



Issue No. 106

February 2009



Editorial

In this issue we have articles on:

- 2008 Building Consent Statistics
- Building Sector News – receive your copy by email
- Producer Statement (Plumbing Testing Only)
- Department of Building and Housing
 - Safety reminder, decks, balconies and balustrades
- Building Code Clause H1 Energy Efficiency Amendments
 - Department of Building and Housing Update No 95
- ACC Articles
 - Think Safety First
 - Concrete – The Hard Facts on Safe Handling
 - Clean Up to Avoid Trip Ups
 - ACC Workplace Safety Discount Scheme
- Quiz on articles in this newsletter

For any enquiries regarding this newssheet, please contact Simon Tonkin on (03) 211 1777

2008 BUILDING CONSENT STATISTICS

2008 proved to be rather a busy year for all concerned in the construction industry in Invercargill.

The building consent figures for 2007 and 2008 are noted below for comparison. These figures are for issued building consents.

Land Information Memorandum inquiries were down approximately 30% from 2007 which usually indicates that property sales are falling, however Council recorded a very steady stream of people wishing to view Council's property files. People usually view the property file of a property they wish to purchase or take plans for future renovations or extensions.

Building Consents Issued:

	2008	2007
Accessory Buildings	225	286
Building Amendment	510	343
Commercial Alterations and Extensions	121	94
Commercial Minor Works	66	66
Decks Fences Pergolas Verandahs	9	10
Demolition / Relocation	72	59
Dishwasher	20	24
Heating Appliances	250	232
New Commercial or Industrial Buildings	30	35
New Residential Dwelling	208	198
Plumbing and Drainage Works	289	293
Residential Alterations and Extensions	554	665
Signage – Freestanding or Attached to Buildings	4	15
Swimming and Spa Pools	5	6
TOTALS	2,364	2,326

BUILDING SECTOR NEWS – RECEIVE YOUR COPY BY EMAIL

The Building Sector News is produced on a monthly basis and contains articles of general interest to the building industry.

Council produce and send this news sheet out at no cost.

However while it doesn't cost anyone to receive it, it does cost Council to produce it and post it out.

In order to keep the costs down, Council would prefer to send you a link to Council's webpage so you can view the latest and older editions online and of course print out a copy.

Please send your email address as noted below.

Thank you.

The Editor

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· **Join our mailing list** ·
· If you would like us to email you or your workplace on a ·
· regular basis with details about the latest building news ·
· and industry related seminars, then please email the ·
· Council at building@icc.govt.nz. ·
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PRODUCER STATEMENT (PLUMBING TESTING ONLY)

Council introduced this form last year for small alterations with less than 20m of pipework testing undertaken by registered craftsman plumbers. The purpose of the form is to assist with continuity of work so plumbers don't need to work around inspection restraints.

To make it easy for the trade to fill in, we put down the two standards for testing (G12 / AS1 and AS / NZS 3500) and asked that the person filling out the form cross out the one that was not applicable. Unfortunately this section is not being completed.

So in order to highlight which means of compliance the plumber has used, the form now has a tick box. Hopefully this will highlight the need to fill out this part of the form. The old form did blend a bit much and was possible a little difficult to read. Hopefully the new tick boxes will ensure the form is completed correctly.

PRODUCER STATEMENT (PLUMBING TESTING ONLY)

To: Invercargill City Council

Issued by (craftsman plumber): _____

Building Consent Number: _____

At (project address): _____

In relation to (description of building work): i.e. alteration / extension / bathroom / etc.

I have been engaged to undertake the plumbing work on the above building consent. I hereby certify that the work complies with the building consent and that I have undertaken a pressure test for water tightness in accordance with:

NZ Building Code G12/AS1 – 1500 kPa for a period of not less than 15 minutes

AS/NZS 3500.1:2003 – 1500 kPa for a period of not less than 30 minutes.

(Tick appropriate box)

This statement will be accepted and relied on by the Invercargill City Council for testing only of small bathroom / kitchen, laundry alteration up to maximum of 20m of pipework in length.

Registration number (I hereby certify that my registration is current): _____

Name print: _____

Signature: _____ Date: _____

This form is to be handed to the inspector at time of inspection.

Office Use Only

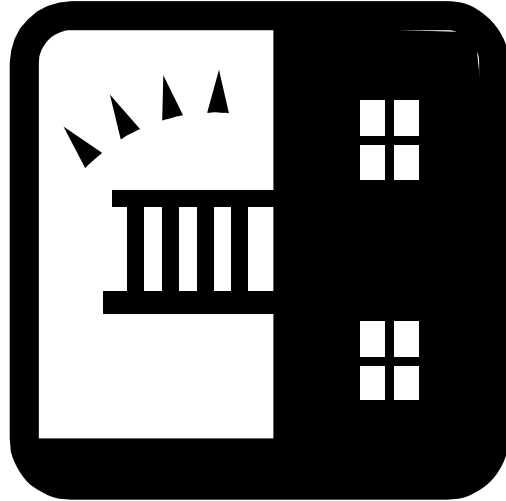
- Form filled out correctly
- Yes – put this form on building consent file.
 - No – If no, pipework is to be tested and viewed by Council inspector. This form to building consent file.
 - Failed notice left on site. Preline not approved. Linings not to be installed – reinspection required.

DEPARTMENT OF BUILDING AND HOUSING
SAFETY REMINDER: DECKS, BALCONIES AND BALUSTRADES

The Department of Building and Housing reminds owners of dwellings that decks and balconies supported by untreated kiln-dried timber may pose a safety risk, particularly in those situations where water pools rather than draining away.

At this time of year, many New Zealanders take advantage of warmer weather and time off work to have barbecues and socialise. They often enjoy these occasions on their decks and balconies.

This summer season, it is worth taking some time to consider that certain types of decks and balconies do have a risk of rotting when water has leaked into them, potentially leading their underlying structure to decay. In extreme cases, this can lead to collapse.



The Department of Building and Housing reminds territorial authorities, designers, builders, building consultants and other building professionals to pay particular attention to this risk whenever they are onsite.

SAFETY CHECK – ENCLOSED DECKS, BALCONIES AND BALUSTRADES

All types of deck, balcony and balustrade must be designed and constructed to meet the requirements of the New Zealand Building Code and be maintained throughout their lifetime.

The main concerns about leaking are with certain types of timber construction. There is potential risk of decks leaking where the timber balustrades are enclosed within claddings or the floor is covered with a waterproof surfacing, with or without tiles laid on it.

Unless correctly designed, constructed and, most importantly, properly maintained, water may leak in behind the cladding or through the waterproof surfacing and create conditions that encourage timber to decay and fasteners to corrode.

If the property has a balcony or deck, consider these risk factors.

- Has untreated kiln-dried timber been used for structural support?
- Is the balustrade clad with lightweight materials with a plaster finish?
- Are there any holes or cuts in the waterproof floor surfacing?
- Is there flat access, with no step, where the deck meets the building doorway?
- Does water pool on the surface?
- Do cantilevered joists (or other joists that penetrate the exterior wall) lack flashings?

Look at the barrier or balustrade. These factors all pose further risk.

- Is it clad with lightweight material with a plaster finish?
- Does it lack a waterproof capping?
- Does it have a flat top where water sits?
- Does it have a railing where water is able to leak down screw holes?

Warning signs

- Balconies and decks that move when walked on.
- Damp spots or stains where the balcony, balustrade or deck joins the main part of the building.
- Cracks, particularly near junctions, joints and corners.
- Balustrades or railings that wobble.
- Balustrades where damp spots or stains can be seen on the cladding.
- Interior water damage or any visible change to interior finishing's adjacent to, or directly beneath the balcony or deck.

Open timber decks constructed with durable treated timbers are less likely to be of concern. However, these are things that should be checked.

- Look at where the deck meets the wall of the house. Is there anywhere that water can sit or track into the house? Do the flashings take water away from the house wall and allow it to drain away? If the cladding relies on paint to keep the water out, is that coating continuous or is there any point where water might penetrate?
- Is there any sign of timber beginning to decay? For example, is there any sign of excessive cracking or 'softness'?
- Is there proper waterproofing around the cantilevered joists or around other joists that penetrate the house wall?
- Are the balustrades or posts correctly connected to the deck or balcony structure? They should not wobble.
- Check the tightness of bolted connections, especially on balustrades and handrails, to ensure nuts are secure.
- Check that galvanised steel connectors are not corroding.

DOES WORK ON A DECK OR BALCONY REQUIRE A BUILDING CONSENT?

A building consent is not required for decks and balconies where it is not possible to fall more than 1 m should the structure collapse. However, all decks and balconies must be built in accordance with the Building Code to ensure they are safe for people to use.

Where necessary, the building work owner should apply for a building consent when constructing a deck or a balcony. The consent will give assurance that any safety concerns with the deck are addressed, as a building official will have inspected the work after it has been completed to certify that it meets Code requirements.

Building owners and building professionals should discuss this with their local council.

ACC – THINK SAFETY FIRST

In the upcoming months articles from the ACC will appear in this news sheet.

The ACC's message is to promote safety in the workplace. It is everyone's responsibility to ensure that they follow safe work practices. Time off work due to an accident is not beneficial to anyone.

Make sure you are your workmates stay safe onsite, so always think safety first. For more information see www.acc.co.nz.

The Invercargill City Council supports ACC in this campaign to ensure we are all safe when undertaking out jobs.

The first articles from ACC are:

- Concrete – The Hard Facts on Safe Handling
- Clean Up to Avoid Trip Ups
- ACC Workplace Safety Discount Scheme

CONCRETE – THE HARD FACTS ON SAFE HANDLING

Concrete has long been the Kiwi builder's friend.



In the residential construction industry, concrete is the staple material of many a driveway, path and house foundation. The short of it is, if you're a builder, you can't avoid working with concrete. But although most builders are used to handling it, not all are aware of the health hazards that come with it.

Wet Cement – Minimise Contact

An ingredient in cement called hexavalent chromium can cause a severe allergic reaction in some people. Even if you aren't allergic to cement, particles of wet cement and sand can still irritate the skin and lead to dermatitis. Skin affected by dermatitis usually looks red and scaly, and can feel either itchy or sore.

Wet cement can also cause burns to the skin and affect your vision if splashed into the eyes,

To reduce these risks:

- Wear overalls, boots, gloves and eye protection when working with cement.
- Make sure sleeves come down over your gloves, and trouser legs cover the tops of your boots – this will help prevent wet cement getting trapped against the skin.
- Ideally wear well fitting, elbow length butyl or nitrile gloves (try to avoid wearing leather gloves, as they easily become saturated and also contain chromium, which can contribute to skin irritation).
- After work, remove overalls, boots and gloves outside the house, and shower and change into clean clothes.
- Clean gloves before and after use, and replace if they get too contaminated.

Cement Dust – Avoid Inhaling It

Breathing in cement dust when emptying bags or cutting concrete may expose you to silica which can irritate the nose and throat.

Safe work practices aimed at minimising your exposure to dust are the best way to manage this risk:

- Use ready mixed concrete if you can.
- Wet the cement before dust can become airborne.
- When sawing concrete, use saws that provide water to the blade.
- Wear a quality respirator, to minimise your exposure to any dust that does become airborne.

By following these precautions, you should be able to ward off most ill effects commonly associated with handling cement. This will ensure it remains your friend and doesn't become as irritant that affects your ability to do your job.



CLEAN UP TO AVOID TRIP UPS

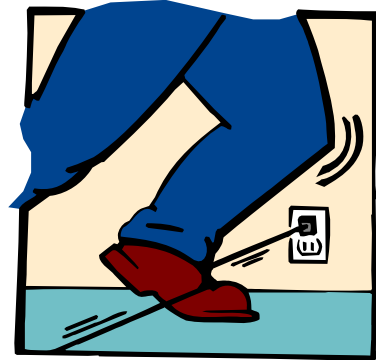
One of the best ways to keep yourself safe on a building site is also one of the simplest – keep the site tidy.

Slips and trips a common cause of injury

Many of us probably think that using sharp or fast moving power equipment, or working at heights, pose the greatest at work risk to builders.

While these are both potentially dangerous scenarios and certainly deserve lots of respect, its simple slips and trips that actually cause many of the injuries suffered by builders on the job.

When you think about it, that's not too surprising. A typical building site is a busy place, full of people, supplies and equipment. And that's where the risk of slips and trips comes from.



Unless you make a point of keeping things orderly, the ground can become littered with objects very quickly. All it takes then is a moment's inattention, you catch your foot on something, and down you do.

Because tripping over something on the ground doesn't involve falling from a great height, you may not think you can do yourself much injury. But don't be fooled.

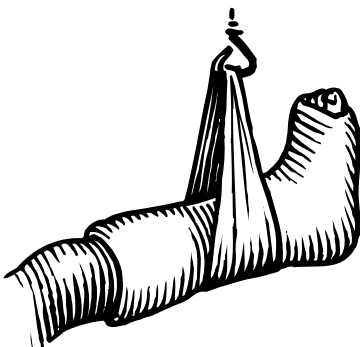
Its not so much how far you fall, but how you land – and what you hit on the way down – that determine whether you get injured and if so, how badly.

With so many heavy and sharp objects present on a building site, the chance of hitting something 'unfriendly' as you fall is actually quite high. And despite what you may think, we rarely have time to prepare ourselves for impact, so we basically land as we fall.

Common injuries received in trips and slips on the building site include sprains, broken bones, cuts, bruising and even concussion.

All injuries are worth avoiding

It's easy to put minor work injuries in the same bag as the bumps and scrapes we get on the rugby field, and dismiss them as no big issue.



But its worth thinking ahead, because an injury that doesn't cause you too much bother now may come back to haunt you later on – especially when you hit your forties and fifties.

Any injury, even a fairly minor one, can also cost you time and money. A sprain or strain may be enough to keep you off work for a week or two. During that time, you risk getting behind on the job, or facing the hassle of getting a temporary work to fill in for you while you get better.

ACC weekly compensation doesn't start until a week after you stop work because of injury, and is usually up to a maximum of 80% of your pre-injury average weekly income, so you will feel an injury in your back pocket too. Optional cover is available from ACC that lets you set the level of cover you want – this is called ACC Cover Plus Extra, and is especially relevant if:

- Your declared income is less than your actual income
- You have just started out in self employment
- Your income goes up and down (so you have 'good' years and 'bad' years).

With each of the scenarios above, the amount you'd receive under ACC's standard weekly compensation may not meet your essential weekly costs. So if you're in one of these situations, ACC Cover Plus Extra is worth checking out.

Tips to prevent slips and trips on the building site

At the end of the day, your best bet is to do what you can to prevent injuries happening in the first place. There's no rock science involved here – mostly it comes down to simple common sense.

Here are some steps you can take that will help make a real difference:

- Provide plenty of skips or rubbish bins onsite, so there's something to put rubbish into.
- Clean up as you go – in particular, try not to leave things like timber off-cuts, empty cement bags and empty RTV tubes, etc. where they fall after use.
- Have clearly defined access ways to key parts of the site and keep these free of any obstruction.
- Avoid trailing extension cords and power tool leads across the ground, but especially across walkways.
- Store building products in a clearly defined area, not just wherever they're offloaded.



For more information on workplace safety, visit www.acc.co.nz.

ACC WSD

It's well known that residential construction is one of the most dangerous industries around. Most of us know it pays to be safe on the job. And now workplace safety really does pay.

ACC's Workplace Safety Discount (WSD) scheme offers a ten percent saving on work levies to eligible self-employed and small business owners working in residential or civil construction. Depending on the size of your business this could save you hundreds of dollars a year, for three years.

It's basically a financial incentive to run a safer business. Those who qualify get to save money and learn how to provide a safer environment, while working with ACC to bring down the rate of injury and death that dogs the construction industry.

When you look at the statistics it's a win-win.

Official figures show 14 people died working in the construction industry in 2006 and the number of new ACC claims from injuries in residential construction increased from just over 1,000 in 2001 to 2,500 in 2006. The cost of these new claims was a whopping \$25,000,000.

Good health and safety management practises not only help you avoid injury, but also help avoid the cost and hassles that come with them. For example the average "lost time injury" costs a small business \$4,000 in lost provide, this typically results in between \$40,000 and \$80,000 in gross turnover.

Often these injuries could have been prevented if a better health and safety system was in place, says Jen Woodside, ACC programme manager for injury prevention.

"We get a lot of accidents from people working on ladders that aren't secured or who slip or fall out to the side," says Jen.

"And we get a lot of injuries from slips and trips caused by poor housekeeping, like not getting rid of rubbish or leaving off cuts of timber or rubbish lying around the site. It's about basic hazard management."

If you want to be part of the scheme you'll need to first see if your business qualifies to be included. There is more information on the application process below.

But basically, you will need to show ACC that you have abilities in health and safety management. This usually means completing a free training course or providing proof that you already have other training or experience managing health and safety. They you'll need to fill in a self-assessment booklet, or online Hazard Handler (there's links to both below) that spells out your health and safety system.

Don't worry if this sounds daunting. This self-assessment booklets and the hazard handler both include plenty of advice for identifying and dealing with any potential hazards you might have onsite, and the course providers will even help you fill out the forms.

At the end of the process – which could take as little as an hour or two of your time – you'll probably find your business is more compliant with health and safety legislation and, with your personalised hazard register in place, in a better position to win more contracts.

The key, says Jen, is finishing the process.

“Guys that have gone into the scheme have been really positive, but what we’re finding is that there are a lot of people out there that don’t know about it, and there are a lot of people who have heard about it but haven’t got around to completing the process.”

“It’s like all of us – if we go and do a training course or whatever and there’s some extra homework to do you often put it off. And the longer you put it off the harder it is to get it done.”

So now you know all about the WSD, go through the four step process below and apply for your own discount. It’s worth it, for the health of your workers and your business.

1. Check if you can apply: You must be either self employed or a small business with a total annual payroll of \$450,000 (or less) or with ten or fewer full time employees to be eligible.

Your work also needs to fall within specified industries. ACC’s website outlines these in detail. To see what businesses qualify as the residential construction industry, phone ACC on 0800 222 776 or go to www.acc.co.nz/wsd.

2. Attend training or provide proof of appropriate experience: If you cant prove you’ve done other courses or have other relevant skills in managing health and safety systems, you’ll need to attend a free course set up specifically for the residential / civil construction industry run by either Sitesafe (04 499 2509 www.sitesafe.org.nz) or Impac (0800 476 588 www.impac.co.nz).

You can get information about the training courses from ACC on 0800 222 776 or www.acc.co.nz/wsd or contact the course providers directly.

3. Fill in the self assessment for or Hazard Handler. At the end of the training course you will be given a simple self assessment form or you can download one from the ACC website.

Alternatively you can fill in the Hazard Handler online at www.dol.govt.nz/onlinetools. The Hazard Handler has a section specifically designed for residential construction businesses and will take you step by step through the process to personalise your own Hazard Register. You can print this off, or email it to ACC in place of the self assessment form.

4. Complete your application. Send in your completed forms together with evidence of your training or experience to:

ACC
Workplace Safety Discounts
PO Box 242
WELLINGTON

ACC will consider your application. You’ll soon know if you’ve been given a discount, or if more information is needed or if, in a few cases, an audit of your health and safety systems if required. Throughout any of this, feel free to contact ACC on 0800 222 776 for help or advice.

NO. 95 - BUILDING CODE CLAUSE H1 ENERGY EFFICIENCY AMENDMENTS

From 1 February 2009, new Building Code (NZBC) provisions for hot water and HVAC systems come into force.

The Department provides the following guidance to help designers and building consent authorities (BCA) interpret the new provisions relating to hot water and HVAC. BCAs, when issuing building consents, will need to consider the provisions on a case-by-case basis. Copies of the new NZBC clause H1 are available at: www.dbh.govt.nz/energy-efficiency.

Hot water energy efficiency provisions of the Building Code now include a new requirement for systems to “be constructed to facilitate the efficient use of hot water” (new NZBC clause H1.3.4(c)). This new provision only applies to buildings that are classified as housing (refer NZBC clause A1 for definitions). The existing Acceptable Solution for hot water energy efficiency, H1/AS1 5.0, states that “hot water systems complying with NZS 4305 satisfy the requirements of NZBC H1.3.4”. This Acceptable Solution remains in force for H1.3.4(a) and (b). However, in the absence of a new Acceptable Solution that expressly includes H1.3.4(c), NZS 4305:1996 can be used to interpret H1.3.4(c) as well.

Heating, ventilation and air conditioning (HVAC) systems are no longer excluded from NZBC Clause H1 after 31 January 2009, and a new performance (H1.3.6) is added as follows,

H1.3.6 HVAC systems must be located, constructed, and installed to –

- (a) limit energy use, consistent with the intended use of space; and
- (b) enable them to be maintained to ensure their use of energy remains limited, consistent with the intended use of space.

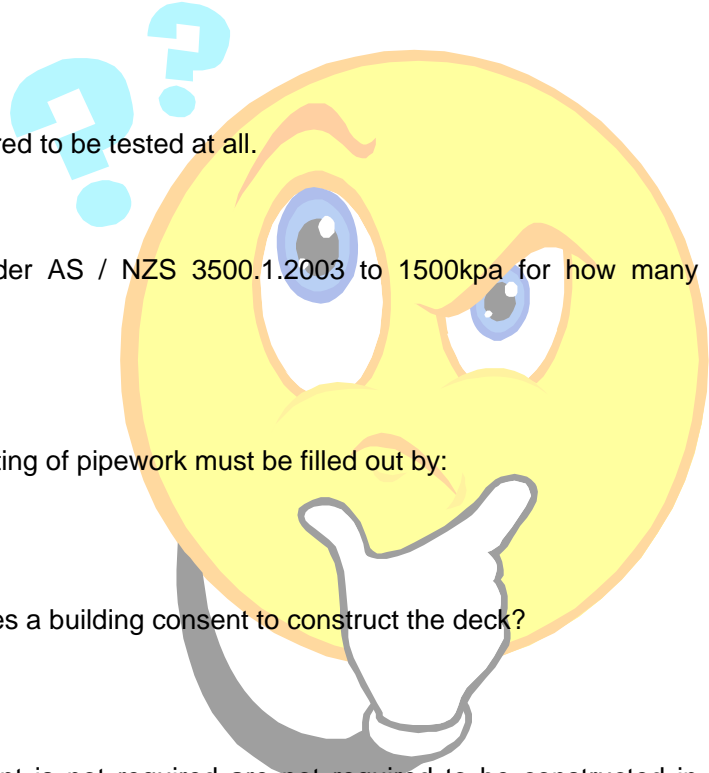
H1.3.6 will only apply to buildings that are classified as commercial (refer NZBC clause A1 for definitions).

There is currently no acceptable solution or verification method for the new NZBC clause H1.3.6. Very little comment was received on the latest version of a proposed Acceptable Solution for HVAC released for public submission in October 2008. The Department has therefore decided to publish the main elements of this document as guidance rather than to publish a Compliance Document. This will allow designers and Building Consent Authorities more flexibility and allow more time for further consideration before any Compliance Document is completed. This guidance document [Guidelines for energy efficient HVAC plant](#) is available from the Department (www.dbh.govt.nz/energy-efficiency) to assist BCAs in making decisions on whether the new HVAC provisions have been met. This is not a compliance document and the decision of whether a design complies with these new provisions is for the BCA to make.

The Department will continue to work with the sector to improve guidance/compliance documentation and enable better energy efficiency outcomes. Submissions on proposals for amendments to the H1 Compliance Document will be sought later in the year.

QUIZ ON ARTICLES IN THIS NEWS SHEET

1. Invercargill City Council's building sector news is only available in electronic form.
 - a. True
 - b. False
2. Plumbing pipework is required to be tested under G12 / AS1 to ____ kpa for 15 minutes.
 - a. 1000
 - b. 1200
 - c. 1500
3. Plumbing pipework is not required to be tested at all.
 - a. True
 - b. False
4. Plumbing pipework tested under AS / NZS 3500.1.2003 to 1500kpa for how many minutes?
 - a. 5
 - b. 15
 - c. 30
5. The producer statement for testing of pipework must be filled out by:
 - a. The builder
 - b. The plumber
 - c. The craftsman plumber
6. A deck over what height requires a building consent to construct the deck?
 - a. 500mm
 - b. 1000mm
 - c. 1500mm
7. Decks where a building consent is not required are not required to be constructed in accordance with the Building Code.
 - a. True
 - b. False
8. Decks, enclosed balconies should be maintained to ensure that deterioration does not cause any damage to the deck, etc. and to other parts of the building.
 - a. True
 - b. False
9. Wet cement can cause burns to the skin.
 - a. True
 - b. False
10. Cement dust can irritate the nose and throat.
 - a. True
 - b. False
11. What sort of gloves should be used for handling concrete.
 - a. Leather
 - b. Butyl or nitrile
 - c. Latex



12. For information on workplace safety visit www.acc.co.nz.
 - a. True
 - b. False
13. Workplace safety is everyone's responsibility.
 - a. True
 - b. False
14. ACC statistics show that claims for injuries in residential construction in 2006 were _____.
 - a. 100
 - b. 1000
 - c. 2500
15. The cost of claims in 2006 was _____.
 - a. \$10,000,000
 - b. \$25,000,000
 - c. \$50,000,000
16. What ACC scheme offers a 10% discount on work levies?
 - a. Workplace Prevention scheme
 - b. Workplace Safety Discount scheme
 - c. Be Safe scheme
17. Training for workplace safety is never a waste of money.
 - a. True
 - b. False
18. Hot water systems for housing that comply with NZS _____ satisfy the requirements of H1.3.4.
 - a. 3604
 - b. 4229
 - c. 4305
19. Heating ventilation and air conditioning systems are excluded from H1.
 - a. True
 - b. False
20. Untreated pine framing timber is acceptable to be used on an exterior deck.
 - a. True
 - b. False

ANSWER TO QUIZ

1. b
2. c
3. b
4. c
5. c
6. b
7. b
8. a
9. a
10. a

11. b
12. a
13. a
14. c
15. b
16. b
17. a
18. c
19. b
20. b

