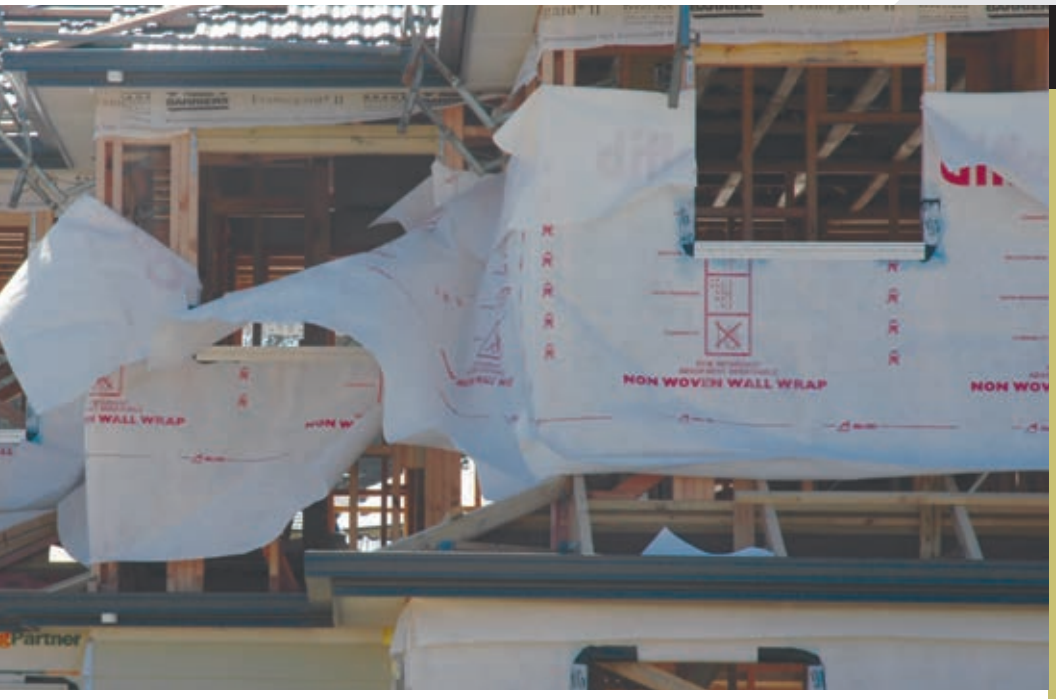
FREE TO ALL BUILDERS | ISSUE 82 | FEBRUARY 2017

BRANZ

builder's mate



GOING UNDER THE WALL

Wall underlay plays a crucial role in the weathertightness of timber-framed houses. If it is not installed properly, water that gets through the cladding and underlay can reach the framing and insulation. It is a real problem – inspections of 200 houses under construction in 2014 found loose wall underlay on half of them.

While cladding will always be the first line of defence against water, in extreme situations, the underlay may be called on to provide a backup where cladding is installed over a cavity. For a direct-fixed cladding, it is likely at some time in the life of the building that water will be in contact with the wall underlay. Underlay must be installed to allow water to flow downwards >

INDUSTRY NEWS

2017 starts on a high

Building consents are at a 10-year high, and over 10,000 apprentices are now on the books of training body BCITO. A business confidence survey in December found the construction sector had the highest confidence level of all sectors.

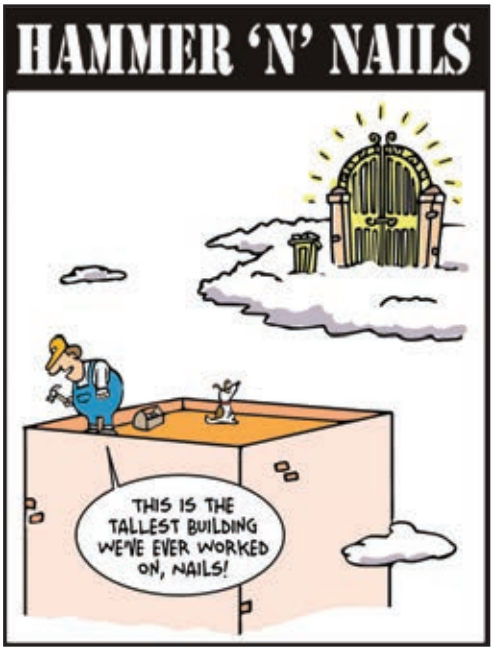
There are two challenges: finding enough skilled workers and enough Building Code-compliant building materials.

Council building control teams have found product substitutions increasing as some materials are in short supply. This is risky if the materials don't comply with the Building Code. There are cases where houses have had to be rewired or reroofed because compliance couldn't be proved.

BRANZ seminars

The first two BRANZ seminars for 2017 are **Ventilation – Internal and Roof Space**, going to eight centres 27 February–9 March, and **BRANZ Answers – Bracing**, going to seven centres 13–22 March.

You can find more details at: **branz.arlo.co/find-a-course**.



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and around any penetrations without reaching the framing or insulation.

Properly installed wall underlay also helps prevent excessive air movement through the wall. This means the air in bulk insulation remains still, and the insulation does its job. With a cavity, underlay also helps keep the insulation in place and maintains the cavity space.

Wall underlay options in E2/AS1 are a flexible wall underlay or a rigid wall underlay that has a flexible wall underlay installed over it. Proprietary rigid air barriers, which provide the same function, are outside the scope of E2/AS1 but commonly consented as an Alternative Solution.

Flexible wall underlay installation sequence in cavity construction

1. Use only one wall underlay product on a building.
2. Install the wall underlay horizontally over the framing. Start from 10–15 mm below the bottom plate and carry it up to the top of the top plate. Lap a higher layer over the lower layer by 150 mm. Fix securely to studs and dwangs so the underlay is taut across the framing.
3. At the end of runs and on gable walls, laps should be made vertically with a 150 mm end lap over studs. Tape vertical joins.
4. Trim openings by cutting at 45° away from the corners and folding the underlay around the framing.
5. Apply flexible flashing tape to the opening.
6. Where they are used, fix vertical battens (except above openings) following E2/AS1. Use a continuous horizontal closer batten across the top of the wall and a slotted cavity closer along the bottom.
7. If battens are at centres wider than 450 mm, fix additional battens vertically from top to bottom plate at mid stud to hold the underlay against the framing or install horizontal tapes or wires at 300 mm maximum centres. It helps prevent the underlay from bridging the cavity after bulk insulation is installed, maintaining cavity drainage and ventilation paths.
8. Install penetrations (pipes, wiring and so on) and seal carefully with flexible tape.
9. The wall underlay must be as weathertight as possible before the building is closed in. Damage to underlay will significantly reduce its in-service performance. Repair any cuts and tears, and replace damaged underlay before windows, doors and cladding are installed.
10. In some cases, wall underlay is used to give protection to the building under construction and will be exposed for several weeks. Fix it to withstand wind pressure, rain and UV exposure. Do not go beyond the manufacturer's maximum exposure time – commonly 30 or 60 days.

Working with hazardous materials

What do you do on a worksite when a workmate splashes something into their eyes or a chemical is accidentally spilled?

When you are using hazardous materials, there is a good chance that you will find instructions or warnings on a product label or wrapper. That may not give you enough information, however. Every building site should have safety data sheets on hand.

Safety data sheets (SDSs) give specific details on the hazards of different materials and how they should be handled in a safe way, from when they are transported to the site and stored through to when they are used or disposed of. They give first aid information and say what risks to the environment a material poses. They also say what to do if there is a fire or other emergency.

There are safety data sheets for a very wide range of hazardous or potentially hazardous materials, from paints and solvents to treated timbers.

Under the law, the person in charge of the workplace must ensure that SDSs are available to workers where materials are on site above certain minimum quantities. However, it is easier and more practical to have safety data sheets available for all hazardous materials regardless of quantity.

Information on safety data sheets includes:

- product and company identification
- hazard(s) identification
- composition and information on ingredients
- first-aid measures
- fire-fighting measures
- spillage, accidental release measures
- handling and storage
- exposure controls and personal protection
- physical and chemical properties
- stability and reactivity
- toxicological information
- ecological information
- disposal considerations
- transport information
- regulatory information
- other information.

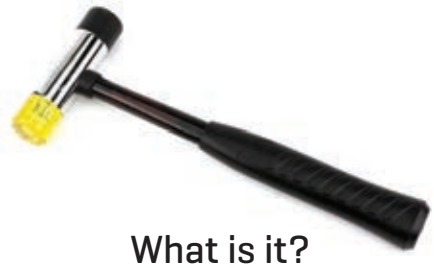
If you don't have a safety data sheet for something, ask the supplier – by law, they must give this to you. Many manufacturers and suppliers have safety data sheets downloadable from their websites.

Safety data sheets prepared by manufacturers overseas can be used in New Zealand if they carry the right information, including New Zealand supplier details and New Zealand emergency contact information.

The legal requirements are set out in the Hazardous Substances and New Organisms Act 1996 and regulations, including the Hazardous Substances (Identification) Regulations 2001. The Hazardous Substances (Emergency Management) Regulations 2001 and Hazardous Substances (Disposal) Regulations 2001 also apply. There is a code of practice that covers the preparation of safety data sheets.

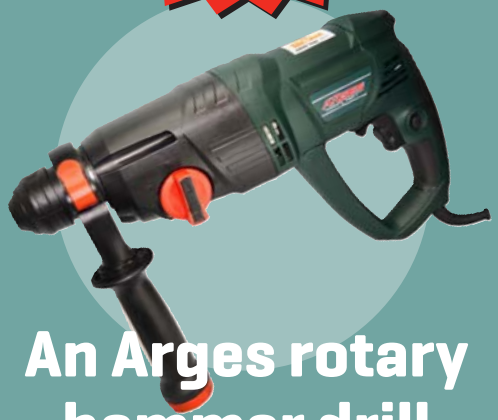
You can find more details on the WorkSafe website – **www.worksafe.govt.nz**

Competition
Here's a tool



What is it?

WIN!



An Arges rotary hammer drill worth $269

This tool is great for drilling up to 26 mm in masonry, 13 mm in steel and 30 mm in wood. Complete in a robust plastic case with a range of bits, chisels, drill chuck and arbor.

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 "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 10 March 2017. Details will be posted on the BRANZ Ltd website (www.branz.nz) and in the next edition of ***Builder's Mate*** due out on 1 April 2017.

The winner of the **Builder's Mate 81** competition was Cameron Diack of Mount Maunganui. Cameron wins a DeWalt 1200 w reciprocating saw worth $529. The mystery tool was an air hammer.

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 10 March 2017. 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.

SEND ANYWHERE

Transfer apps like Send Anywhere let you securely move photographs, drawings etc. between devices or to clients or workmates with a temporary password. No account or login required.

ITM

The ITM app helps you manage LBP points. You can select news updates, and there are links to technical documents for building materials. A YouTube video shows how to use the app.