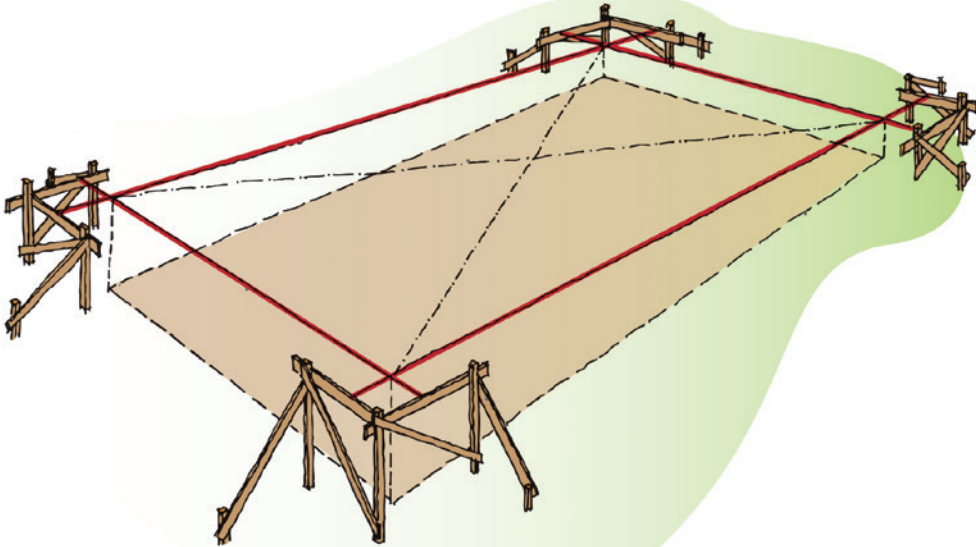


BRANZ

builder's mate



Get ready, get set...

Before excavations for a new house start, you need to set out the building – working out where it sits on the site. Getting this wrong can be very expensive!

Setting out involves determining the precise location and extent of the building on the construction site. Start by getting local authority records for the site, and make a thorough site inspection.

It is the designer's job to give clear set-out instructions on the drawings to ensure that the building complies with set-backs, height envelopes and other requirements. Buildings must be located a safe distance from the tops of banks, for example – see NZS 3604:2011 *Timber-framed buildings* clause 3.1.2(b).

The designer's instructions must:

- determine the set-out reference point – the front or side boundary
- give single offsets from the building to the most critical points on the boundaries (Figure 1) – they must not dimension set-outs to opposing boundaries

- establish a permanent datum point for setting out the height of the building in relation to the ground or other identified features – the datum point may be well clear of the building and established on a fixed feature such as an iron stormdrain cover.

You typically need to:

- locate precise boundary lines and find boundary pegs
- confirm the existence/location of underground/overhead services that the designer has indicated
- obtain site levels – the ground may seem flat and level, but it pays to check
- verify the position of existing structures such as another house, garage, outbuildings or significant trees
- locate the datum point that the designer has used to define the finished floor levels. >



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Special offer – see back page

INDUSTRY NEWS

ENERGY STAR® windows launched

Finding thermally efficient windows is easy with the launch of ENERGY STAR®-qualified windows – EECA estimates ENERGY STAR® windows will reduce heat loss by more than 18% compared with standard aluminium-framed, double-glazed windows.

EECA developed ENERGY STAR®-qualified windows in consultation with the Window Association of New Zealand (WANZ) and BRANZ.

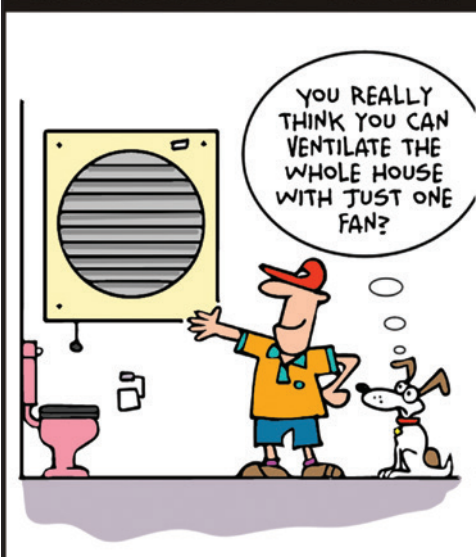
Help constructing a ramp

Standards New Zealand has produced an iBook on the design and construction of a ramp. It's called *Improving access for people with disabilities*, and it covers some key parts of NZS 4121:2001 *Design for access and mobility – Buildings and associated facilities*. You can find it at www.standards.co.nz.

Smarter information

Did you know that you can access many BRANZ books and bulletins on your mobile Apple or Android device, smartphone, laptop and desktop computer? If you're new to this sort of thing, you can download a free user guide from www.branz.co.nz/epubs.

HAMMER 'N' NAILS



On site, establish set-out lines to fixed points, positioned so that the lines are clear of the new building. The lines can then be rerun for checking without having to pass through the building.

You can then:

- erect profiles approximately 1.2 m (but not less than 0.9 m) outside the perimeter of the building to keep them clear of the area you will be excavating
- brace profiles to keep them still
- level horizontal profiles, from the highest point of the site first, using a builder's or laser level
- determine the longest building face, locating the structure corners on the longest line

- set out lines at right angles to the longest line and locate all other lines
- mark set-out lines on levelled profiles – check the set-out to ensure the building layout is square, to correct dimensions and at the correct level
- mark the building lines permanently on the horizontal profile members
- check lines setting floor levels to ensure that finished minimum ground clearance can be achieved, gully traps can be set at the correct heights and there will be sufficient fall for drains.

It is typically the builder's responsibility to place the building correctly on site, but check where

responsibilities lie in the contract. The owner must usually indicate the boundaries and check that boundary pegs are properly positioned.

Most builders can make building set-outs where instructions are clear and sites are level, but for difficult sites or tight urban sites where set-out measurements are critical, a surveyor can be used. They can also set out other features such as pile positions (tricky on steep sites), boundary walls and so on.

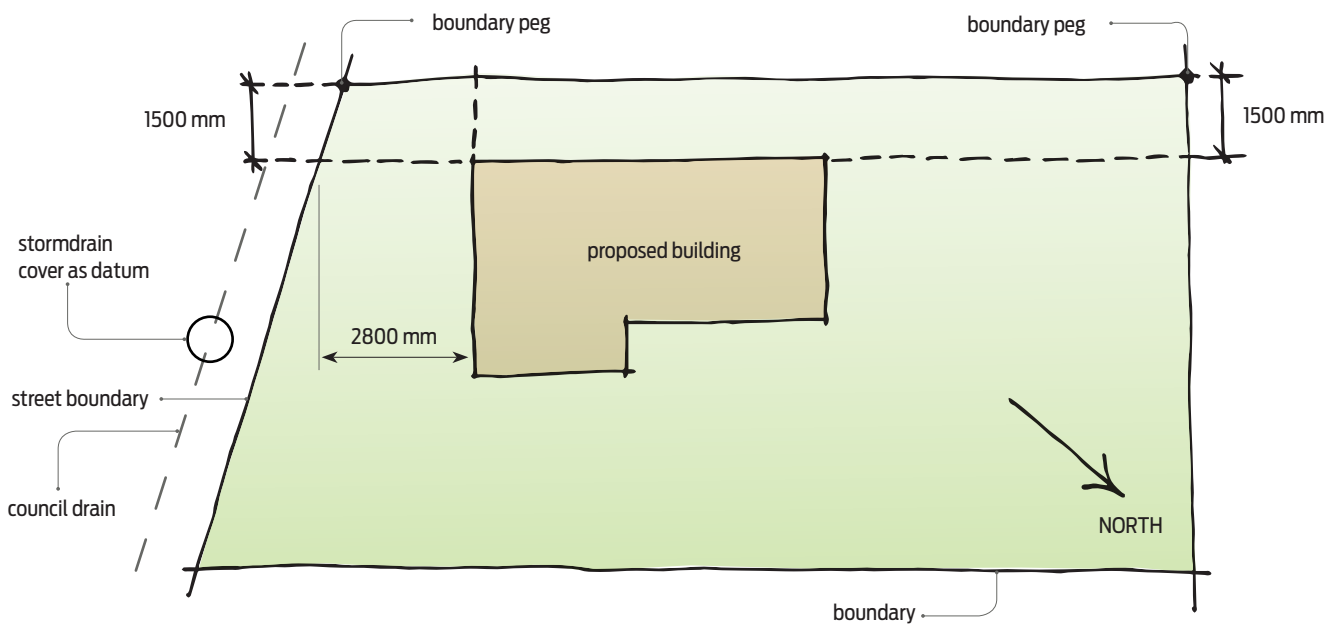


Figure 1: Clear set-out with single offset dimensions.



Mouthpiece

BRANZ has recently completed a study on the cost benefits of the working at height campaign being enforced by WorkSafe in the residential construction sector. The report concluded that there are net financial savings from the scheme as well as the obvious social benefits of reduced injuries.

The real gold in the report lies in the sensitivity analysis around productivity gains made by improving safety processes for working at height. The value used in the report for productivity gain was 1.6% on a new house. This figure was reached from interviews with builders, who had a broad range of views on the campaign's impact on productivity, so the report used a conservative figure. The sensitivity analysis showed that, if this gain is doubled, the total savings generated by the working at height programme were almost doubled, and importantly, these benefits go straight to the builder and therefore the consumer.

It is well known that New Zealand's safety record lags well behind comparable countries such as Australia and

the United Kingdom. Productivity in these countries is also well ahead of ours, and I believe that safety and productivity are definitely linked. It would be foolish to say safety is the only issue affecting productivity, but if we can improve the two together, surely this has to be beneficial to everyone in the sector.

There is an opportunity in the sector to look past minimum requirements for compliance and use systems that not only enhance safety but also speed up the job. This does not apply solely to work at height. With improved planning from design right through to handover, there are many opportunities to reduce risk while improving speed and reducing costs.

Graham Burke

Past president of Scaffolding Access and Rigging New Zealand (SARNZ) and current president of New Zealand Specialist Trade Contractors Federation.

Stuff you should know!

Starting from 1 January 2015, there will be more legal protection for consumers and more requirements on contractors to 'put things right' for clients. The law changes don't just apply to builders but to work done by any tradesperson.

For residential building work of \$30,000 (including GST) or over, you must:

- have a written contract
- give clients a checklist and disclose certain information about your business before entering into the contract.

The checklist and disclosure information must also be given if the client asks for it, even if the work is below \$30,000.

The contract must include certain content. Default clauses apply if the contract doesn't contain the required information.

A good solution will be to use one of the standard contract forms available from Registered Master Builders Association, Certified Builders Association, NZ Institute of Architects or NZS 3902:2004 *Housing, alterations and small buildings contract* or specialist trades contracts – and keep an eye out for the newly updated BRANZ bulletin on construction contracts.

The consumer checklist gives the client information about the process, their role and their rights. You can find details from the MBIE website.

The disclosure statement gives information about the contracting company. False or missing information can lead to hefty fines.

After the work is completed, other information must be given to the client, including details of insurance the contractor holds, copies of guarantees/warranties that apply and maintenance requirements.

One of the key changes is an automatic 12-month defect period that starts when the contract has been completed. The contractor must remedy any defects notified by the client. This applies to all building work. MBIE is producing a document outlining acceptable levels of workmanship to help.

There are also new remedies for breaches of implied warranties.

The rules are part of the Building Amendment Act 2013 and follow a comprehensive review of the Building Act 2004.

You can find more information from the MBIE website.

build

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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.



ALWAYS FOLLOW A CLIENT'S INSTRUCTIONS



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Competition

Here's a tool.



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A
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Worth
\$130!



Hitachi's worksite fan is quiet but powerful. The fan comes with an AC adaptor but can also be run with any Hitachi 18V slide battery. Mention *Builder's Mate* and get the fan for just \$99.90, saving \$31 on the normal price!

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 "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 9 January 2015. 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 February 2015.



August competition winner Joshua Hanrahan of Inglewood picks up his Arges drill kit prize from Kevin at Morris ToolShed New Plymouth. The winner of the October competition was Faye Pearson-Green of Christchurch. Faye wins a DeWalt angle grinder. The mystery tool was a scroll saw, used for cutting intricate curves.

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 on Thursday 8 January 2015. 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 TIMBER CAVITY BATTEN INSTALLATION



2 WALL INSULATION

1. Insulation should not be installed with folds and creases as these significantly reduce its performance.

2. Vertical battens should not be tight butted up the side of the window – they should have a gap between them to allow for drying and drainage.

ANSWERS



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Standards referred to can be purchased from Standards New Zealand. Tel: 04 498 5991 or www.standards.co.nz.

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