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FREE TO ALL BUILDERS

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builder's mate

Getting a good fix

Using the right fixings for each product or situation is vital to ensure building work is durable and safe. There are requirements to be met in the New Zealand Building Code and in standards such as NZS 3604:2011 *Timber-framed buildings*.

The key issues in choosing a fixing are:

- the materials being used (and in the case of timber, the preservative used)
- compatibility between materials
- geographical location (for example, beside the sea or inland)
- location on the building (for example, inside the walls or exposed to the rain and wind).

In a nutshell, selecting the right fixings is about getting a product that will be durable. Section 4 of NZS 3604 provides one way of complying with the durability requirements in the Building Code for fixings used with timber framing.

Section 4.4 of the standard covers steel fixings and fastenings and is the place to go to work out >

INDUSTRY NEWS

Changes to licensing being considered

Changes to the building licensing scheme may follow a recent industry consultation. The Building Practitioners Board is considering 240 submissions and feedback from 31 workshops that were attended by 2000 practitioners. A summary of the submissions is to be made available on the website of the Ministry of Business, Innovation and Employment.

As at 21 November last year, 25,956 licences had been granted to 21,288 building practitioners.

Building work hits decade high

Building work is growing at its fastest rate in a decade, with the volume of building activity growing by 9.6% in the September 2012 quarter.

A lot of the growth comes from non-residential work – this grew by 12.4%, while residential building activity increased 7.1% (MBIE data late 2012).

The growth comes largely in Canterbury and Auckland. The number of building consents for new dwellings in the Auckland region is the highest it has been in 4 years.

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> Continued from previous page

whether you should be using galvanised or stainless steel nails or screws, for example. The key factors are:

- the exposure zone the job is in (explained in section 4.2)
- whether a specific fixing will be in a closed, sheltered or exposed part of the building (shown in Figures 4.3 (a) and(b)).

Table 4.1 of the standard sets out the types of fixings you should be using, taking these factors into account.

Table 4.3 covers steel nails and screws used specifically in framing and cladding.

Note 4 to Table 4.3 of the standard requires that grade 304 (or grade 316) stainless steel fixings are used when in contact with exterior timber, timber piles or subfloor framing treated with copper azole (CuAz – preservative code 58) or alkaline copper quaternary (ACQ – preservative code 90) where the timber is in sheltered or exposed locations that may get wet or be damp.

Galvanised steel nails after just 12 months in a high-humidity test in ACQ- treated timber. The decay shows the need for careful selection of fixings for each situation.

Silicon bronze fasteners are also recommended in BRANZ's durability opinions and Appraisals for use with timbers treated with CuAz or ACQ that may have a high moisture content during service.

If you are looking for general information about fixings, section 2.4 of NZS 3604 is a good place to start.

E2/AS1 is another key source. For cladding installations, Table 24 specifies the:

- nail type, e.g. annular grooved shank (stainless steel nails must have annular grooves to provide sufficient holding strength)
- nail size – diameter and length
- fixing penetration into the framing.

The exception is horizontal profiled metal claddings, where clause 9.6.6 gives the fixing requirements for the cladding.

If you are unsure about some of the terminology and the difference between metals used in fixings, BRANZ Bulletin 490 *Metal component terminology* may be useful.

Note that some proprietary systems require fixings over the minimums required in NZS 3604 or E2/AS1. Some require stainless steel to be used in all cases, for example.

Mouth piece

The call for many parts of the building industry to step up a level in professionalism and capability is one that has recently become louder and louder from various groups in the community. This has been especially focused on the need for the industry in general to increase its business and commercial skills. The call has often arisen from the misdirected belief that this is a 'gap' or an issue that has suddenly arisen. This is not so, as I am sure the need has been evident over a number of decades.

So why now?

The changes in regulations governing the building industry – both recently introduced and coming in the near future – are having the impact of requiring the industry to improve its skill levels both on and off site. These changes, although sometimes painful, are necessary if we are going to remain an industry that is trusted by the community across the country.

The building industry is dominated by smaller firms and enterprises. The reason that many people enter the industry is that they are able to own and run their own operations with the associated benefits and risks.

An extension of the call to increase skills has been the assumption that the smaller enterprises cannot achieve this and the move to larger operations is therefore required.

This is not correct. The skills 'gap' is a result of our industry itself not providing the tools and education to address these needs – a responsibility that the industry clearly has.

These types of skill increase subjects are a core part of the regular ongoing Builder Training and Education seminars that are conducted across the country by Certified Builders Association as our part in meeting this challenge.

Grant Florence, Chief Executive,
Certified Builders Association of NZ

When all else fails...

"When all else fails, read the instructions" is an old joke that has much more than a grain of truth in it. If you are a very practical, hands-on kind of person – as most builders tend to be – it can be too easy to work out how to fix or install a fitting or material without spending any time reading the paperwork that comes with it.

That is a mistake, because not getting and following the manufacturer's instructions can have serious consequences. For example:

- using the wrong fixings or coatings (mechanical fixings, adhesives, paints) may reduce the durability of a material, fixture or fitting
- not checking that a material is actually suitable for a particular situation – a wet area in the interior or an exposed area of the exterior – can also drastically reduce durability
- if a material or fixture isn't installed properly, there may be safety risks for building occupants
- the warranty or guarantee of a product is likely to depend on it being fixed or installed in a precise way – do something else, and the manufacturer may have no liability if the product doesn't perform

Product formulations or designs can change from year to year, so even if you have used something before, it pays to check the instructions for the current product to see whether anything has changed. It is also not uncommon for manufacturers to change their instructions based on testing or customer feedback.

The best approach to take:

- Get the instructions, and ensure that they are the correct ones for that type, model or year of product. If in doubt, contact the manufacturer.
- Read the instructions before starting any work, especially before cutting or fixing any material.
- Pay special attention to any warnings about non-compatibility with other materials. For example, what type of fixings should be used? Is a particular type of coating recommended?

build

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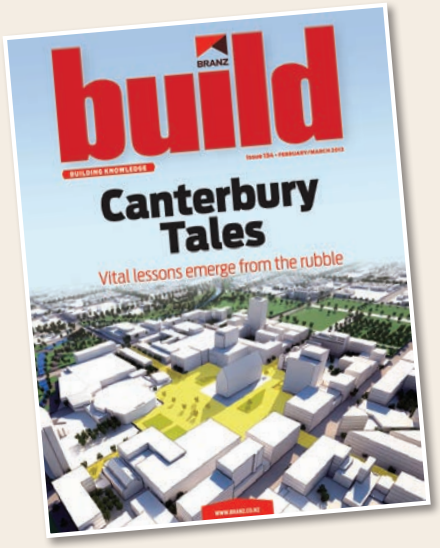

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Competition

Here's a tool. What is it?

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A Makita cordless driver drill

Worth $189!

This Makita driver drill comes with all metal gear construction for durability and transmission of power, and single sleeve keyless chuck for easy bit installation and removal. This great all-rounder is ideal for general joinery and fit-out tasks.

The prize is provided courtesy of The Tool Shed.

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

Email you answer to **buildersmate@branz.co.nz**. Put "February 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 1st March 2013. 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 April 2013.

the ToolShed

October winner Bruce Dawson receives his prize in the Morris ToolShed New Plymouth.

The winner of the December BM 57 issue was Karl Paterson of Palmerston North. The mystery tool was a bolt extractor. Karl wins a De Walt work stand/mitre saw stand worth $200.

Terms and conditions:

Entry is open to all New Zealand residents except employees and immediate families of BRANZ and The Tool Shed shops. The competition will close on Friday 1st March 2013. The prize is not transferable for cash. The judge's decision is final. No correspondence will be entered into.

What's wrong in these PICTURES?

1 WALL INSULATION

2 WINDOW HEAD FLASHING

ANSWERS

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2. Insufficient cross-fall and no stop-end to the cavity window head flashing.

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