from time to time, send you information about our products. You can contact us at any time if you do not wish to receive this information.

# **Builder's Mate winners!**

The winner of the BM 14 competition is Alan Macdonald, of Hamilton, who correctly identified the tools as boning rods, used since ancient Egyptian times to set out level paving work. Your eyeometer is used to line up the middle rod (the 'traveller') with the back one when you are looking over the front one. He wins an Izzy 1200 watt inverter supplied courtesy of The Tool Shed.



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February/March/April 2006

Profiled metal is a fashionable cladding – but it has to be fashioned with care to look and perform well.

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For more information contact Gail King: tel (04) 237 1170; email Gailking@branz.co.nz; or visit www.branz.co.nz.



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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: 04 498 5991 or www.standards.co.nz.

# Blokes on the job



**Logan Gosse**, ready for lunch at Ngunguru near Whangarei.

Favourite tool: the microwave.

Favourite tip: take notice of the boss.



Daniel Cory, on site at Albany.

**Favourite tip:** turn your cell phone off when you really want to get down to work.

**Favourite tool:** sash clamp which he says he uses on every job for something as they can be a second pair of hands and can even pull frames together.



**Donald Peter**, on a roof near Lake Kaniere on the West Coast.

Favourite tip: measure twice, cut once.

Favourite tool: sabre saw.

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

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