

builder'smate



NICE WORK IF YOU CAN DO IT

Workers who aren't licensed builders, electricians or plumbers play an important role in our housebuilding industry, but there are quite a few jobs that only licensed people can carry out.

Under the Building Act, anything defined as restricted building work (RBW) must be carried out or supervised by a licensed building practitioner (LBP). This is typically all the work that makes a house structurally sound and weathertight. It includes work on such things as:

- floor slabs
- wall and roof framing and cladding
- bracing
- damp-proofing
- waterproofing (such as installing waterproof membranes).

In practice, the hands-on work of any task can therefore be carried out by an underqualified

or unlicensed person, but if it involves RBW, they must be supervised by an LBP licensed in the appropriate area (such as carpentry or roofing). This arrangement allows people to learn on the job.

Work that does not require a building consent is not RBW. Schedule 1 of the Building Act sets out what can be done without a consent. Part 1 of this, Exempted building work, is work that

INDUSTRY NEWS

Building law changes coming

Everyone in the industry will be affected by upcoming law changes. The changes planned for mid-2020 include:

- Building products must come with plain English instructions about how they should be installed and maintained.
- Prefab homes will get a new certification/consenting process.
- The Building Levy will be reduced.
- There will be much higher penalties for Building Act breaches.

Government moves to fix skills gap

The government aims to encourage more young people into construction and other industries with skills shortages. A new brokerage service and more trades-focused 'speed-dating' events will better connect local employers and schools.

New body aims to reduce building worker suicide rates

The programme Mates in Construction is raising awareness of the issue of suicide amongst construction workers. BRANZ research report *Suicide in New Zealand's construction industry workforce* revealed that almost 7% of working-age male suicides in New Zealand are building industry workers. One in every six builder suicides are apprentices.

Survey puts numbers to building site risks

A survey of construction workers commissioned by WorkSafe NZ found that:

- Construction workers work more hours per week than the general population.
- 93% are exposed to dust, 52% to smoke or fumes, 42% to oils and solvents.
- At least a quarter of the time, people worked in a cold/damp environment (84% of workers) or a hot/warm environment (83%).
- Two-thirds use vibrating tools at least a quarter of the time.
- Three quarters are exposed to loud noise for an average of 5 hours per day.



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anyone with the right skills, experience and tools can carry out. You can download a guide to this, *Building work that does not need a building consent*, from the website www.building.govt.nz.

Leave the leakies alone

Any work around the repair of leaky homes is absolutely not something an unlicensed person – or even a licensed builder with no experience in this area – should attempt. There have been many cases where the problem has not been fixed and has even been made worse. Repair work on leaky homes should be left to licensed people with specific experience in that area.

The owner-builder exemption

The law allows homeowners to do a lot of building work on the home they own and live in – even some restricted building work if they fill out the appropriate paperwork. There are things owners can't do, however, such as gasfitting, even with the exemption.



Electrical work

Anyone who carries out prescribed electrical work must be registered, and if they collect payment for the work, they must have an annual practising licence. Licensed electrical workers certify their work by supplying a certificate of compliance.

Prescribed electrical work and work that is not prescribed is set out in Schedule 1 of the Electricity [Safety] Regulations 2010. Among other things, you cannot work on mains or switchboards other than replacing a fuse wire or cartridge on the switchboard.

As with building, the law allows homeowners to do a limited amount of electrical work in the home they own and live in. This includes removing or replacing light sockets, switches, water heater switches and fuse links and connecting and disconnecting or replacing existing fixed wired appliances.



Homeowners cannot work on mains or switchboards. The details are covered in Part 5 of the Regulations. Remember, whatever electrical work you do, ensure that the power is turned off first.

Plumbing

Relatively simple plumbing jobs such as replacing a tap or connecting up a washing machine can be done by anyone with the right experience and tools, but there are rules around who can do other types of work. Sanitary plumbing – work that involves water supply pipes or waste pipes, traps, ventilation pipes or overflow pipes – must be done by a licensed plumber or drainlayer.

You should only ever do work that you clearly understand and are confident you can do safely. Never try to teach yourself on the job.



Mouthpiece

A recent media story bemoaned that only 17% of male employers recruit women tradies.

It's easy to knock the 83%. At the National Association of Women in Construction [NAWIC], we prefer to focus on acknowledging and growing the 17% of great employers who do choose to employ women.

In fact, 17% is actually an improvement in the last decade. Given that good things take time, we're not too disappointed by this figure although obviously we'd like to do better, faster.

We realise that, to get more women tradies, we need blokes to change too. Currently, it's still men who are making the key decisions in who they hire.

We'd like to see more tradie dads hire their daughters and their daughters' friends as well as women making their mid-career change.



Recent research has found that tradeswomen enjoy a career that allows them to be active, solve problems and have the ability to make an impact on the lives of others.

The same media story outlined how female school leavers who enter apprenticeships earn \$145,000 more than their university counterparts by the age of 30. Dads [and mums] – don't ignore the trades as a great career option. After all, these school leavers will be choosing your rest home in 40 years – it's in your interests for them to be financially secure!

Women can sometimes feel a little isolated in our industry, which can be a barrier. NAWIC attempts to address this through peer mentoring, connecting women in the sector and

recognising women's achievements through an awards programme. We are working on providing more of these support mechanisms. Over the years, we've found this policy pretty effective, and we've had great support from employers like mine.

We also think that women on site often contribute to better safety outcomes. Given the challenges we have in this regard, why not try hiring a female next time?

Stacey Mendonca

Chief Estimator
Pacific Doors Systems

President, National Association of Women in Construction

A GOOD LONG SOAK

Soak pits are making a comeback, but just as some things are never quite the same the second time – like flared jeans – today's soak pits are different from the old ones.

Soak pits are basically a carefully designed hole in the ground where stormwater is directed and held so it can slowly soak into the earth. Part of the reason for their comeback is that some local authorities say new housing cannot send additional stormwater into the council system – it must be handled on site. Soak pits are one solution.

A soak pit can be:

- a hole filled with rocks (Figure 1)
- a solid chamber with porous sides and base
- a proprietary product.

Today's soak pits have to be big enough so that water that drains in will not overflow before it soaks away – pits well over a metre deep and several metres long are not uncommon. The size has to be carefully calculated, accounting for local rainfall intensity and how quickly the water soaks away (based on on-site tests). Soak pits today are covered.

New Zealand Building Code Verification Method E1/VM1 shows how to design a soak pit. This is a task for someone with the right training and experience.

Soak pits usually require a building consent (and often resource consent) with sizing, construction and location details in the application. Local authorities often specify minimum distances from existing buildings and property boundaries. Some have additional requirements around soak pit construction.

The fact that soak pits are part of the consent process means that it is important to follow the consented plans carefully when constructing or installing them:

- Dig the hole in the location and to the depth and dimensions given in the consented documents.
- Ensure filter cloth a minimum 0.45 mm thick and with a mass of 140 grams/m² goes under and around every soak pit regardless of type.
- Ensure the rocks in a rock-filled pit are 100–150 mm in size.
- Where a chamber is used, ensure there are 100–150 mm rocks in the bottom to a depth of at least 250 mm.
- Follow the manufacturer's instructions with a proprietary product.

While the filter cloth is designed to stop soak pits silting up and not working properly, property owners still need to occasionally check their soak pits.

Rainwater tanks

Other storage options for managing stormwater include:

- detention tanks – temporarily store rainwater on site for slow release into the public stormwater system
- retention tanks – store water for gardening, toilet flushing etc. (but not drinking)
- rainwater tanks – store water for human consumption [see www.level.org.nz/water/water-supply].

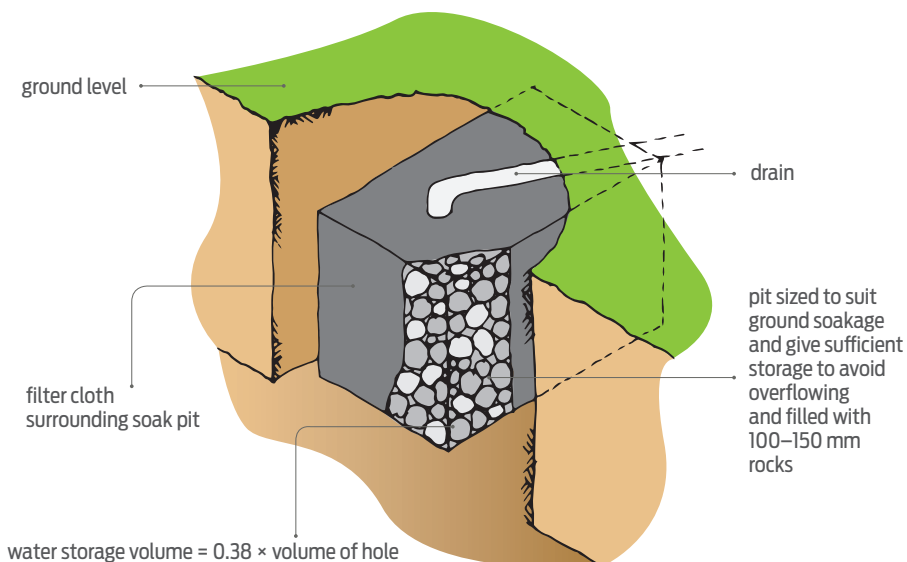


Figure 1. General schematic of a rock-filled soak pit.

build

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Competition

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The prize is provided courtesy of The ToolShed. All you need to do is tell us the name of the mystery tool at the top of the page.

Email your answer to buildersmate@branz.co.nz. Put "December Competition" in the subject line. The message should include your answer, your name, postal address and phone number. One entry per entrant please.

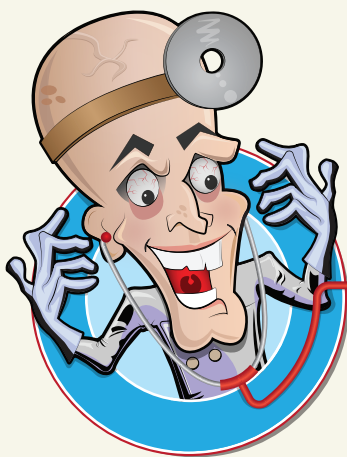
Don't forget to tell us where you picked up your copy of **Builder's Mate**! The winner will be the first correct entry drawn at 9 am on Friday 17 January 2020. Details will be included in the next edition of **Builder's Mate** due out on 1 February 2020.



The winner of **Builder's Mate 98** was Nick Crowe of Wellington. Nick wins a Milwaukee hammer drill and impact driver kit. The mystery tool was a mini gas torch.

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 17 January 2020. The prize is not transferable for cash. The judge's decision is final. No correspondence will be entered into.



DR DETAIL

Holes and notches

NZS 3604:2011 *Timber-framed buildings* sets limits for holes and notches in 90 x 45 mm studs. [Note also that trimming studs cannot have holes/notches in their middle third, and holes in studs supporting brick veneer must be 50 mm minimum clear of the outside face.]

A proprietary stud stiffener [typically galvanised steel] can be fixed to a stud to allow a hole up to 60 mm.

For 140 mm framing, BRANZ calculates the maximum hole or notch would be 38 mm. All other requirements for 90 mm framing apply.

MBIE says that, where 140 mm studs replace 90 mm studs for non-structural reasons – for

25 mm max. diameter or 35 mm for a maximum of three consecutive studs

90 x 45 mm stud

100 mm minimum

notches must be least 600 mm apart.

25 mm maximum depth for maximum 200 mm length or 35 mm for a maximum of three consecutive studs

example, to fit insulation – holes/notches may be up to 75 mm. This is provided a notch does not reduce net section depth below 65 mm and holes are in the centre of the stud depth.

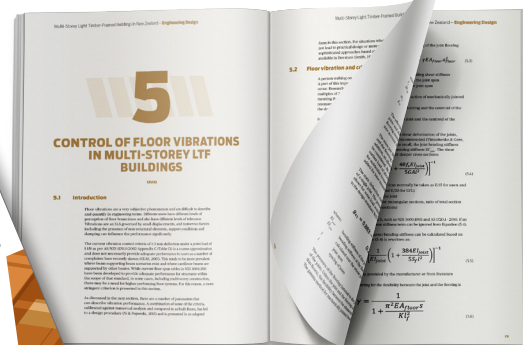


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