Guideline

August 2016

Welcome to this update on technical and informative advice for the building and construction industry on issues relating to building controls and good construction practices.

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Restricted building work – roofing

Licence requirements

Restricted building work is work that is critical to the integrity of a building. It must be done properly to ensure the completed building is structurally sound and weathertight. It applies to both new construction and alterations of existing buildings. Restricted building work can only be done or supervised by tradespeople who have proven they are properly skilled – licensed building practitioners (LBPs).

All installation of roof claddings is classified as restricted building work. As such, it must be carried out under the supervision of an LBP holding a specialist trade roofing licence. There are seven areas of practice for the roofing licence:

- Roofing 1: Concrete or clay tile
- Roofing 2: Profiled metal
- Roofing 3: Metal tile
- Roofing 4: Membrane
- Roofing 5: Torch-on membrane
- Roofing 6: Liquid membrane
- Roofing 7: Shingle or slate.

Licences may be held in one or more of the above categories.

The roofing licence class has four competencies that reflect the skills and knowledge required by a competent person to be licensed in this class.

Full details on the recognised qualifications to become an LBP roofing and areas of competency (the skills and knowledge you need to become licensed) are contained in this fact sheet.

Bottom plate anchors

Requirements for wall bracing elements

The specific performance or load requirements for bottom plate anchors is given in NZS 3604:2011 *Timber-framed buildings* section 7.5. The standard permits the use of cast-in bolts or proprietary

anchors. Proprietary anchors should have test data to show they meet the requirements of NZS 3604:2011 clause 7.5.12.3. for given installation situations.

It gets complicated where all or part of the wall contains a wall bracing element. The bracing element must be anchored in accordance with the supplier's instructions, as a specific fixing capacity is required to achieve the bracing rating.

For example, a bracing element that is providing 150 bracing units when attached to a concrete floor requires an uplift fixing characteristic strength of 15 kN. This is more than twice that required for an anchor where there is no bracing.

Window jamb battens – direct-fixed claddings
Installation order important

When installing aluminium windows into a direct-fixed cladding following E2/AS1, the window jamb detail incorporates jamb battens. The purpose of these battens is to allow the sill tray to be installed without the need to notch into framing as was done in the past.

There are some fishhooks when using this detail. The battens need to be installed before:
- the cladding is installed.
- the opening is measured for the window itself.

If the battens are not installed first, the risk is that the cladding will be trimmed to the trimming stud, and the window flange cover to the cladding will be unachievable once battens are installed. Also, if battens are not allowed for, the window will be too wide for the opening.

Where a mistake has occurred, possible options are to:
- revert to the traditional detail where a flashing is notched into the trimming stud or
- form a turn-up at the end of the flashing where it is formed around the trimming stud and tape the turn-up to the framing.

If the above approaches are adopted, the BCA will need to accept it as an alternative method.

Drains under slabs and G13/AS2
Key requirements

Where drains are installed under a concrete slab on ground, the key reference is G13/AS2. The Acceptable Solution specifies materials, gully trap heights, gradients, pipe diameters, jointing, access points, testing and so on.

Where a drain passes under a floor, G13/AS2 section 5.8 requires that they shall:
- be straight and of even gradient
- be separated from the building foundation by at least 25 mm
- be sleeved or wrapped in a durable and flexible material to allow for expansion and contraction when passing through concrete
- have 50 mm clearance from the top of the pipe to the underside of the slab
- have junctions beneath the building joining at an angle of not more than 45°.

A comment in the Acceptable Solution states that drains under buildings must meet the durability performance requirement of B2.3.1(a), that is, the life of the building being not less than 50 years.

In addition, section 5.9 requires provision of access to the drain for cleaning where two or more soil fixtures are connected to a branch drain beneath the building. Access for cleaning shall be

provided by a sealed floor level rodding point located downstream of the highest fixture connection to the branch drain.

Access points located within a building shall be in an area that complies with the isolation and ventilation requirements for spaces in which soil fixtures are located. They may be located in a space containing a soil fixture.

BRANZ eLearning modules
Free module offer – Introducing Bracing

BRANZ eLearning provides the building practitioner with an insight into or refresher to upskill a knowledge gap at a time and place that suits you. Each self-paced, interactive learning module takes approximately 20 minutes and includes a self-assessment component. Gain 100% in the questions at the end of the module, and you'll receive a record that can be submitted as part of your CPD activity log.

Test your bracing knowledge and use promo code GL for a free trial. Click here to get started (offer ends 2 September 2016).

BRANZ Answers *Membrane Roofing* seminar
Register now

Membrane roofing has been used in domestic and commercial buildings since the 1930s, but the membranes we use now have evolved significantly from those of previous years. The performance of a membrane roofing system is heavily dependent on getting the material specification and installation correct. There is little leeway for error at any stage of the process. The aim of this seminar is to provide up-to-date information of the design, specification and installation of current roof membrane systems.

Topics to be covered in this 3-hour presentation will include:
- key Building Code requirements – B2, E1, E2 and relevant Acceptable Solutions
- relevant standards, codes of practice and Appraisals
- impacts on membrane performance – UV, internal moisture, movement
- substrate options
- membrane options – single ply, multi-ply and liquid applied
- warm roofs – benefits, design
- green roofs
- key design and detailing requirements – finishes, substrates, accessories, gutters, upstands, slopes, outlets and scuppers
- key installation requirements for membrane systems.

This seminar will be presented by BRANZ membrane specialist and Assurance Services (Appraisals) Project Manager Russell Clarke supported by Greg Burn (NZCD (Arch) Dip Bus (Marketing) – Structures Ltd) or Trevor Pringle (B Arch (NZIA) – BRANZ Principal Writer).

This BRANZ Answers *Membrane Roofing* seminar is a must for you if you are a designer, architect, builder, roofer, building inspector or contract supervisor/manager.

All seminars run from 1.00–4.00 pm – please be signed in and seated before 1.00 pm so the session can start on time.

Date	Location	Venue
Mon 5 Sep	Nelson	Rutherford Hotel Nelson
Tue 6 Sep	Hokitika	Order of St John Hokitika
Wed 7 Sep	Christchurch	Addington Events Centre
Mon 12 Sep	Napier	Mission Estate Winery
Tue 13 Sep	Palmerston North	Convention Centre Palmerston North
Wed 14 Sep	Upper Hutt	Silverstream Retreat
Mon 19 Sep	Rotorua	Holiday Inn Rotorua
Tue 20 Sep	Tauranga	Trinity Wharf Tauranga
Wed 21 Sep	Auckland – Mt Wellington	Waipuna Hotel & Conference Centre
Mon 26 Sep	New Plymouth	The Devon Hotel
Tue 27 Sep	Hamilton	Claudelands Exhibition & Conference Centre
Wed 28 Sep	Auckland – Central	Rendezvous Hotel Auckland
Mon 3 Oct	Invercargill	Ascot Park Hotel
Tue 4 Oct	Queenstown	The Heritage Hotel Queenstown
Wed 5 Oct	Dunedin	Dunedin Centre
Mon 10 Oct	Blenheim	Scenic Hotel Marlborough
Tue 11 Oct	Timaru	Landing Service Conference Centre
Wed 12 Oct	Christchurch	Sudima Christchurch Airport
Mon 17 Oct	Whangarei	Distinction Whangarei Hotel & Conference Centre
Tue 18 Oct	Auckland – North Shore	QBE Stadium
Fr 21 Oct	Wellington	InterContinental Wellington

Online registration is available now.

Events

New Zealand Commercial Project Awards 2017

Be a part of this prestigious awards programme that sets the benchmark for commercial construction in New Zealand. Open to all project team members (constructor, architect, engineer and quantity surveyors etc.). Entries open 29 August – 30 October 2016. For more information, click here.

Constructive – NZ Construction Industry Forum 2016

Led by the Registered Master Builders Association (RMBA), Constructive is a national construction forum that will bring the industry together to discuss sector issues and create a platform for resolving those issues collaboratively.

Held in Christchurch on 21–23 September 2016, Constructive will be focusing on the lessons learned from the Christchurch earthquakes and the global financial crisis and how, nationally, the sector has had to react and adapt to survive and thrive.

The programme will consist of informative and interactive panel discussions with leaders from the industry in residential and commercial construction. They will share insights into the transformation of their businesses to meet the changing demands of the industry and, in some cases, launch into new markets.

Leaders from across the construction sector are invited to attend and participate. Delegates will

gain knowledge on how to evolve and grow their businesses while meeting a broad cross-section of like-minded folk within the industry.

For more information or to register, click here.