

Building Control

March 2019

Post

Welcome Back

Welcome back to the Marlborough District Council's Building Post. The first edition for 2019.

Last year flew by and already we are almost a quarter of the way through 2019. Consent applications were slow to start, but that's pretty traditional for the new year, but in saying that, numbers were about 20% down on the previous year. What was surprising was that for this financial year we are 50% down on new dwelling consents application compared to the year 2017/2018. Maybe the designers had a longer summer break this year.

Talking about summer, what a hot summer it was. For the first time in a long time I didn't mind being stuck at my computer in an air conditioned office. Believe me, I did think of you all working out in that heat. It took me back to building Lockwoods when the sun reflected off the floors and the walls. I would go home burnt to a crisp and that was in the Turangi/Taupo area where 27° was deemed to be a scorcher. So don't forget "Slip, Slop, Slap".

Tiny Cottages, Modified Containers, call them what you want

In most cases you will need a building consent to construct or alter these structures. Section 8 of the Building Act 2004 makes it very clear what is a building. Section 9 identifies what structures are not buildings. If it's a building and not included in Schedule 1 (exempt work) then it requires a building consent to construct and/or alter. Building Control is finding more and more of these, so called, exempt buildings on sites all around Marlborough. In most cases they are **not** exempt. And before you suggest welding a couple of wheels onto the structure to confirm that they don't require a building consent, I suggest you go on the Ministry of Business, Innovation and Employment (MBIE) Determination site and read a few determinations. You might save yourself (and your customer) a whole heap of grief.

Schedule 1 Exemptions 3 and 4 will let you build a structure without a building consent, **but** there are a whole heap of conditions associated with these exemptions. Number 1, the biggie, the work must comply with the Building Code. Secondly, the structure should not have sanitary fixings within them. Before you go permanently fixing one of these structures to the ground make sure you find out a few things first:

- Where did the structure come from?
- Did it have a formal exemption or building consent to be constructed?
- Will it perform in the new location as well as it did where it was constructed?

For example, built in a low wind area and is being relocated to a high wind zone.

Earthquake and snow zones as well

Remember, even if the building has a consent or formal exemption, you still need a consent to relocate it. Normally that would mean at least foundation and any associated drainage work.



Exempt work! Don't think so. Not even if you weld a couple of wheels on it.



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Time for a Review

The start to the year also allowed the senior inspectors and I to look at what has the greatest effect on our processing times and budget. What can we do to stop losing time and money, and work more efficiently?

The seniors and I highlighted a number of issues:

- The old issue, insufficient/inaccurate information and lack of specific details in the consent application.
- Old consent applications.
- Old Certificate of Acceptance (COA) applications.
- · Inspections on very old building consents.
- The time and cost spent travelling to outer zones, especially Zones 3 and 4.

Insufficient and Inadequate Information

Firstly, let me point this out straight away. Most of our regular customers meet the grade and we can process most consents with a minimum of requests for further information (RFIs). We realise that there will always be a few RFIs for specific details or just straight out forgotten details. We understand that there is a hell of a lot of information required these days. That's just the nature of the beast. Basically, good information covers everyone.

Where things really go wrong is when we have to send out over 20 RFIs for a simple project. Invariably if we have to go over 20 RFIs we will usually end up having to send a second and third request because of each return of information not being up to standard. The effect that this has is that it slows everything down. Instead of moving onto your application we are still stuck trying to get the inadequate application through.

So what are we doing about it? Starting this year, when Building Control gets a substandard application and the list of RFIs is quickly rising, we will cease processing and refuse to issue the consent. This means that the consent is gone and you will be invoiced for the administration work we have done up until the refusal. To progress, the application will have to be resubmitted and include a far better standard of documentation.

Old Consent and COA Applications

This approach also applies to building consent and COA applications that have been sitting with us for years waiting for RFIs to show compliance. If you have one of these old consents/COAs you will be receiving a reminder letter. If we don't receive a reply by the stated date in the letter or email we will refuse to issue the consent or COA.

Inspections for Old Consents

The Building Control Group has thousands of old issued consents that have never been completed. Those consents include pre and post flat fee consents. Up until now inspections carried out today are charged out as per the fee applicable at the time of issuing the consent. I have submitted my fee paper to Council for acceptance. As usual the paper will go out for consultation so you have a chance to put in a submission. In that paper I am proposing that any consent older than two years will have any ongoing inspections charged out at the current rate applicable at the time of the inspection. Here's an example of the disparity between old travel fees and todays fees. An Endeavour Inlet inspection fee in the year 2000 was \$72.00, now the same trip could cost up to \$500.00, and that is just the boat costs. It doesn't include the time the officer travels to and from the job, let alone the time spent doing the inspection.

Travel Costs

A review of our travel costs included in the flat fees system revealed that we have lost ground rapidly. This is mainly due to the actual transport costs. This is particularly clear when looking at those inspections which require boat travel. Another area of concern is the recovery of the time spent travelling to and from the inspection. The end result of review was that a full cost analysis was required for Zones 2, 3 and 4. The budget paper recognises the true full costs of undertaking long distance inspections. The paper also proposes an additional zone. We will create Zones 4a and 4b. The two different zones are to make allowances for those boat travel inspections that don't take too long but can only be accessed by boat. Once again you are able to make a submission, but I'm sure that you charge your clients what it costs to do the job and don't subsidise those far away jobs with the monies made from your close to town jobs. Council certainly cannot continue to do that.

Finally, keep your eye out for consultation on proposed fee changes.

A Timely Review Building Control Newsletter Page 3

Dams and Reservoirs

Dam It - it's hot out there

It won't have escaped anyone's notice that Marlborough is currently experiencing a very hot summer. Current river flows are low and water permit abstractions are under restriction and/or cut off. At this time it may be appropriate for agents to start conversations with their clients on water storage and other solutions to meet irrigation needs in these circumstances.

When considering what water storage is appropriate you must also consider the Building Act implications. Schedule 1 Exemption 22 provides an excellent guide when considering whether the proposed storage system requires a building consent or not. Any storage that meets the description of a large dam requires a building consent. Resource consent may be required, even if a building consent is not required. As with all building work, getting consents in place before starting work is essential and will avoid costly delays and compliance intervention.

Here's the link to Schedule 1:

 $\frac{https://www.building.govt.nz/assets/Uploads/projects-and-consents/building-work-consent-not-required-quidance.pdf}{}$

22. Dams (excluding large dams)

Building work in connection with a dam that is not a large dam.

This exemption allows smaller dams to be built without needing to obtain a building consent. However, they will still need to comply with the Building Code.

A dam is defined in section 7 of the Building Act as meaning

- (a) an artificial barrier, and its appurtenant structures, that:
 - is constructed to hold back water or other fluid under constant pressure so as to form a reservoir; and
 - (ii) is used for the storage, control, or diversion of water or other fluid
- (b) includes a flood control dam, a natural feature that has been significantly modified to function as a dam and a canal but does not include a stopbank designed to control floodwaters.

Large dams are **not** covered by this exemption. A large dam is defined in section 7 of the Building Act as meaning a dam that has a height of 4 or more metres and holds 20,000 cubic metres volume of water or other fluid.

This is about the capacity of eight Olympic-sized swimming pools, or a rugby field with water approximately 3 metres deep (ie up to the crossbars of the goal posts).

How the height of the dam is measured differs slightly based on whether the dam is across a stream or not, or if the dam is a canal.

If the dam is across a stream, the height of the dam is the vertical distance from the dam crest to the natural bed of the stream at the lowest downstream outside limit of the dam.

If the dam is not a across a stream, the height of the dam is the vertical distance from the dam crest to the lowest elevation at the outside limit of the dam.

If the dam is a canal, the height of the dam is the vertical distance from the dam crest to the invert of the canal.

The dam crest is defined in section 7 of the Building Act as the uppermost surface of the dam, not taking into account any camber allowed for settlement, or any curbs, parapets, guard rails or other structures that are not part of the water-retaining structure. Note that any freeboard is part of the water-retaining structure.





Example where this exemption could apply

A farmer constructs a water reservoir for crop irrigation. The height of the dam is 3.5 metres and it retains a depth of 2.5 metres over an area of 5,000 square metres (approximately 12,500 cubic metres of water). This is exempt work as the height of the dam is less than 4 metres and the volume of the water that is held back is less than 2,000 cubic metres.

Example where building consent is required

The height of a proposed dam on a river is 20 metres and it will hold back more than 250,000 cubic metres of water. This work will require a building consent because the dam height is greater than 4 metres and the reservoir volume is greater than 20,000 cubic metres.

Dam Design

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New Improved Duty Process

Well, you probably won't notice too much of a change, but we have had to review our way of recording customer inquiries as a result of a few old inquiries coming back. By recording these inquiries you will be able to see property specific inquiries in the public file.

What we are doing: Any inquiry that is site specific will be recorded to the appropriate file. If it has contentious information, the inquiry will be placed on the confidential file for that property. All generic customer inquiries will be saved to our own file so we can reference the information at a later date. The main effect on you will be that we will require you to provide better information up front before we reply to your query.

Consent Notices

Consent notices identify specific conditions that were agreed to by Council and the property owner during a subdivision process. Consent notices are covered by section 221 of the Resource Management Act 1991 and only apply to subdivision consents. Any consent notices imposed on a subdivision consent will be registered on the new Certificates of Title alerting current and future property owners of certain obligations that must be complied with after the Certificate of Title has been issued or, in some cases, on a continuing basis by the owner and subsequent owners of a property.

As a consent notice is an agreement between the Council and the landowner, it is the responsibility of the landowner and the Council to check compliance. If a consent notice is relating to building work, the consent notice requirements will be checked at the building consent stage. This is where it becomes messy. Even though a consent notice is identified on the property title, many property owners are not aware of the implications and the requirements that they have to meet when considering building. The consent notice requirements are also at times missed by the designer for the project. Once again, applying for a Project Information Memorandum (PIM) prior to submitting a building consent application will highlight the consent notice requirements and therefore let the designer include those requirements in the design. But as we all know, very few people allow the time for this process. In saying that, by getting a PIM up front, the designer can often save a huge amount of time through the building consent process.

I should point out at this stage that only some consent notices can be dealt with by Building Control during the consenting process. Those situations are when the consent notice deals with issues such as minimum floor heights, maximum build heights and drainage or potable water supply requirements. Consent notices requiring residential sprinkler systems or similar are not enforceable by the Building Act 2004, but failing to comply with the consent notice would be a breach of the Resource Management Act 1991 and will be dealt with by Council's Compliance Team.

Sometimes conditions on or around the property may change over years and the property owner or designer may feel that the consent notice is no longer applicable. In that situation consent notices may be varied or cancelled through an application process under Section 221 of the Resource Management Act 1991, however, the process would require really good evidence that the consent notice should no longer apply.

To vary/cancel a consent notice, please see Council's variation application form and the Council's fees and charges schedule for cost.

The reason for this article is to raise your awareness of the planning requirements that affect your projects. As I have already stated, some of those planning requirements do affect Building Code compliance. Over this past year I have had to get involved in a number of projects where the consent notice has been completely ignored or misunderstood. In all cases the consent notice requirements hadn't been addressed and only got highlighted when a Building Control Officer arrived on site to do an inspection. By this time there has usually been a lot of time, effort and money put in to the project. To rip the work out and start again, or go for a variation to the consent notice, is in most cases extremely expensive, time consuming and really a complete waste of time. Had enough time been taken to understand the consent notice requirements all of this could be avoided. As demand for land increases the use of land that had previously been deemed unsuitable for whatever reason is now coming online and, to ensure that land can be used appropriately, consent notices are being attached to new titles. Please be aware and save us all (including your client) a whole heap of work (money) and stress.

for
Consent
Notice

Building Control Newsletter Page 5

MARLBOROUGH DISTRICT COUNCIL

CONSENT NOTICE

Pursuant to Section 221 Resource Management Act 1991

IN THE MATTER OF

Computer Freehold Register (Marlborough Registry)

AND

IN THE MATTER

of Subdivision Consent U

Pursuant to Section 220(1) of the Resource Management Act 1991 the Marlborough District Council imposed the following conditions on the Subdivision Consent for the subdivision of those parcels of land comprised in Computer Freehold Register (Marlborough Registry).

The following conditions are to apply to Lots 1 and 2 DP

 All habitable buildings, and other buildings with structural floor elements, must be constructed and maintained in compliance with a geotechnical report provided with the building consent and prepared by a chartered professional engineer. The report must incorporate the following minimum standards:

- (a) The floor levels of all habitable buildings, or other buildings with structural floor elements, must be no lower than RL 1.60 metres (Council Rivers
- (b) The floor levels of other buildings must be no lower than RL 1.10 metres (Council Rivers Datum).
- (c) The on-site wastewater management system used to service the lot must as a minimum comply with AS/NZS 1547:2012 and the system and land application area must be no lower than RL 1.45 metres (Council Rivers Datum).
- 2. A potable water supply must, at all times, be provided to any residential unit located on this property. The quantity of the water supply must be sufficient to meet the reasonably expected need for domestic use. The quality of the water supply must comply, on a continuing basis, with the current Ministry of Health Drinking Water Standards and, if required by those standards, must be treated. As the supply will not always be potable, a water treatment system must be installed at time of constructing a residential unit to provide a potable domestic water supply in accordance with the relevant Ministry of Health Drinking Water Standards. The water supply and treatment system must be maintained.
- 3. As volunteered to resolve a submission, sufficient water supply for fire fighting purposes shall be installed in all new dwellings constructed on Lots 1 and 2 hereon in accordance with the New Zealand Fire Service Code of Practice for Fire Fighting Water Supply SNZ PAS 4509:2008 (or any subsequent amendments). This condition has been reproduced from the previous consent notice imposed under Resource Consent U
- These lots are within close proximity of the existing Blenheim Sewage Treatment
 Plant. Subsequent owners of the title should understand Marlborough District
 Council's right to operate this important facility for the needs of the local
 community.

The following condition is to apply to Lot 1 DP

Dated at Blenheim this 11th day of September



Example of Consent Notice

Consent Notice

It's Important Page 6 March 2019

News from GIB

We recently had a visit from Graeme Robertson, Senior Technical Advisor from Winstone Wall Boards. Graeme provided an update to the Building Control Officers covering changes to the on-site guide and new products coming onto the market.

Seven Things to Consider to Reduce Fastener Popping

As substrate movement is the biggest contributing factor to popping, it's important to adhere to the following guidelines. The Building Code (see also GIB Site Guide) requires the moisture content of timber framing to be 18% or less at the time of lining.

We recommend a lower moisture content (12% or less) if air conditioning, heat pumps or central heating are to be installed; as the equilibrium moisture content of the timber could be as low as 8% once the systems are fully operational.

We know this is a real challenge during wet winter months, however, remember that a 3-5% moisture change can result in a 1mm dimensional movement in timber. It is therefore essential that the moisture readings are taken accurately and that the timber treatment and temperature 'correction' factors are applied to achieve accurate readings.

1. Use metal ceilina batten

They provide a stable substrate for plasterboard ceiling linings as they are non-responsive to the effects of moisture or humidity. Regular users of metal batten systems consistently have fewer call-backs for movement related ceiling defects such as peaking or cracked joints and popped fasteners. The use of 13mm GIB Standard plasterboard with GIB Rondo metal ceiling battens have been well proven to be a cost effective ceiling lining system in residential housing.

2. Drive screws in neatly

Overdriven or skewed screws can puncture the face paper which results in no holding power. The head should be neatly seated, slightly below the surface of the sheet.

3. Ensure linings are flush with framing

Whenever the back of the plasterboard is not held tight and secure against the face of the framing substrate by the head of the fastener, a potential fastener pop exists.

4. Fasteners minimum of 200mm from adhesive

If fasteners are applied through or adjacent to a daub of adhesive, popping can occur as the adhesive dries and pulls the plasterboard closer to the framing substrate. Ensure fasteners are fixed a minimum of 200mm from a daub of adhesive.

5. Insert control joints

This is particularly important with large open plan rooms or where corridors enter a large space. As best practice, control joints should be designed and installed wherever there is a risk of structural movement (e.g. large rooms, long walls, entry to large rooms and mid-floor level in stairways).

6. Metal perimeter channel with square stopping for wall/ceiling junction

Where you intend to square stop the wall/ceiling junction, design to replace any nominal 140mm ribbon plate with a conventional 90mm ribbon/top plate so that either a GIB Rondo 340 channel, GIB Rondo NZ18 or GIBFix angle can be fitted to the perimeter. This means the perimeter screws are penetrated into the steel, not the timber. Alternatively, GIB-Cove will generally cover these at-risk fasteners.

7. Allow adequate drying time

Ensure your winter construction programme accounts for sufficient time for framing to adequately dry steadily and evenly once the building is closed in. While you can't beat natural airflow, colder months may require the use of artificial heating. LPG burners emit water as a by-product of combustion. This is detrimental to drying of a structure. Where possible use other liquid fuel burners, or electric heaters. The important consideration is that plasterboard linings should only be installed when the moisture in the timber framing is less than 18% (or lower if air conditioning, heat pumps or central heating are to be installed).

Helpful Information From GIB Building Control Newsletter Page 7

News from GIB continued...

The Causes of Fastener Popping and How to Repair It

Timber dries from the outside in. Therefore shrinkage occurs from the outside in.

1. Substrate movement

Popping can be attributed to movement in the substrate. Timber substrates are more prone to temperature or moisture induced movement and shrinkage.

2. Incorrect fasteners

Overly long fasteners are one potential contributing factor and therefore, it's important to use the correct type and length fastener for each specific lining system.

3. Framing not aligned

Improperly aligned, bent, twisted or warped framing can result in popping (e.g. nail plates or hold down ties not set flush with the framing or loose attachment of the plasterboard to the framing).

4. Incorrect installation

Improper fastening method is another factor: Overdriven or skewed screws can puncture the face paper which will result in a loose head and a weak point for movement.

Repairing

Popping that occurs after at least one month's heating cycle is likely caused by timber shrinkage. Because further shrinkage is likely to occur and popping reappears, do not repair until the end of a full heating cycle.

- A screw should be reapplied 50mm from the popped fastener.
- Drive in a new fastener whilst applying firm pressure to ensure firm contact with framing.
- Remove loose compound and paper.
- Apply two coats of taping compound followed by a topping coat, then redecorate.

Will popping reoccour?

If timber has endured a full heating cycle the chances are that the timber may have reached its equilibrium moisture content and has stabilised. Seasonal fluctuations in moisture content are unlikely to cause future fastener pops.



The GIB Site Guide contains all the information you'll need to minimise fastener popping

For more info visit <u>www.gib.co.nz</u> or call the GIB helpline on 0800 100 442

GIB

Site

Guide

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The Ground Moves

Liquefaction and Lateral Spread

Prior to the Christchurch earthquakes liquifaction was hardly ever discussed. Since then, and especially since the November 2016 Kaikoura/Hurunui earthquake events, liquefaction and lateral spread has become a real issue when considering building design for new and/or alteration work.

Council has been provided with information since the recent events that suggest that there are large portions of the Blenheim township that are built on liquefiable soils. This is especially the case east of the railway tracks and any area close to waterbodies. Proximity to waterbodies also introduces potential lateral spread. Lateral spread can also occur where there is a sudden drop off in land. Examples of lateral spread were seen in Elizabeth Street and Park Terrace as a result of the 2016 quake. It also occurred on rural land but this wasn't as obvious to the public.

Building Control Approach

Council is only just starting to receive geotechnical information and there is ongoing research being undertaken by external agencies. At this stage Council cannot send out specific information for individual properties. The Building Control Group can, however, work on best practice and formulate a process that will ensure that applications address the issue of lateral spread and liquefaction in those areas that are currently suspect.

In our process we will not be demanding a full geotechnical assessment of each site. We will, however, want to be satisfied that an appropriately qualified person has assessed the site and has considered liquefaction and, where applicable, lateral spread. That assessment may result in a full geotechnical assessment being required. Note that the old site assessment as per NZS3604 does not adequately address liquefaction and lateral spread. Many producer statements for B1 (Structure) actively identify that the statement cannot be used when associated to land susceptible to liquefaction. In this situation an amended design will be required and that design needs to refer to test results undertaken for the specific building site.

Council is working through the assessment of liquefaction and lateral spread with new subdivisions and, as a result, the final conditions for the subdivision will state the level of compliance for proposed foundations. At this stage there is no information that Council has received that would allow it to designate building requirements for existing lots so these lots need assessing at the time of considering a building project.

Asbestos

Not this again, I hear you say.

Brendon Robertson and I recently met with representatives of Worksafe to discuss Building Act implications for work that involves the presence of asbestos.

As a result of our conversation I would like to draw your attention to the Health and Safety at Work (Asbestos) Regulations 2016.

Here is a link:

http://www.legislation.govt.nz/regulation/public/2016/0015/latest/DLM6729812.html

If you are considering alterations/additions, or even demolition, to pre 2000 buildings it is vital you have a very good understanding of the Worksafe requirements, and you need to understand your responsibilities as a "Person conducting a business or undertaking" (BCPU).

Be safe out there and make sure the people around are also safe from your actions.

Warning

Email: mdc@marlborough.govt.nz www.marlborough.govt.nz