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Track live updates of your delivery with PlaceMakers.

> Full article on page 15

> > **PlaceMakers**



FOREWORD VIEW FROM THE GM OPERATIONS

RED TAPE TOSS UP



Thank you for all your support over the year and I hope you and your families enjoy a well-earned break over the holidays

and requiring it

Moving in the opposite direction, the Government has just announced a move to reduce red tape for Modern Methods of Construction (a term coined by MBIE) in the first of its building reforms and has made 120 standards free to improve builders' access to key documents.

While determining whether to increase or reduce red tape remains a tricky subject for the Government, at PlaceMakers, we are committed to reducing it wherever we can – ably demonstrated by our new world-class delivery service. The only service of its kind in New Zealand, our builders have told us it is reducing red tape for them, and saving them time and money as a result. We call that a win-win! Read more on page 15.

As always, I hope you find this issue interesting and informative. Thank you for all your support over the year and I hope you and your families enjoy a well-earned break over the holidays. We look forward to working with you again in 2020.

Gary Woodhouse

General Manager Operations

PlaceMakers

Together we're building New Zealand

There's a fine line between resenting red tape

Red tape is often blamed for stifling productivity, particularly in the building industry. However, our feature this month on the protection provided by the retentions scheme in the Commercial Contracts Act 2017 certainly suggests that, in some cases, more red tape could be good for builders.

In an attempt to introduce retentions without making the scheme too onerous, the Government decided retention money did not have to be kept in a separate account and could be interminaled with other money, so long as proper accounting records were kept. While this may have reduced 'red tape' for some, it has cost subcontractors millions of dollars where retention money wasn't kept in a separate account. A ruling by the High Court after the collapse of Ebert Construction highlighted the issue, with the Court determining that only retentions which were 'reconciled and transferred' to a separate account would be paid.

Building and Construction Minister Jenny Salesa is currently considering changes to how retentions are held and an announcement – which will likely include more red tape - is expected soon.

The Government has also increased its own 'red tape' through new procurement rules, which require government agencies to consider a range of factors when comparing tenders. This includes creating a skills and training development plan for jobs over \$50m.

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FEEDBACK

BUILDERS' BUSINESS

BUILDING TEAM CULTURE

Builders' Business is a column by builders for builders. Its objective is to provide a forum, particularly for small business operators, in which to share knowledge, experience, tips and ideas

Q: What do you do to strengthen team culture?

Firm: Fixation Builders **Principal:** Darren Robinson Location: Queenstown Staff: 5

Firm: Main Frame Limited Principal: Rick Pettit Location: Queenstown **Staff:** 10

We are always keen on doing things together outside of work that everyone enjoys. Being in Queenstown gives us plenty of opportunity to do things outdoors, such as hiking, skiing, or rafting. Doing these activities together is great for building our culture and creating a tight-knit team.

We aim to employ people who share the same interests. All of us enjoy doing these things outdoors in our own time, so it provides something to talk about and puts everyone on the same page.

When we started this company four years ago, we were in a position where we had to take on anyone we could get. Fortunately, as we've grown, we've been able to be more selective.

It's important that the people we hire can get along with others and not cause problems. We've created team culture guidelines that explain our values, so that everyone who comes to work for us understands what we expect and what culture we have here.

of interest, which helps everyone get to know each other better, but also makes the team bond over more than just work. My guys will usually be out in teams of two or three, and although I mix and match the personnel on the teams depending on the job, having the time each week to come together and catch up helps keep us all on the same page.

The way my team of employees is constructed also helps build team chemistry. If we're in need of more builders, I can trust one of my existing employees to recommend somebody who is interested in joining the crew. Because I have a good group, I'm confident that they'll bring in good people, and this has been the case so far.

NOW HAVE YOUR SAY...

HOW DO YOU FEEL ABOUT THE GOVERNMENT'S PROPOSED REFORMS ON MODERN **METHODS OF CONSTRUCTION?**

ANSWER THIS QUESTION TO ENTER OUR QUARTERLY PRIZE DRAW Email your answer with your full name, contact phone number, company name, number of full-time staff and the city or town in which you're based to editor@pmundersconstruction.co.nz. All responses must be submitted by 10 January 2020. The answers to this question will be published in Under Construction February/March 2020.

Having the chance to sit down and catch up over a beer once a week has always been a good thing for team chemistry, as it provides time for us to relax and talk about things that might not be work-related. We can discuss world issues, sports, and anything else

Firm: SMBC Ltd Principal: Sam Manson **Location:** Christchurch Staff: 2

I think the most important thing is communication. Creating a work environment that emphasises speaking up and not hiding what you're thinking or what's bothering you can help in breaking barriers in communication.

Stressing the importance of having team members ask questions is also vital. Whether it's an experienced or inexperienced employee, if they feel like they can be open with anything, the workplace becomes much more transparent and people feel more comfortable being open with each other.

Our weekly health and safety toolbox chat always provides a good opportunity for catching up with each other while we prepare and plan for the week of work ahead. On top of this, making sure we get out and enjoy things outside of work helps build better relationships between everyone.



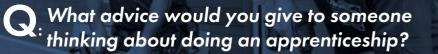
PAC NEWS

PLACEMAKERS APPRENTICE CREW



FROM THE GROUND UP

Our apprentice column provides an opportunity for PAC members to share their views, experiences and ideas, while providing insight for builders who employ them. This month's question is:



Name: Dan Location: Wanaka

For Daniel Murphy, a 28-year old apprentice who is about to qualify, he would suggest that anyone thinking about taking on an apprenticeship start by laboring as he did.

 $\mathbf{3}_{rd}$

YEAR

"I looked for a small company, where I knew I would be involved in all aspects of building, and applied as a labourer," says Daniel. "I was pretty keen on changing careers and becoming a builder, but I thought I should check it out first hand before going all in, and figured laboring would be a good way to do it."

"For me, it was a great decision. Not only did it reinforce my desire to be a builder and work for Dean Miller Level Construction, it also allowed me to prove I could be a valuable employee, which made the company more open to investing in training me."

Having left a career as a sustainable energy engineer in Ireland, Daniel says he was keen to get on the tools.

"I was working as a project manager for a retrofit company, instructing people to do things I didn't know how to do. It made me kind of uncomfortable and I wanted to learn how things went together myself – thus getting into building."

> I looked for a small company, where I knew I would be involved in all aspects of building, and applied as a labourer

After three years, Daniel says he couldn't be happier with his decision.

"It's such an interesting job, and there are so many aspects to it – from pouring concrete to finishing cabinetry. I think it's a much better apprenticeship than the carpentry one in Ireland, as you have to choose what type of carpentry you want to do before you've even tried them all."

All in all, whether you're 18, 28 or 38, Daniel suggests getting a taste of the industry before committing is the way to go. "It's a great way to test the waters and, if you decide it's for you, make your intentions known and show your worth. Training someone is a big commitment, so it's a much easier decision for an employer if your level of commitment is equivalent."

After three years as an apprentice, Daniel has three more top tips to share, which will be featured in an upcoming article in Under Construction. Stay tuned!



Daniel Murphy has received Apprentice of the Month twice in two years!

SEPTEMBER APPRENTICE OF THE MONTH

Turning a weakness into a strength

ane Nisbet, a recently graduated fourth-year apprentice from Auckland, has turned a weakness in written work into a practical strength.

Kane explained that, while the practical side of the apprenticeship came easily, the theoretical side did not.

"I'd been around building for ten years before I started my apprenticeship and I'm a practically minded person, so that part of it came naturally to me," says Kane.

Perhaps unsurprisingly, Kane took a practical approach to improving his book work skills. "It turned out fixing my weakness wasn't that hard, it was just a matter of putting the time in and getting on with it. I set aside an hour a day, every day, to work on one to two units of the theoretical stuff with Jason, my mentor."

"By working with Jason every day, I didn't just fill in the lines so that I could pass the assessments, I got to really understand the theory, which has made me a better builder."

Another tip Kane is keen to pass on to other apprentices struggling with bookwork is not to be afraid to share your weaknesses with your co-workers.

OCTOBER APPRENTICE OF THE MONTH

Thinking ahead and seeking guidance

ndrew Hopley, a second-year apprentice from Christchurch, was awarded Apprentice of the Month for facing a new building challenge using his own foresight and support from a more experienced builder.

Andrew was overseeing the build of a large shed, a job which included calculating material quantities and research specifications using NZS 3604.

This was a significant build and a big challenge for a second-year apprentice. Andrew took two important steps, which helped him meet the challenge.





PRENTICI

* >

CREW

"If you tell people what you're struggling with, they're likely to give you suggestions on how they'd approach it, and getting those different angles and inputs is useful."

Firstly, he planned ahead, which lessened the number of surprises later on. Secondly, Andrew recognised he needed help, so he sought the guidance of a more experienced builder.

How did it work out? In Andrew's words: "Bloody good!" The project was successfully completed, he received great feedback from the boss and the homeowner, and he learned a lot.

"It's a job that I looked forward to going to," says Andrew. "It's not always smooth sailing but sometimes a job like this comes up that makes you realise why you're doing this and it makes everything else worthwhile!"



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PAC CASH TRADE DISCOUNTS

Don't forget that all current PAC members have access to cash trade discounts on safety gear and hand tools plus other product ranges (some exclusions apply) at all PlaceMakers branches. Visit the PAC hub for more details pac.placemakers.co.nz

NEWS

WHAT'S ON

PLACEMAKERS PRODUCT PICKS

FIXED LADDER BRACKET



New to PlaceMakers, European-made DumaWall is a lightweight, easy-to-install waterproof wall tile. Produced with the revolutionary patented RCB® (Rigid Core Board) technology and featuring an interlocking tongue and groove system, Dumawall is durable, 100% recyclable, obtains a PASS[™] and meets NZ Building Code.

DumaWall+ comes in a handy tile size of 375 x 650mm and DumaWall XL is available in 2600 x 900mm, making shower walls and large areas quick and simple to cover. Both DumaWall+ and DumaWall XL come in a range of contemporary colours that suit a variety of interior spaces. Product available early 2020.



Seratone offers a range of pre-finished panels and jointing options, setting the tone for inspiring and creative designs for both commercial and residential interiors. A trusted wall and ceiling panel solutions provider for over 30 years, Seratone has just introduced a brand-new look - Aqua. This new solution is a great option for wet and dry areas in a home.

Another option, Seratone Classic, is designed for modern interior living and work spaces, allowing functionality and aesthetics to go hand in hand.

Seratone Specialty is a stand-out option – its metallic finish breathes life into any modern living or working space. The full range is available at PlaceMakers.



Total Height Safety's fixed ladder bracket, Ladderlink, is designed to support a ladder, stopping sideways movement and therefore holding the ladder in place safely. It is an entry point to any height safety system.

Made from marine grade aluminium and available at PlaceMakers, it's quick and easy to install and has two tie-off points to aid in securing the ladder in position.

Ladderlink also has a protective membrane in the form of a powdercoat finish, which ensures your product is ready for any additional product you would like to apply to match your guttering. PlaceMakers is pleased to offer Sesto's great new drive pin, the PXW75. It is designed to be used as a temporary fixing for bottom plates to concrete (until they are secured with a permanent fixing) as well as for boxing and formwork. Specific features include:

- **75mm length** Ideal length for fixing 45mm timber to concrete.
- Low-velocity pin Designed to be used in all leading brand piston tools.
- 22mm fixed washer Fixed washer provides a larger bearing surface for higher loads.
- Galvanised finish Offers increased durability.
- Ballistic tip Machined point provides more consistent penetration.

SCruifs

PlaceMakers is now stocking Scruffs Trade Flex Shorts, designed specifically for work in the height of summer.

The revolutionary new 'boardie' style work short is lightweight yet extremely durable and flexible.

- Flexible slim fit with stretch panels.
- Lightweight and durable ripstop fabric.
- Cargo pocket and mobile phone pocket.
- Hard-wearing. Canvas fabric pocket reinforcements.
- Tool loops and D-ring for tool and accessory storage.
- Triple stitched seams for long-lasting durability.



UTURE POST

PlaceMakers is pleased to offer customers Future Post, a long-lasting fencepost that's also more environmentally friendly than traditional fence posts, according to Future Post. Made in New Zealand from 100% recycled plastic, each post contains around 500 milk bottles and 1,500 plastic bags.

There's no possibility of splitting, cracking or rotting. Impenetrable by water, frost, insects or fungi, the posts can be driven, cut, drilled, nailed, screwed, bolted and stapled.

The posts are ideal for riparian planting, as there's no leaching of CCAs into the soil. They are organic farm-friendly, BioGro certified and are recyclable.

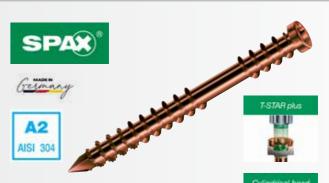
Available in 4 sizes : $100\,\text{mm}$ x 1.8m, 125mm x 1.8m, 125mm x 2.4m and 200mm x 2.4m.

Check out the website futurepost.co.nz and click on "Our Posts".



When it comes to quality collated nails, Paslode is a well-known, heritage brand in New Zealand. PlaceMakers is the exclusive distributor of the 90mm framing nails in the convenient 1,000 pack, which doesn't include gas cannisters.

Available at PlaceMakers stores nationwide in bright and galvanised finishes, these nails are high-volume lines in the market. The 1,000 packs are great for top-ups if you have gas already, or for smaller jobs. They are also a great option for gasless framers and are compatible with all the leading brands. This is particularly helpful as gasless framers are becoming more established in the market.



SPAX antique decking screws in stainless steel are engineered and manufactured in Germany for use on timber decks. Their brownish colour is a result of thermal processing and provides a nice decorative finish. They are exclusive to PlaceMakers and available at stores nationwide.

Pre-drilling is highly recommended to achieve a professional finish and reduce stress cracks around the screw, ultimately saving time, money and maintenance in the long term.

NOTE: When used with Garapa timber, the timber must be sealed on all sides before laying to prevent any staining. SPAX ANTIQUE DECKING SCREW





MBIE

BUILDING STANDARDS MADE FREE



NZS 3604:2011 Timber-framed buildings, which can now be downloaded for free, is a key document for many Licensed Building Practitioners

Over 120 building Standards used for Building Code compliance have been funded for free download thanks to a collaboration between the Ministry of Business, Innovation and **Employment and Standards New Zealand**

his is great news for the building and construction sector, as it will reduce financial barriers to achieving Building Code compliance.

As the building system regulator, MBIE has chosen to fund these specific Standards as they are primary references for Building Code compliance. New Zealand is one of the few countries in the world to sponsor free access to building Standards, which has been made possible through the use of the building levy.

This initiative is a follow-up to the

highly successful pilot launched in December 2017, when MBIE sponsored six building Standards for free download. In the past 18 months, those Standards have been downloaded over 15,000 times. The newly funded 120 Standards, released in July 2019, were downloaded 60,000 times in the first month.

BENEFITS OF USING STANDARDS

Standards are an accepted method for standardising the way things are done. They provide consistency and certainty about methods for manufacture and testing. Standards are used across

the construction industry to enhance products and services, improve safety and quality, set industry best practice and support international trade.

Standards New Zealand uses expert technical committees to develop Standards. This is often done in partnership with other organisations such as Standards Australia or the International Organization for Standardization (ISO).

KEY FUNDED STANDARDS

The MBIE-funded Standards were selected because they are referenced in

Standards are an accepted method for standardising the way things are done. They provide consistency and certainty about methods for manufacture and testing

Acceptable Solutions and Verification Methods that enable compliance with the Building Code. International and joint Standards (such as AS/NZS) are not included in the sponsorship agreement as copyright for these documents isn't owned by Standards New Zealand. MBIE is continuing to work with Standards New Zealand to find options to extend the number of sponsored Standards available for free download.

TIMBER-FRAMED CONSTRUCTION

NZS 3604:2011 Timber-framed buildings is a key document for many Licensed Building Practitioners (LBPs). When read in conjunction

with Acceptable Solution B1/AS1, it describes Building Code compliance methods for the design and construction of timber framing in buildings up to three storeys high.

Other funded Standards relevant to timber-framed buildings include NZS 3602:2003 Timber and wood-based products for use in building and NZS 3640:2003 Chemical preservation of round and sawn timber, which, when read in conjunction with Acceptable Solution B2/AS1, are used to select appropriately treated timber for building work.

CONCRETE AND MASONRY WORK

A companion Standard to NZS 3604:2011 is NZS 4229:2013 Concrete masonry buildings not requiring specific engineering design, which describes methods for the design and construction of concrete masonry in buildings up to three storeys. It should be read in conjunction with Acceptable Solution B1/AS1.

Also being funded are NZS 3109:1997 Concrete construction, NZS 4210:2001 Masonry construction: Materials and workmanship, NZS 4230:2004 Design of reinforced concrete masonry

This article is an excerpt from Codewords Issue 92. Reading Codewords articles that are relevant to your licence class is a mandatory requirement for Licensed Building Practitioners. These questions can be answered through the LBP portal, online at underconstruction.placemakers.co.nz or recorded on the magazine, then provided at the time of renewal.

CODEWORDS QUIZ ISSUE 92

1	Where can you download free building-related standards?	
al	standards govt nz	

- b) lbp.govt.nz.
- mbie.govt.nz.
- d) building.govt.nz.

- Why has MBIE funded (2) building-related Standards so they can be downloaded for free?
- Standards are overpriced.
 - the construction industry.
 - c) To encourage using the digital versions of Standards.

structures and SNZ HB 4236:2002 Masonry veneer wall cladding.

CONTRACT TEMPLATE

When undertaking building work valued at \$30,000 or more, it is mandatory to have a written contract. This is made easier with the template building contract provided by NZS 3902:2004 Housing, alterations and small buildings contract.

ENERGY EFFICIENCY

Another Standard that will continue to be available for free download is NZS 4218:2009 Thermal insulation - Housing and small buildings. When read in conjunction with Acceptable Solution H1/AS1, it provides a way of complying with the New Zealand Building Code for the thermal insulation of houses for energy efficiency.

Download these and other funded building Standards on the Standards New Zealand website:

www.standards.govt.nz/sponsoredstandards/building-standards.

To reduce the cost of using Standards, so that people are more likely to use them, leading to better outcomes in

How are Standards developed?

- a) They are dictated by what the Government regulates
- b) They are developed by expert technical committees.
- c) They are developed by manufacturers to specify how to use their products.

MBIE

TIPS ON LBP ID CARDS



Anyone can ask to see evidence of your LBP licence at any time, so it pays to keep the photo current and always carry your LBP ID card with you when on the job

nder the Building Act, Licensed Building Practitioners (LBPs) must produce evidence of being licensed when asked. Identification (ID) cards are a simple way to verify your identity as an LBP. You can also use your licensing confirmation letter from the Registrar as evidence, but this is less practical when working on site.

ID CARDS PROVIDE EASY PROOF

Anyone is entitled to ask to see evidence of your licence. It is an offence to fail to produce this evidence, so make sure you have a way of demonstrating your licence status.

If someone asks to see your licence, they may just be doing their due diligence, so there is no need to be offended or worry that they doubt your

www.building.govt.nz

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ability as a tradesperson.

REPLACE LOST, STOLEN OR DAMAGED CARDS

To replace your card, you will need to complete a Personal Details and Replacement ID form. The charge for a replacement card is \$50.

The Personal Details and Replacement ID form is on the LBP website.

You will also automatically receive a new licence card when you relicense.

UPDATE YOUR ID PHOTO OCCASIONALLY

Currently, there is no time limit for how long you can keep your ID photo. When you relicense, we will automatically use the photo from your last licence.

However, it's important that your photo still looks like you, so you may want to update it from time to time.

The best time to update your photo is prior to relicensing, as when you relicense, a new ID card is automatically printed using the photo we have on file.

If you are relicensing using a paper application, you can attach a physical photo to the application form and send them in together.

When relicensing online, you will need to email or post the photo to us before you relicense online - allowing ten working days for processing.

If you want a new ID card with a new photo before your annual relicensing round, you will need to pay the \$50

replacement fee. If you combine updating your photo with relicensing, there is no extra charge as a new ID card is included.

> Anvone is entitled to ask to see evidence of your licence. It is an offence to fail to produce this evidence, so make sure you have a way of demonstrating your licence status

MAKE SURE THE ID PHOTO **IS RIGHT**

The photo you provide needs to meet a range of requirements. We recommend aiming for the same standard as a passport photo to ensure it will be accepted. Some of the requirements include:

- High quality in colour black and white photos are not acceptable.
- Ratio of 3:4 width to height.
- Sized between 45–50mm high and 35-40mm wide for printed photos.

This article is an excerpt from Codewords Issue 92. Reading Codewords articles that are relevant to your licence class is a mandatory requirement for Licensed Building Practitioners. These questions can be answered through the LBP portal, online at underconstruction.placemakers.co.nz or recorded on the magazine, then provided at the time of renewal.

CODEWORDS QUIZ ISSUE 92

- (4) Which document is NOT (5) Who can ask to see suitable to prove you evidence of your licence? are a licensed building a) Potential employers. practitioner? b) The homeowner. a) LBP ID card. c) Council inspectors. b) Letter from the Registrar d) Anyone.
 - confirming your licence.
 - c) Driver licence.

digital photos. Taken with a clear, light-coloured background.

- Even lighting so that there are no shadows on your face.
- Undamaged no ink, staples, pins, paper clips or folds.
- Showing your face, head and shoulders looking directly at the camera.
- No hat, sunglasses or other accessories that obscure your face.
- No signs of alteration.

Pharmacies, PostShops and photograph printers may offer ID or passport photo services, where they take your photo and provide you with printed and emailed copies.

These services may be helpful if you are unsure how to take a photo that will meet the requirements. A passport quality photo will meet all the requirements for an LBP ID.

Between 50kb and 5MB in size and jpeg or jpg file format for

A DIGITAL PHOTO IS FINE

You can send in a digital photo to use on your ID card as long as it meets the requirements above. Currently, there is no facility to upload a photo when relicensing through the online portal. To update the photo we have on file, email it to us.

Ensure you include your LBP number and a request to update your photo. You will need to allow time for your email to be processed before you relicense to ensure the photo on file is updated before your next ID card is printed.

TELL US IF YOUR NAME CHANGES

If your name has changed it will need to be updated on your ID card and in the public register. To notify us that your name has changed, please fill in the Personal Details and Replacement ID form. We may require certified legal documentation that your name has been changed.

The Personal Details and Replacement ID form (PDF) on the LBP website: www.lbp.govt.nz/assets/documents/ forms/personal-details-andreplacement-id-form.pdf.

(6)

Do you need to notify MBIE if you legally change your name?

- a) Yes, it needs to be updated on the public register and your ID
- b) No. MBIE will automatically know if your name has been changed.



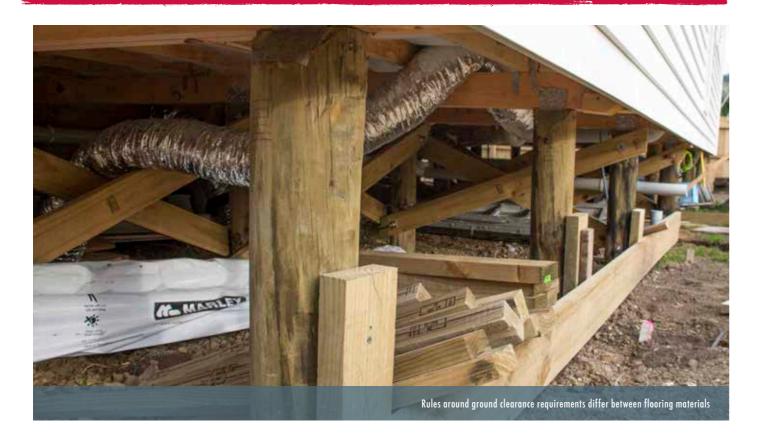
Which

document is NOT suitable to prove you are a licensed building practitioner?

- a) A selfie.
- b) A passport-quality photo, printed or digital.
- c) An airbrushed photo.

BRANZ

CLEARANCE UNDER PARTICLEBOARD FLOOR



Calls to BRANZ helplines have revealed confusion created by differing advice in NZS 3604:2011 on the ground clearance needed for particleboard flooring. So, what is the ground clearance needed?

hen the flooring of a suspended timber-framed floor is particleboard, NZS 3604:2011 Timber-framed buildings specifies a minimum clearance of 550mm between the underside of the particleboard and the ground (paragraph 2.3.7).

However, paragraph 6.4.1.1 in NZS 3604:2011 allows a minimum pile height above finished ground level of 150mm. So, in what situations may minimum pile heights apply?

PARTICLEBOARD NEEDS LARGER CLEARANCE

From Tables 6.4 and 7.1 in NZS 3604:2011, the minimum permitted sizes of bearers and joists are 90 × 70 mm and 90 × 45mm respectively. If these sizes are used with piles 150mm

high, the underside of the flooring will be 330mm above ground level (Figure 1).

TIMBER STRIP AND H3 CCA-TREATED PLYWOOD FLOORING

Timber strip and H3 CCA-treated plywood flooring do not have restrictions on the permitted installation height above ground, so these flooring materials may be installed over subfloor framing with ground clearance of less than 550mm.

PARTICLEBOARD FLOORING

If the same sized bearers and joists are used with particleboard flooring, the pile heights above finished ground level must be at least 370mm. Generally, larger joists are likely to be used, but regardless of the sizes of the subfloor

framing, the clearance between the around and the underside of the particleboard flooring must be at least 550mm (Figure 2).

Note: These minimum subfloor clearances may not be achievable over the entire footprint of the building. NZS 3604:2011 requires crawl spaces to permit visual inspection of all subfloor framing. Clause 6.14.4 requires an access height of not less than 450mm to the underside of the floor joists, but does not require all timbers to be 450mm or more above the ground.

ADD MORE PROTECTION, **USE POLYTHENE SHEET**

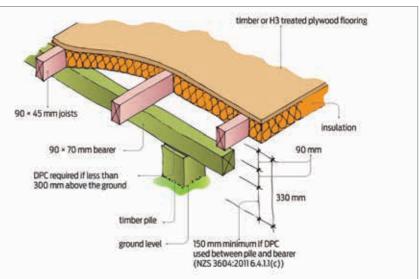
Particleboard flooring must be protected from exterior exposure. Where damp soil conditions exist, it is recommended that the ground be

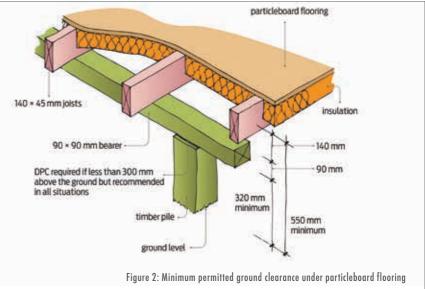
covered with polythene sheet. This includes where the minimum subfloor ventilation requirements of NZS 3604:2011 paragraph 6.14.1 are being met – a minimum net open area of 3,500mm² per m² floor area.

Calls to the BRANZ helplines have revealed confusion around ground clearance needed for particleboard flooring. This confusion is understandable but easily resolved

A polythene ground cover should also be used in any situation where:

- The subfloor ground is permanently or seasonally damp.
- The airflow is obstructed by party walls, internal foundations or attached terraces.
- The ground is more than 7.5m from a ventilation opening.





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PROVE YOUR KNOWLEDGE

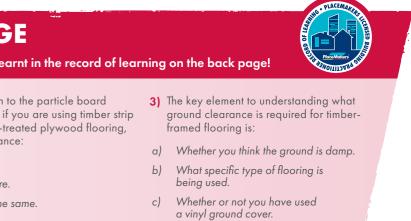
Tick the correct answers below and record what you've learnt in the record of learning on the back page!

1)	When using a suspender minimum cle must be:	d timb	er-frame f	loor,	2)	In comparise requirements and H3 CCA ground clear	, i \-i
a)	550mm.				a) Can be less	s.
Ь)	150mm.				b) Must be mo	ore
c)	330mm.				c)) Should be t	the

NB: The questions and answers in this section have been produced by the publisher and do not necessarily reflect views or opinions of the contributing organisati

Figure 1: Minimum permitted ground clearance under timber and plywood flooring

This article was first published in BRANZ's Build 174 magazine. www.buildmagazine.co.nz. Words and figures supplied by BRANZ.



BRANZ

GOOD GROUND VERSUS CLEARED GROUND

There's good ground and then there's cleared ground. From time to time, the BRANZ helpline receives enquiries asking what the difference is, so here's a quick recap

he terms 'good ground' and 'cleared ground level' are defined in 1.3 Definitions of NZS 3604:2011 Timber-framed buildings:

- Good ground is any soil or rock capable of permanently withstanding an ultimate bearing capacity of 300kPa.
- Cleared ground level (CGL) is the ground level after completion of site excavation and removal of harmful material but before excavation for foundations.

WHAT DOES THIS MEAN?

In other words, cleared ground is the ground ready to be built on and achieved by preparation such as clearing off plant material and topsoil.

Good ground, however, must have a bearing capacity, in addition to its own weight, able to support the load of a building without undergoing significant settlement. To establish good ground, the area of the proposed building must be tested.

DETERMINING GOOD GROUND The initial assessment for determining good ground - set out in NZS 3604:2011 section 3.1.3 is observing that:

- Neighbouring buildings show no sign of settlement.
- There is no evidence of erosion, landslides or ground creep either on the site or adjacent sites.
- Excavation reveals no evidence of buried services or fill material.
- Excavation does not reveal organic soil, soft or expansive clay, or peat.

Other investigations include referring to the project information memorandum and other territorial authority records such as local history of the site and published geological data.

TESTING GROUND BEARING CAPACITY

To establish the ground's ultimate bearing capacity of 300kPa, a scala penetrometer method of testing

must be used. The test requirements are described in NZS 3604:2011 section 3.3.

A scala penetrometer – also known as a dynamic cone penetrometer – consists of a calibrated rod driven into the ground at various locations with a sliding weight or hammer that is raised and allowed to drop onto an anvil

The number of blows required to achieve a particular depth of penetration into the ground establishes the soil's bearing capacity. Where testing shows the ground does not meet the bearing capacity required, the foundation of the proposed building will need specific engineering design (SED).

TESTING DEPTHS

Testing depths required under NZS 3604:2011 are:

- 2m minimum for strip or pile foundations.
- 600mm minimum below the depth of short driven timber piles.

This article was first published in BRANZ's Build 174 magazine. www.buildmagazine.co.nz. Words supplied by BRANZ.

5) Initial assessment of whether ground is

or around creep either on the site or

Excavation reveals no evidence of

a) No evidence of erosion, landslides

buried services or fill material.

PROVE YOUR KNOWLEDGE

Tick the correct answers below and record what you've learnt in the record of learning on the back page!

adjacent sites.

c) Both A and B.

b)

good ground includes:

- 4) Good ground is defined by:
- a) Ground with 300kPA ultimate bearing capacity
- Ground that is flat and cleared. b)
- Ground that is ready to be cleared. c)

- 6) The method for establishing ground's ultimate bearing capacity is:
 - a) An experienced eye.
 - b) Use of a penetrometer.
 - c) All the tradies on site jumping up and down on it

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NEWS COMMUNITY

NEXT-LEVEL DELIVERY

PlaceMakers offers unique world-class delivery service to customers around the country

laceMakers is transforming the way it does business, with an innovative new approach to delivery – and builders around the country are benefitting

"By combining a number of existing technologies - from restaurant ordertype platforms to Uber-type software - we have created a dependable, transparent and end-to-end delivery service for our customers," says PlaceMakers Business Transformation Manager Wayne Armstrong.

"The service, which has been rolled out to almost all branches nationwide over the past year, allows customers to track their order from start to finish, even when it's en route to give our customers absolute certainty as to when we will arrive on site."

STARTING OFF RIGHT

Once a customer order is taken, the whole PlaceMakers team can see where the order is at through all stages of delivery.

A confirmation text and email will be sent to the customer, with an estimated arrival time and location. Using the system, PlaceMakers can see the site and pinpoint the site's entry point and the exact location where the customer would like the products placed.

ACCURATE PICK AND PACK

Once the order has been made and the confirmation sent, branch staff can begin packing the order. Scanning an item automatically updates the order on the dashboard and, once all items have been scanned, the order will be marked as complete.

If a customer calls in to add something to the order, the item can be added to the existing order on the dashboard



and the order's status will be updated accordingly.

"The system is designed to eliminate order errors," says Wayne. "For example, if an entire order has been picked, scanned and marked as complete, then a new item is added, the system acknowledges this and changes its status to incomplete. This way, the team knows to pick the new item before delivery."

"This means that, when drivers check in before loading begins, they'll know right away if something has been added by the customer but not yet picked."

HEADING IN THE RIGHT DIRECTION

The new system uses customer location data to determine the best route and order of stops for the delivery driver, reducing unnecessary travel time.

Once the customer has been notified that the order is en route, the system's real-time delivery route tracking software allows the customer to track the truck's progress and estimated arrival in real time, just like Uber.





Need a delivery direct to site? PlaceMakers will make sure it's placed exactly where you want it

Customers can sign for the order on arrival using the driver's system, and drivers can document the arrival by uploading a photo to the order.

The order is only finalised once the signature and photo are uploaded and placed on the company invoice completing the end-to-end service.

> The new system uses customer location data to determine the best route and order of stops for the delivery driver, reducing unnecessary travel time

"It's all about efficiency and communication - two key elements of excellent customer service," says Wayne. "Our goal is to provide world-class customer service that make a real difference to builders, saving them time and money."

The service will be rolled out to Northland and the Lower North Island by March 2020.

INDUSTRY FOCUS

RETENTION REALITIES



BDO's 2019 Construction Survey Report revealed some of the challenges facing the construction industry. This issue we look at the realities of who is adhering to retention rules, and what subcontractors can do if someone isn't

R etentions are one or mount contentious subjects in commercial construction, especially in the etentions are one of the most contentious subjects in commercial wake of recent high-profile companies leaving subcontractors out of pocket when put into liquidation. This is despite regulations surrounding retentions coming into effect more than two years ago.

WHEN RETENTIONS GO BAD

From the client's perspective, retentions are intended to ensure the contractor and subcontractor complete the work to the agreed standard. From the subcontractor's perspective, the withheld retention can represent all of the profit they stand to make from the job. When everything goes to plan, this approach can work well, but when a head contractor goes bust, that money can be lost if the retentions have not been set aside properly.

Despite changes to the Construction Contracts Act in early 2017 to protect retention payments, several subcontractors are still unpaid or

embroiled in lengthy legal battles after recent construction company collapses.

WHAT IS MEANT TO HAPPEN?

Under amendments made to the Construction Contract Act in early 2017, retentions are meant to be held 'on trust'. According to BDO's report, what 'on trust' means specifically is not well defined by the Act. Crucially, it does not require money to be held in a separate account.

BDO's report notes that "while the intermingling of funds is allowed under the Act, this is risky and does not guarantee that the funds are held on trust. Instead, best practice is to hold the retention monies in a specific trust account at the bank, for example labelled 'Construction Retentions Trust Account'. This ensures that, in a receivership or liquidation situation, it is very clear that the funds are held in trust and cannot be used for any other purpose".

At the other end of the scale, allowing

the retentions money to be used as general operating capital could be considered 'worst practice' and would not be compliant. However, a lack of penalties, understanding and/or "desire to rock the boat" appears to contribute to no contractors taking remedial action

> When a head contractor goes bust, that money can be lost if the retentions have not been set aside properly

CURRENT LEVELS OF COMPLIANCE

According to BDO's report, 93% of respondents (who responded to the BDO survey, who had retentions payable) said they are complying with the retentions regime. Of these, 65% are following 'best practice' - holding cash in a separate account in trust with 25% having sufficient cash are but not using a separate account.

Of the remaining 10%, 7% of respondents said they 'preferred not to answer', which BDO believed is most likely to mean "we aren't complying". The Ministry of Business Innovation and Employment (MBIE) estimates that subcontractors write off between \$7 million and \$16 million in retentions each year.

ONUS ON SUBBIES

While those who hold retentions are meant to hold the money separately, in a way that that money cannot be used for other purposes, the onus for checking whether this is done falls to the subcontractor.

BDO was surprised to learn how few subcontractors actively inspect their head contractor's trust records.

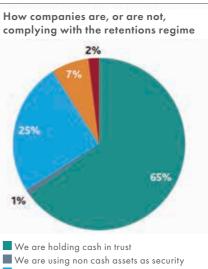
"In our 2018 survey, we asked how many [contractors] check to see if their retentions are held in trust by their customers. We were surprised by the level of inaction as, given most of the profit in a job is locked up in retentions receivable, this is basic risk management. Despite a number of highprofile insolvencies across the industry and shortfalls of funds in trust, the number of those actively inspecting their head contractor's trust records has only improved to 30% (+4% on last year)," stated the report.

Of the 30% who did check if their retentions were held appropriately, almost half found at least one client who was not holding their retentions properly. As BDO notes, "these customers are simply not complying with the law".

WHY ARE SUBBIES NOT **CHECKING?**

According to Nick Innes-Jones, who co-authored the BDO review, there is a lack of understanding on subcontractor's part about the retention inspection process.

"Our view, from having had discussions



We always have sufficient cash but are not using a separate account We prefer not to answer this We have a retentions insurance policy

with industry participants in the construction industry, is that many simply don't really know what to ask for," said Innes-Jones. "And, if they do ask, they're not sure whether the explanation • or evidence they receive is sufficient."

When asked what subbies are doing when they find a head contractor is not holding their retentions in accordance with the act, Innes said: "our sense is that they are not taking further action but are simply tolerating it. And it's worth noting that some have indicated that the lack of penalties in the Act is a large factor for non-compliance."

Graham Burke, President of the Specialist Trade Contractors Federation (STCF), echoed these comments.

"Subcontractors often don't ask because they don't want to rock the boat," said Burke. "I don't know of any subcontractors who have taken any action when they've found retentions are not being held properly, again, because they don't want to rock the boat."

WHAT'S NEXT?

Building and Construction Minister Jenny Salesa is currently considering changes to how retentions are held

Is the subbies' share of the pie being protected?

and an announcement is expected soon.

Burke, who recently made a submission to the Minister on behalf of the STCF. said the submission "focused on five points that we think would make the retentions regime stronger, without introducing undue levels of compliance costs".

In summary, the STCF recommended that:

- Retentions must be held in an account used only for retentions.
- The holder of retentions must send regular updates to the subcontractor about how much is held in trust for them in their retention account.
- In the event of company failure, the liquidator automatically becomes distributor of retentions (rather than needing to apply to the courts).
- In the event of company failure, the liquidator is able to charge their fee, not to exceed 10%, which should be taken from the retentions fund (rather than needing to apply to the courts).
- Regulation should set penalties and there should be a body that can prosecute any breaches.

Burke also noted that these changes would only be one piece of the puzzle.

"Fixing the retentions regime is necessary, but it's worth noting that this is part of improving construction contracting as a whole," said Burke.

"The recent implementation of the government procurement rules is a good start to getting better contracts, a better fit between the contractor and the job required, a better balance of risk between the parties and, therefore, fewer construction company collapses and consequently fewer losses of subcontractors' retentions."

INDUSTRY FOCUS

GOVERNMENT DITCHES 'LOWEST PRICE' MODEL

Government looks to 'lead by example' with new procurement rules

fter coming under fire for 'lowballing' contracts for years, the Government has stepped up with new procurement rules, which came into force on 1 October. The new rules require government agencies contracting for construction projects to consider a range of factors taking the focus off the lowest price in favour of a broader and longer-term view.

AVOIDING LOW-BALLING

In describing the impetus for the new rules, Phil Twyford said the "lowest price model" approach resulted in construction companies cutting costs and undercutting each other so intensely that some projects became financially unviable.

"In the worst cases, companies collapsed • before construction was completed, resulting in sub-contractors not being paid," said Twyford.

This appears to have been the case in the recent collapse of Stanley Group, which acknowledged it under-priced a flagship Housing New Zealand (HNZ) project by as much as \$2 million.

"The new rules move away from a 'lowest price model' to a 'broader outcome model', which has to take into account the financial health of the construction company, the health and safety of its workers and the environmental health of the building," said Twyford.

LEADING BY EXAMPLE

Government contracts make up 18% of all large-scale construction projects and the new rules must be applied to all government construction projects with a value over \$9 million.

Speaking to the rules' further possible reach, Phil Twyford commented: "This is about the Government leading by

example, and we hope the private sector will follow suit".

The new rules begin with a new focus on market engagement; government agencies are now required to engage with possible suppliers to consider opportunities, risks, and solutions associated with procuring and delivering, before bids are sought.

Going forward, those bidding for government construction work will need to demonstrate:

- What skills development and training is being undertaken by the construction company and its subcontractors.
- Whether the bidder's competence matches the complexity of the project.
- What sustainable building practices are being used, such as using sustainable materials and minimising waste.

TRAINING REQUIREMENTS

One of the aspects of the new rules that has long been discussed is the requirement for bidders to show evidence of the training and skills development that will need to occur as part of the project.

The new rules provide specific guidance for government agencies on the kinds of questions they should ask of potential suppliers, such as:

- What is the total number of apprenticeship weeks that have been completed over each of the last three years?
- What percentage of your workforce is currently in training apprenticeships?

This aspect of the new rules will favour suppliers who already actively support employee training.

In addition, for large jobs over \$50 million or lasting longer than three years, government agencies must create a specific skills and training development plan.

INFLUENCING THE MARKET

A staunch supporter of this initiative is the Building & Construction Industry Training Organisation (BCITO), which recommended using procurement practices to incentivise firms to train to the incoming government in 2017.

"One straightforward, low-cost, and low-compliance method of encouraging training is through the Government's own procurement policies," said Warwick Quinn, Chief Executive of the BCITO.

"While residential and private commercial clients might form the majority of construction activity in New Zealand, the Government is also a significant source of demand. Moreover, while private sector demand tends to be highly cyclical and operate in something of a 'boom and bust' cycle, government demand is far more stable.

"The public sector's position as a major source of clients and largescale construction work means that its procurement policies can have significant effects on the industry. By requiring or encouraging public sector agencies to include participation in training within their procurement evaluation and selection criteria, the Government will strongly incentivise the industry to invest in developing its workforce."

NEWS **PRODUCT NEWS**

CLADDING FOR EVERY KIWI

PlaceMakers cladding catalogue, now available at PlaceMakers stores nationwide and online, demonstrates its commitment to providing designers, builders and their customers with an impressive variety of options

ith more than 30 different types across fibre cement, cedar, pine, plywood, metals, uPVC, bricks and blocks and a range of composites, hundreds of profiles and a vast range of textures, colours and finishes, PlaceMakers has all types of houses covered – literally.

"Our goal is to be the destination for cladding in New Zealand," says Peter Barrett, PlaceMakers Merchandise Manager for Building Products. "Many homeowners don't know how many options are available, and their associated properties and benefits. We want to present the options in such a way that the differences are clear, so customers can make an educated decision."

To achieve this, PlaceMakers has launched a new cladding catalogue that builders can share with their designers and customers – details include warranty information, maintenance requirements and manufacturing details.

"The catalogue not only features New Zealand's best known cladding types but also showcases a new



premium range of products - many of which are from reputable international manufacturers" says Barrett.

"While the catalogue lists all the information, it isn't quite the same as seeing it in real-life, which is why we are investing in building displays at our branches. Just as they do with bathrooms and kitchens, builders can bring customers in to have a proper look at the cladding options.

"Cladding has an aesthetic impact on a building, and as people become more discerning about the look of their homes or are striving to achieve a different finish, it's important for them to be able to have a solid idea of what the cladding will look like."



Abodo Vulcan is a premium weatherboard timber created from thermally modified New Zealand pine

A key highlight of the range is the number of pre-finished and precoloured options, which provide benefits at the time of installation and generally require less maintenance over the lifetime of the product.

"One of the new additions is Cemintel Territory – a fibre cement composite. It's unique in that it allows a mixed cladding look in one system which is a look that most modern houses feature, this could be a concrete, brick or timber look on one set of detailing which makes design and compliance easy," says Barrett. "It's sold exclusively through PlaceMakers, so it's worth letting your customers know it's an option."

NEWS

INDUSTRY FOCUS

APPRENTICE NUMBERS REACH RECORD HIGH



The number of Kiwis taking up building and construction has recently hit record numbers, a milestone the Building and Construction Industry Training Organisation says demonstrates a changing perception of the trades

he Building and Construction Industry Training Organisation (BCITO) has reached 13,000 apprentices in active training.

"We are delighted to have such high numbers of apprentices joining up. This demonstrates many are seeing the fantastic opportunities provided by a career in the trades. However, we still need more to join," says Warwick Quinn, BCITO Chief Executive.

"While our latest research shows that more parents, students and school leavers are becoming open to the trades, we've got a long way to go to reach the numbers required to meet the current skills demand.

"Our apprentices are setting themselves up for a bright future. Their jobs can be just as financially rewarding as getting a university degree, you can earn while you learn, and they offer a good worklife balance."

Quinn also said research shows an increase in people saying they're open

to a career in the trades, particularly women, Māori and Pasifika.

"Employment forecasts estimate 80,000 new and replacement construction jobs opening in the next five years. To fill this demand, we need more people to start formal training now."

As PlaceMakers Apprentice Crew (PAC) has discovered talking to apprentices around the country, more and more people are taking up an apprentice position at an older age and coming from a completely different career background.

In Issue 76 of Under Construction, PAC talked to apprentices who had changed career to enter an apprenticeship. Matt from Russell, who had just completed his apprenticeship, always wanted to go into trades but was convinced by his parents to go to university and pursue a desk career.

After several years, Matt was the director of his own marketing company, but was still drawn to the trades, so

he gave up his role and entered the building industry on labourer's wages.

"While it might seem a bit nuts, it was a great decision for me personally and a worthwhile career move," said Matt.

"I'd highly recommend others to consider making the change and flex your mind as well as your muscles – there are so many avenues and aspects to explore in building that you'll never get bored!"

With numbers showing more people realising the benefits of working in trades and the opportunity for career advancement, Quinn says there's no better time to enter trades than now.

"There are a vast number of roles available. It is not all about being on the tools. Unless we shift the dial and educate people about the range of opportunities within the trades, we won't be able to meet demand."

INDUSTRY FOCUS

NEWS

BUILDER POSING AS LBP FINED \$13,000



A man falsely claimed to have been a licensed brick and block layer for two years, forging an LBP's signature to sign off work

rookes Hales Sheehan from Mt Manganui was fined \$13,000 after being convicted in the Christchurch District Court, pleading guilty to 13 charges. These included carrying out Restricted Building Work when not licensed, signing documents under another name and dishonestly appearing to be licensed to carry out and supervise building work.

The offence began in 2015 when contacting the director of a building company in Rangiora asking to rent his property. Sheehan provided a business card that included his name and a Licensed Building Practitioners logo.

He then found work at the man's company, laying bricks and blocks for two years at multiple properties in Rangiora, Fernside, Kaiapoi and Cust.

Sheehan never mentioned he wasn't licensed and went as far as supervising several men and signing off work with the name of a licensed builder from Whanganui during his tenure with the company.

Sheehan supervised **Restricted Building** Work, and went as far as signing off work under a false name

This continued until the company director's partner noted Sheehan's records of work were under a different

Courts can hand out fines to builders who break the law, but they can't revoke LBP status. Only the Building Practitioner Board can do so

name, then later discovering his real name was not on the LBP register.

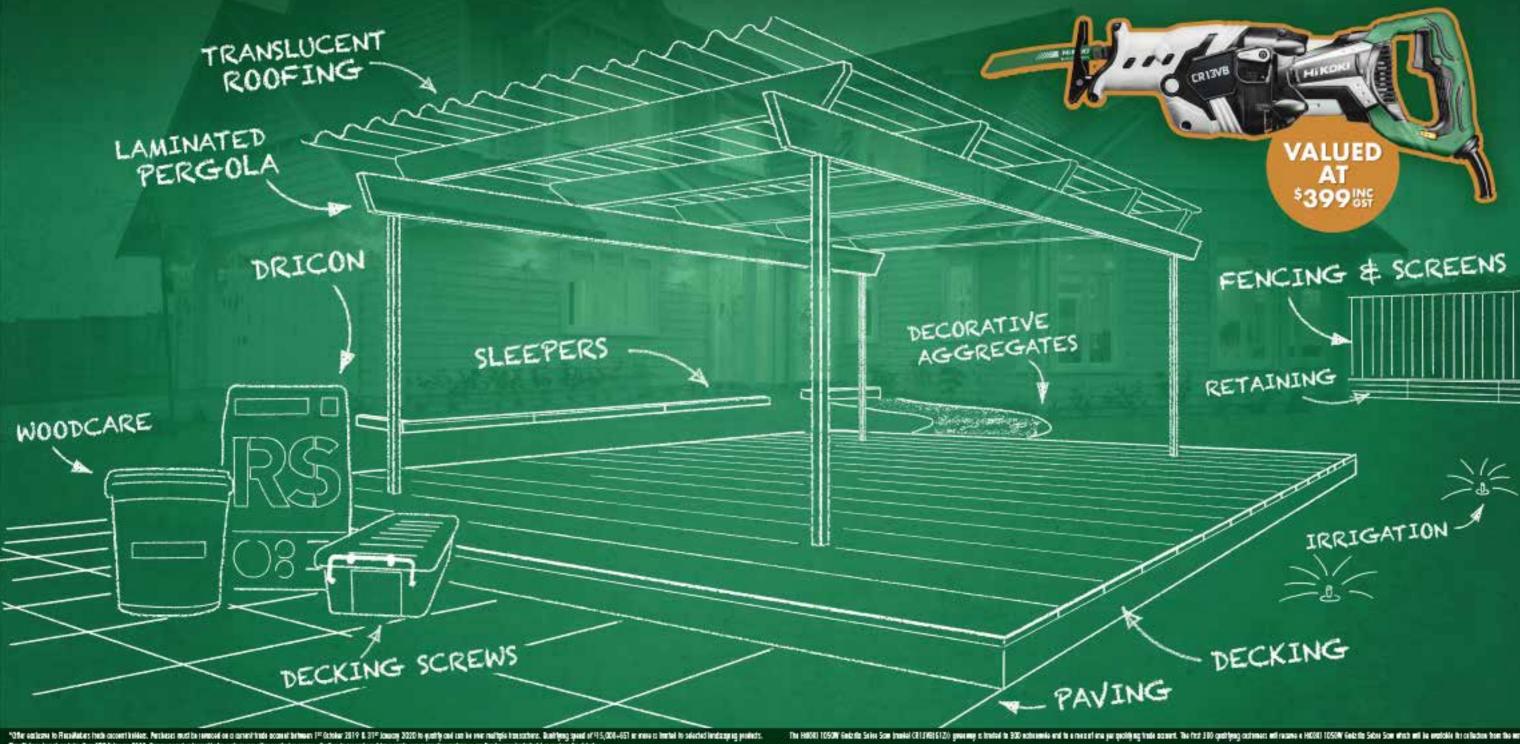
Sheehan confirmed he had signed off work under the Whanganui builder's name, but said he had been granted permission from him to sign the records in his name, claiming the same builder also supervised him at five properties. The Whanganui builder denied Sheehan's report of events.

The judge sentencing Sheehan said it was not possible for the Whanganui builder to be doing this work in the South Island. Under legislation, only a fine could be given.





CREATE THE ULTIMATE OUTDOOR ROOM SPEND OVER \$15,000+GST ON ANY OF THE FEATURED LANDSCAPE PRODUCTS & RECEIVE A FREE' HIKOKI GODZILLA SABRE SAW



TRADEMADE DEALS





TIPS

THE SUCCESSFUL BUILDER

GET YOUR LABOUR IN THAT FIXED PRICE RIGHT!



Accurately quoting a fixed price for labour is one of the trickiest parts of pricing a job. This month, the Successful Builder gives some tips on how to get this part of your guote right

any builders find the task of producing accurate quotes frustrating. Under-estimating can cost a lot of money and overestimating may price you out of the market. But accurate quoting doesn't need to be difficult – it is primarily about making use of your past experiences.

When jobs run at a loss, it is not normally because the quantities were wrong but usually because the job took longer than expected – a slow builder doesn't use more materials than a fast builder.

As a result, it's important to ensure that

your labour estimates are as accurate as possible if you are going to succeed at fixed-priced jobs.

Producing quotations usually involves only three main elements:

- Estimating materials.
- Getting subcontractor quotes.
- Calculating how much employed labour you will need.

The first two are quite straightforward, although availability of subcontractors, and price increases on materials if delays occur can be an issue.

You can calculate materials or get a QS to produce a list for you. When it comes to subbies, they will usually give you a quote. That means the main area you need to master is the labour component. This is where your past experience is the most effective tool you have.

It takes time to become an accurate labour estimator - time and a consistent routine.

If you are not confident about estimating labour, then you need to take the time to master this important component of your business. It may be the difference between barely surviving and doing well. You can start now!

Outlined below are some simple steps you should have in place to develop a better labour estimating system. Once these steps have become routine, you should be able to produce fairly accurate labour estimates. This will enable you to offer fixed-price quotes with some level of confidence.

1. IDENTIFY TYPICAL SECTIONS

Divide your typical job into clearly defined sections (8 - 12 may be adequate). If you are using a construction or management software application, check that your sections are consistent with those in the software.

Examples of typical sections in a new build might be:

- Site set-up
- Excavation
- Slab preparation
- Framing and trusses
- Roof
- Joinery
- Cladding

If you have more than one typical job, produce a set of clearly defined sections for each typical job.

2. KEEP TIMES

Set up a time-keeping system, so that team members record the hours worked in each section and for each job. When you tally these, you will know precisely how many hours have been spent on each section of a specific job. It's a good idea to check that any time-keeping apps you use allow you to allocate hours to sections and to jobs.

Careful time recording is one of the most important records in a building business, yet it is one that very few builders do carefully. This means that if you do it well, you will be at an advantage in a competitive market.

Note: A careful time-keeping system is not only useful in quoting. You can use it to track the performance of your team/s on each job and identify quickly if a job is on schedule. A weekly review with the foreman discussing progress and projections will go a long way to keeping a job on track. If the job is getting behind, you will know sooner and be able to intervene early – this is one of the core activities to ensure financial stability in your business.

3. BUILD RATES TABLES

From the information you get by tracking hours, you can develop rates tables to guide you in future estimating. The first time through, you will have rates from only one job. It's important not to take your first time-keeping results as gospel, because it's a very small survey size and even seemingly similar jobs can be very different in reality. The more jobs you track, the higher the likelihood that the average will be about right.

Once you have rates based on several jobs, you will be able to estimate with a growing level of confidence. Further, the different jobs will give you more benchmarks for comparison.

For example, a rates table (sample below) makes it reasonably easy to estimate the time for a specific floor using these actual times as a guide.

Note: It is a good idea to keep a record of the skill level of the people doing the hours on each job. If the make-up of the

Then your rate table for estimating labour on rib rafts will be as follows:
a) Floors of 100m - 0.72 man hours per square metre.
b) Floors of 150m - 0.64 man hours per square metre.
c) Floors of 200m - 0.54 man hours per square metre.

team changes, then you may need to make an allowance. For example, if a team of three highly skilled people did a section of a job in 100 hours, you might want to estimate 120 hours for a team of lesser skill. It's worth noting that the total cost for the quotation may not be much different, as you will be paying the lower skilled team members less per hour.

If you are not confident about estimating labour, then you need to take the time to master this important component of your business. It may be the difference between barely surviving and doing well. You can start now!

It takes time to develop your rates tables, but once you have done this for each of your sections, you will be able to estimate labour with much more certainty. Then after you complete jobs that used your rates tables to estimate, you can check how accurate your estimates were, make any adjustments needed, and over time have more confidence in building your labour estimate.

72 person hours divided by 100 sqm = 0.72 person hours per sqm.

THE SUCCESSFUL BUILDER

GET THAT FIXED PRICE RIGHT! CONTINUED

4. OTHER CONSIDERATIONS

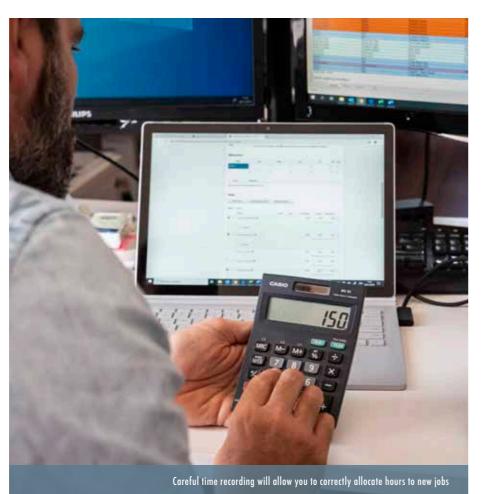
If you are not confident about the labour component of a section, then tag it out

Once you have rates based on several jobs, you will be able to estimate with a growing level of confidence. Further, the different jobs will give you more benchmarks for comparison

of your quotation. It is better not to win a job, than to lose money on it.

Remember that the margins you add to materials, subcontractors and labour need to be sufficient to ensure that your company is both financially viable and returns an adequate profit to the shareholders.

So, investing time into your quoting system now will pay off in the long run. 🔳



Graeme Owen is a builders' business coach at thesuccessfulbuilder.com. Since 2006, he has helped builders throughout New Zealand get off the tools, make decent money, and get more time in their lives. Grab a copy of his free book: The 15 Minute Sales Call Guaranteed To Increase Your Conversion Rate: thesuccessfulbuilder.com/book-15-min-sales-call or join Trademates and connect with builders who are scaling too: www.facebook.com/groups/TradeMates

PROVE YOUR KNOWLEDGE

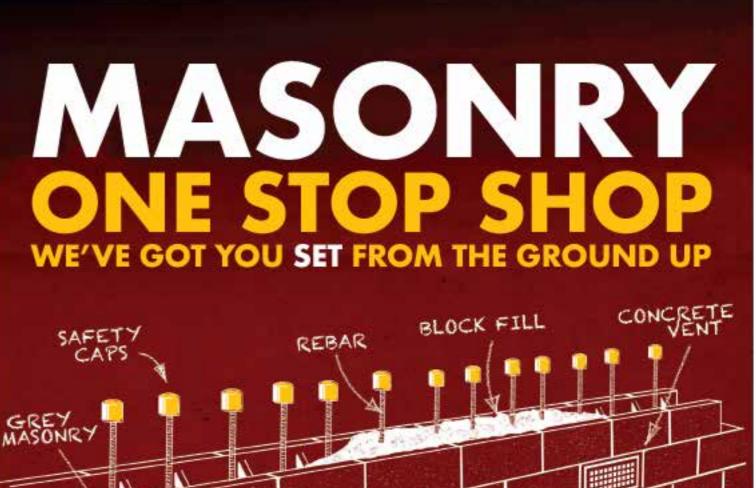
Tick the correct answers below and record what you've learnt in the record of learning on the back page!

- 7) The key to effective labour quoting is:
- Finding out how much time other a) builders are quoting for a similar job.
- b) Accurately understanding your own past build experiences.
- c) Quoting low, so you have the best chance of winning the bid.
- 8) What is the danger of quoting for labour
 - without an accurate method?
 - You might quote too low, win the job, then lose money as the job takes more labour hours than you anticipated.
- b) You might quote too high, and miss out on the iob as a result
- c) Both A and B.

a)

- 9) The first step to accurate labour estimating is:
- a) Identifying specific sections of a build.
- b) Recording time taken for each section of a build
- c) Building rates tables.

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- ADDITIVES



HEALTH & SAFETY **SITE SAFE**

BE SMART IN THE SUN



If it isn't possible to schedule exposed work to a time of day when the sun is less intense, wear a hat and reapply good sunscreen regularly

Heat, dehydration and fatigue. These three things can bite a tradie over summer and are all closely related. Heat can combine with dehydration and lead to fatigue. Managing how you work in the heat and keeping up your fluid intake can avoid these problems

ave Crowley, from Palmerston North's Scafit scaffolding company, says dehydration takes the edge off people and he's seen it with his team.

"Come the afternoon, because we've got a really physical job, dehydration can be a real problem, as it leads to fatigue," says Dave.

"We had a feeling that some of our minor accidents happening later in the day might be a result of dehydration and fatigue due to a lack of food and water intake."

To counteract this, Scafit supplies plenty of water and encourages its employees to stay away from sugary and caffeinated energy drinks. The company also provides all-day breakfast with quality cereals and toast to look after the team's nutrition.

"If the guys aren't eating properly, they're certainly not thinking properly," Dave says.

They even put up pee charts in the toilets, so guys can compare what's coming out with the optimum colour. Too dark means they need to drink more water.

Knowing the danger signs of too much sun and heat are vital says Jeff Strampel, Health and Safety Lead for Site Safe.

If heat stress or exhaustion is not dealt with quickly, it can progress to heat stroke, which can be life-threatening.

But Jeff explains that even everyday fatigue just makes things harder all round.

"It can be tempting to take on too much work, especially if you've been waiting

for good weather to get started on a job. Just remember to take a step back and think about the task before you get stuck in. Smart planning makes the job safer."

Be careful when doing these types of work, which make you more likely to suffer heat exhaustion:

- Working in the direct sun.
- Working near heat-producing processes.
- Working in confined spaces.
- Doing underfloor, ceiling or roof work.
- Sitting in cabs of mobile plant.
- Working in closed areas with limited airflow.

Make sure you know the danger signs to look out for when working in the heat. It might be things you notice in other people, as it can be hard to spot the danger signs in yourself.

> If heat stress or exhaustion is not dealt with quickly, it can progress to heat stroke, which can be life-threatening

SYMPTOMS OF OVER-HEATING:

- Clammy or sweaty skin.
- Feeling weak or dizzy.
- Dark-coloured urine.
- Pounding or rapid pulse.
- Loss of balance.
- Headaches.
- Muscle cramps.
- Mood changes or confusion

Then there's the long-term issue of being exposed to the burning rays of the Kiwi sun.

Site Safe is a not-for-profit, membership-based organisation that supports a culture of health and safety in New Zealand construction. For more information go to: www.sitesafe.org.nz

PROVE YOUR KNOWLEDGE

Tick the correct answers below and record what you've learnt i

- Because New Zealand has one of the 11) 10) highest melanoma rates in the world, when working in summer it is important to limit your UV exposure by?
 - a) Covering up with UV-rated clothing and a hat.
 - Planning your work-day to limit work in b) direct sun
- c) Both A and B.

"Unfortunately, New Zealand has one of the highest melanoma rates in the world," Jeff says. "Kiwis need to know that exposure to our harsh UV rays can lead to melanoma or other skin cancers."

Workers who are new to New Zealand may not realise how strong the New Zealand sun is, so it's important to reiterate it to new employees.

TIPS FOR STAYING SAFE

- think about where the sun is and which jobs you might be able to do first to avoid full sun for too long.
- Be cool: wear lightweight, breathable clothing if it's safe to do so, but be sure to comply with your company's clothing and PPE regulations. Remember to wear a hat, safety sunglasses and good quality sunblock. With any sunglasses, always check the impact and UV rating.
- Don't sweat it: stay hydrated with lots of water. Avoid dehydrating drinks containing caffeine or alcohol. People need about eight alasses of water per day, but if you're working in the heat, it's likely you will need more.

An easy way to ass

you are sufficiently

Use of a pee-colo

b) If you feel hot.

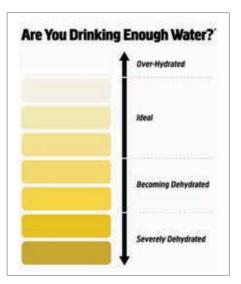
c) If you feel tired.

a)

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www.sitesafe.org.nz 28

Be the person with the plan: if you have several jobs to do outside,



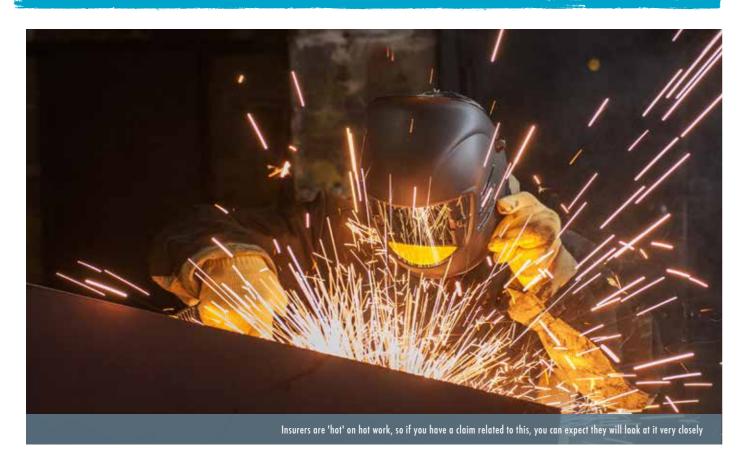
- Go with the flow: think about airflow and use fans to provide ventilation and keep the temperature down if necessary.
- Take a break: if possible, consider taking a break and heading inside during the hottest part of the day. Have regular breaks and consider extra breaks if the work is demanding. Monitor and place limits around overtime and avoid incentives to work too many hours. If you need to work longer hours, consider staggered start and finish times, and longer breaks and periods off work. Try to set realistic deadlines and timeframes for jobs. 🗖

n the record o	flearning	on the back page!
sess whether hydrated is:		One of the most important reasons to avoid dehydration is:
our chart.	a) b) c)	To lessen the chance of work-place accidents.

BUILTIN

HOT TIPS ON HOT WORK

BUILTIN



With the recent Sky City Convention Centre fire a hot topic, now is a good time to highlight the expectations insurers generally have around hot-work claims

ot work is the use of welding, brazing, cutting, grinding, blow lamps, burning off or other flame or heat operating equipment. It is governed by NZS 4781, which is the relevant New Zealand Code of Practice for protecting people and property from the hazards that can arise from hot-work activities. See list of hazards on opposite page.

Most insurers will assess any hot work-related event against this standard. Failure to comply with it could result in your claim being declined.

PUBLIC LIABILITY INSURANCE

These typically include a hot-work exclusion, with cover then brought back in again but subject to specific obligations/limits. In one example,

you'll be covered as long as you:

1. Comply with NZS 4781.

2. Comply with the conditions of any specific hot work permit.

3. Take all reasonable steps to minimise the risk of loss.

Depending on your occupation or the type of activity you perform, your policy may include further specific limitations or exclusions, a higher excess and a maximum limit to the amount you can claim (which could be lower than your headline policy limit).

The policy may also have a specific definition of what they consider hot work to be, so check that in your policy.

CONTRACT WORKS INSURANCE

A contract works insurance policy may not specifically refer to hot work, but it will always require you to take reasonable care to avoid circumstances that could result in a claim. This includes not acting in a reckless or grossly irresponsible way. If a claim is made you could expect them to check very closely if you have complied with NZS 4781. Failing to do so could be grounds to decline your claim.

GOOD PRACTICE

NZI has produced a helpful guide, to minimise your hot-work fire risk. To find it, Google 'NZI hot work'. Among other things, it suggests you:

Use hot work permits to manage the on-site area.

- Identify and remove any flammable materials or other fire hazards from the area if possible, including sweeping floors.
- Wet down the immediate area if practical.
- Use guards to confine heat and protect fire hazards that can't be relocated.
- Nominate a "fire watch duty" and assign responsibilities to people for overseeing the work.
- Conduct checks afterwards to check for hotspots.
- Make sure a hose or extinguisher is immediately available.
- Train operators to perform the work safely.

IN A NUTSHELL

Insurers are 'hot' on hot work, so if you have a claim related to this, you can expect they will look at it very closely. Make sure you're complying with the appropriate NZ Standard and taking all the right precautions, including risk minimisation and operator training.

In WorkSafe'	's Healt
Fires and explosions	These o
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Builtin are New Zealand's trade insurance experts. For more information visit www.builtin.co.nz, email Ben Rickard at ben@builtin.co.nz or call him on 0800 BUILTIN.

PROVE YOUR KNOWLEDGE

Tick the correct answers below and record what you've learnt in the record of learning on the back page!

- 13) What happens to your insurance if you carry out hot work and fail to comply with NZS 4781?
- a) Your claim could be declined.
- b) Your claim could be guestioned.
- Your claim will stand as long as you c) have public liability insurance.

14) What is the definition

work to be.

NB: The questions and answers in this section have been produced by the publisher and do not necessarily reflect views or opinions of the contributing organisatio

th and Safety in Welding booklet, hazards include:

are an ever-present hazard with many welding processes.

ng causes items to become hot – creating a risk of burns and om hot metal and welding spatter.

generated by different welding processes may range from of nuisance value to highly toxic. Health effects can occur oon after exposure (eg, exposure to cadmium fumes can be vithin hours) or may not result until after many years. Fume I requires appropriate ventilation equipment and may require e from a specialist.

ng processes that use electricity pose both obvious and hazards of electric shock - which can be fatal.

ressed gases in cylinders pose a number of hazards. ods for their safe use are outlined in TN7 chapter 5.

dous substances used during some welding processes can e highly specialised methods of control.

utions for preventing these hazards from causing harm are ed in TN7 chapters 5 and 10.

ases used during welding can flood an area and lower n content, especially in confined spaces causing suffocation.

ash is a well-known hazard of welding. Standard precautions art 15) should be used to prevent eye and skin exposure for the worker and for people in the vicinity. Reflecting es make exposure to radiation more likely.

ng for long periods in hot environments can lead to distress an extreme, fatal heat stroke.

iated processes may generate hazardous levels of dust.

and vibration levels during some welding processes can h and should be controlled and/or appropriate hearing tion should be worn.

welding processes may involve heavy/repetitive handling.

on-site area.

c)



Which of the following is not a suggested

way to minimise hot-work fire risk?

Use hot work permits to manage the

fire hazards that can't be relocated.

Use operators that have an NZQA

Level 4 certificate in welding.

Use guards to confine heat and protect

)	What is the definition of hot work when it comes to insurance policies?	15)
a)	The use of welding, brazing, cutting, grinding, blow lamps, burning off or other flame or heat operating equipment.	c L
b)	Your policy may have a specific	

definition of what they consider hot

c) Any work above 3,000°C.

SPONSORSHIP NEWS

SCOOTERIN' FOR A CAUSE

PlaceMakers Southern Scooter Challenge raises more than \$100,000 for local charities

outhland's high country was abuzz with activity on Saturday 14 September, with more than 100 riders taking part in the region's Southern Scooter Challenge. More than \$100,000 was raised through The PlaceMakers Foundation in support of local charities Prostate Cancer Southland and Hospice Southland.

The endurance ride covers 220km of picturesque South Island country, from Stirling Point in Bluff to the finish point in Queenstown. Riders and their scooters were decked out in blue in support of Blue September, the Prostate Cancer Foundation's annual awareness and fundraising month.

Event organiser and PlaceMakers Invercargill employee Tash Clay says PlaceMakers is hugely proud to help the two local charities to continue their great work.

"The challenge is all about raising awareness of prostate cancer and the importance of getting tested, as well as fundraising for survivors, families of those with cancer and those committed to making a difference. We are really proud of the amount raised and can't wait for the next event," she says.

Over the past eight years, PlaceMakers has raised nearly \$2 million in support of Blue September. Since the creation of the PlaceMakers Foundation earlier this year, PlaceMakers branches around the country have diversified, raising funds for a variety of local organisations or initiatives.

From lending a helping hand for local groups to bringing major projects to fruition through the Working Bee programme, the goal of the PlaceMakers Foundation, which was launched in April 2019, is to make a change and together build a better New Zealand.



Queenstown to raise money and awaren



Blue wasn't the only colour on show at the Southern Scooter Challenge

PROVE YOUR KNOWLEDGE

Evidence of actual learning rather than just 'participation' is a key requirement of the LBP renewal process.

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For ease of record keeping, use this coupon to collate your answers from within this issue of **Under Construction** and then sign and date it as proof of your own learning.

Signature	Date



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HEW LYNN Marturaliga	538 6240	NU MAUNSANU Kotoria	575 4119 347 7123	NAUNERSTON NORTH TRANSANUE	153 5777 149 1919	HLENNELM Notubia	528 6830 528 81 64	TINNIU Twicel	617 4135 435 31 39	PlaceM	akers

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