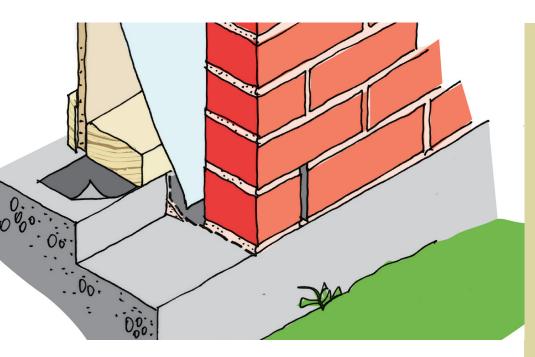


builder's mate



The wrap on gaps

Some gaps in a building must be left unsealed while others must be closed up. Get it wrong, and a building won't perform as it should. Here is what you need to know.

Building Code Acceptable Solution E2/AS1 includes quite a few purpose-designed gaps in a building to allow drainage and ventilation to occur.

Drainage lets rainwater that may have entered the internal wall space (through a cladding joint, a change in cladding material or around a window or door opening) drain out again.

Ventilation dries remaining moisture from behind a cladding after the water has drained out and reduces differences in air pressure between the drainage cavity

and/or framing cavity and the outside, across wall claddings and around window and door openings. Reducing pressure differences reduces the risk of air and moisture flow into a building.

Purpose-designed gaps

Examples of specifically designed gaps in E2/AS1 that must remain open include:

 the drainage slots at the bottom of brick veneer walls at 800 mm centres maximum – in other words, every third perpend should be left open

INDUSTRY NEWS

New requirements coming 1 January 2015

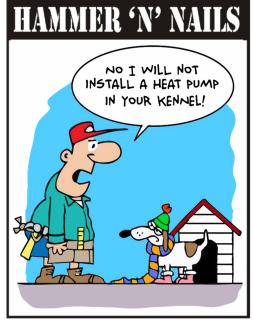
New consumer protection measures for residential building work come into effect from 1 January 2015. The new legislation includes:

- a requirement to have a written contract for building work over \$30,000 (including GST)
- a requirement to give customers a building checklist as well as information about your credentials – skills, qualifications, licensing status and so on
- an automatic 12-month defect repair period when you will have to fix any defects the customer has told you about
- fines for not complying with the law.

More information will be coming in the December issue of *Builder's Mate* and other BRANZ publications.

BRANZ is also running a seminar in 28 centres from mid October to early December. The seminar will provide an overview of these changes to the Building Act, and also updates on the Construction Contracts Amendment Bill (to improve dispute resolution processes) and the new health and safety regime. Find more information at www.branz.co.nz





- the openings at the top of brick veneer walls for ventilation behind the veneer
- between the bottom of the cladding and the top of a window head flashing
- between the bottom of the cladding and an interstorey flashing
- between the sill window flange and the sill flashing for windows installed with direct-fixed cladding
- between a notched apron flashing downturn and the roofing profile
- the drainage slots across the bottom of aluminium window sections
- the drainage ventilation slots in a nominal 20 mm cavity closure as detailed in E2/AS1
- the capillary gap between the bottom of a directfixed cladding and the foundation wall.

Gaps to be sealed

In some situations, gaps between elements must not be left open.

The most important gap requiring sealing is the one between the window or door reveal and the wall framing forming the rough opening. A continuous airseal consisting of expanding foam over a PEF backing rod must be installed to prevent air movement from the outside to the building interior (Figure 1).

Other gaps that must be sealed include:

- movement control joints in claddings
- · movement control joints in tile finishes
- the space between the back of the jamb flange and window cladding of windows that are installed with direct-fixed sheet claddings.

These joints must be sealed with a flexible sealant installed according to the manufacturer's instructions.

TABLE 1: LOCATIONS WHERE GAPS ARE REQUIRED		
	LOCATION WHERE GAP REQUIRED	SIZE OF GAP
E2/AS1	Brick veneer cavity	40 mm (minimum) to 75 mm (maximum), BRANZ recommends 50 mm
	Top of brick veneer and soffit or cantilevered floor framing above	5 mm minimum
	Cladding base to apron flashing or membrane deck	35 mm minimum
	Flashing at top of cladding or inter-storey flashing	5 mm
	Drained and vented cavity	18–25 mm (20 mm nominal)
	Expansion gap to vertical flashings with horizontally fixed profiled metal cladding	5 mm, BRANZ recommends 10 mm
NZS 3604:2011	Rear of bottom edge of direct-fixed cladding and foundation wall	6 mm

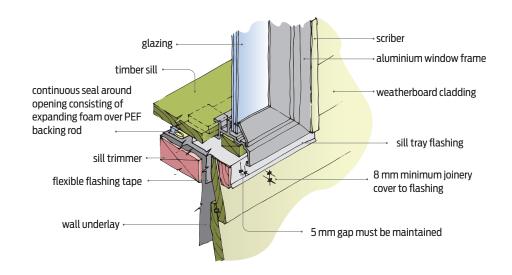


Figure 1. There must be a continuous seal around the window opening



Mouthpiece

WorkSafe NZ congratulates sector for progress in falls from height campaign

Two years after the Preventing Falls from Height campaign began, new WorkSafe NZ data is showing a 25% drop in serious harm accidents in the construction industry. The reductions have coincided with a big increase in workplace visits and enforcement.

Falls from 3 metres or less off roofs and from ladders make up most of the serious harm accidents reported to WorkSafe NZ. The campaign promotes the safe use of ladders and safe working on roofs. Best-practice guidelines and fact sheets have been widely circulated.

Marcus Nalter of WorkSafe NZ said internal data showed the reduction occurred between 2011 and 2013 – the first 2 years of the campaign.

"We know the campaign has had a positive impact, but we are cautious about assigning the reduction solely to our work. What we do know is that our inspectors have been very busy," he said.

"Our workplace assessment visits targeting work at height increased by 438% for the same period. In 2013, we completed 3,134 visits, and enforcement increased by 492%. There was a significant increase in the use of infringement notices, jumping by 767%. Our investigation meanwhile reduced by 34%, and prosecutions dropped from 10 in 2011 to just one in 2013."

Marcus Nalter said the sector had increased its awareness of non-compliance and was notifying WorkSafe NZ of their concerns.

"Complaints have gone up by 105% and represent 45% of the traffic received by our response team."

He congratulated the sector, saying credit was mainly due to the industries and trades that had made it happen.

New safety rules bring big changes

Whether your business is small or large, start preparing now for a new workplace health and safety law coming early next year. It brings some major changes.

The new Health and Safety at Work Act is expected to pass into law this year and come into effect next April. There is unlikely to be a period of grace, fines are big and you can't contract out.

Under the new law, a 'person conducting a business or undertaking' (PCBU – which could be an individual or a company) must ensure, as far as is reasonably practicable, the health and safety of employees, contractors, subcontractors and other workers they engage.

The law also has a new duty of consultation. This means that all those with a duty under the law – the builder, subcontractors and others – must consult, cooperate and coordinate as far as reasonably practicable to ensure compliance with the duty.

Workers or officers, including directors, are not the PCBU but will have separate personal liability. Directors can be prosecuted if they don't exercise due diligence to ensure the PCBU complies with its duties and obligations, so they will need to know about how health and safety is being taken care of on the job.

The new law puts safety ahead of cost unless the cost is 'grossly disproportionate' to the risk.

Small businesses will need to think hard about how to spend money ensuring health and safety. It may mean giving up some jobs if the risks are too great.

If penalties are imposed on company directors and the firm itself, that could be a huge challenge for a small building company.

Designers, manufacturers and suppliers are also impacted by the law.

BRANZ and other industry bodies will provide more information in coming months. BRANZ will also be running a seminar on the law changes in conjunction with a number of industry bodies, including WorkSafe NZ. from mid-October



"Do you get your free Build magazine?"



All building contractors who are in the business of building and have paid a Building Research Levy in the current year can receive BRANZ's *Build* magazine for free. This Levy is paid as part of the building consent fee on all construction projects over \$20,000. If you are missing out on your free copy of *Build*, call 0800 80 80 85 (press 2) or email vera.chan@branz.co.nz.





Competition

Here's a tool.



What is it?



The DeWalt 125mm 1400w angle grinder



This heavy-duty grinder has a comfortable handle and features DeWalt's low profile head to fit into tight spaces. A dust ejection system removes most debris from the air passing over the motor. The tool also features a multiple position handle, side spindle lock and keyless guard adjustment.

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 "October 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 7 November 2014. 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 December 2014.



The winner of the August competition was Joshua Hanrahan of Inglewood. Joshua wins an Arges 10.8v drill kit. The mystery tool was a tile cutter.

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 7 November 2014. 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?



.(d) I.4.4.9

2. E2/AS1 requires a minimum gap vertically of 2 mm at the overlap between boards – see

1. Nuts to the bolts left loose

ANSWERS

BRANZ

GOOD PRACTICE GUIDE

CONCRETE MASONRY

This essential revised and updated guide is offered now in both electronic and hard copy formats.

This guide covers single-skin reinforced concrete masonry wall construction meeting the structural requirements of the recently cited NZS 4229:2013 Concrete masonry buildings not requiring specific engineering design.

\$67.50 +\$8 p&p

Order online at **branz.co.nz** or call **0800 80 80 85** (press 2)

* Hard copy and Epub also available individually. Epub reader required on device

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.

©BRANZ Ltd, October 2014.

www.branz.co.nz