Guideline

June 2019

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.

In this issue: Legislative changes are afoot • Treated firewood – no, no • Maximum drained and vented cavity heights • Shiplap cladding – can it be used horizontally? • Natural slate roofing • Stucco details • Earthworks consents • BRANZ webinars

---

Legislative changes are afoot

Did you have your say?

Submissions on major changes to New Zealand's building laws closed 5pm, 16 June 2019.

Treated firewood – no, no

Resist the urge

With winter upon us, the temptation to grab a few off-cuts of treated timber for the woodburner must be resisted – no treated timber should be used for firewood. Burning treated timber can damage woodburners and flues and can release dangerous pollutants into the air.

Maximum drained and vented cavity heights

When to drain

E2/AS1 limits the height of a cavity to 7 metres or 2 storeys for ALL cladding types. At the maximum height, a horizontal flashing that bridges the cavity and drains any water that might have got into it to the outside will be required. In most cases, the logical location is at an intermediate floor level.

Shiplap cladding – can it be used horizontally?

Maybe or maybe not

NZS 3617:1979 *Specification for profiles of weatherboards, fascia boards, and flooring* gives profile dimensions (widths, rebates etc.) for horizontal weatherboard and vertical shiplap. A situation has arisen where an existing building has an existing cladding of horizontal shiplap and it is the owner's wish to match the existing on an extension.

The first step is confirming that the existing cladding has been meeting the performance requirements of clause E2 *External moisture*. Any signs of leaking would indicate not and therefore could not support the further use of horizontal shiplap as proposed.

Where there is no evidence of past or present leaking or timber damage, the use of the shiplap horizontally may be proposed as an alternative method based on satisfactory existing performance as a compliance path.

Natural slate roofing
What does a building consent application require?

Natural slate roof cladding is outside the scope of the roofing section of E2/AS1. Where slate is proposed, the consent documentation must be sufficient to demonstrate compliance, in particular, with the performance requirements of clauses B1 *Structure*, B2 *Durability* and E2 *External moisture*.

While slate is commonly used on buildings overseas and basic information such as minimum roof slopes and fixings is readily available, its use is not common in New Zealand.

Information that should be supplied to the BCA where natural slate is proposed as a roofing includes:
- its origin
- independent assessment of the material quality and durability for use under New Zealand conditions – traditional slate is a natural product with an inherent variability, and while it has proven durability overseas, are New Zealand's environmental conditions considered likely to have an impact on durability in particular?
- details of the supporting structure – natural slate is a heavy roof
- warranties
- recommended construction details such as ridges, hips, valleys and all roofing accessories
- fixings.

Stucco details
MBIE details only

BRANZ has had a number of requests for stucco details. These are the only current sources of traditional stucco cladding details:
- Section 9.3 of E2/AS1 covers stucco consisting of three coats of sand/cement plaster plus a weathertight exterior acrylic coating system on a rigid or non-rigid backing installed over a nominal 20 mm cavity.
- The reference standard is NZS 4251.1:2007 *Solid plastering – Cement plasters for walls, ceilings and soffits*.

Earthworks consents
You can't just dig where you like

There is a case currently before the Environment Court where the charge is breaching the Resource Management Act in relation to earthworks. The following questions and issues arose:
- Is digging a trench considered 'earthworks'? The defendants submitted that they were merely digging a trench. However, in this case, it was considered to be a significant cut into the side of a bank with a house immediately above it. It was not a narrow excavation in which pipes may be laid.
- Had the work carried out followed the plans and resource consent? Council argued it hadn't because the excavation was higher than originally proposed and it had encroached onto the neighbouring property.
- Cut height limits had been exceeded.
- Construction standards required in an urban area had been breached, according to the council laying the charges.

Other limitations that might apply to earthworks include:

- whether or not any earthworks are permitted in the particular locality
- maximum volume of material removed
- slopes and stability of excavated banks – excavation may expose unstable material
- support of adjacent property
- support to the sides of trenches
- maximum height (or depth) of excavation
- amount of fill that can be placed, particularly when filling areas where water may pond in flood events
- prevention of sediment run-off
- requirements for temporary support of excavated banks
- presence of drains, water supply pipes, electric cables and so on.

The WorkSafe New Zealand publication *Excavation safety* provides practical guidance to manage health and safety risks associated with excavation work.

BRANZ webinars

Passive Fire

Non-compliant passive fire protection (PFP) has been recognised as a potentially huge issue for quite some time but has been brought to the fore during weathertightness remediation work. Costs associated with bringing the PFP to full compliance can be excessive. Greater knowledge and awareness of this problem and better tools and skills to assess and determine viable solutions will improve confidence in decisions regarding PFP compliance and correction.

This webinar series will look at the options for determining PFP compliance, what kind of information you should be expected to collect or receive regarding PFP compliance and the tools to technically evaluate the implications when PFP is non-compliant for ANARP purposes. The audience will have a greater knowledge of what a standard fire resistance test means for PFP performance in real fires and what the limitations of these tests are.

Audience

Architects, builders, BCAs, designers, quantity surveyors, building surveyors, fire engineers and passive fire protection consultants.

Presenters

The webinars will be presented by one of the following:

- Kevin Frank – Fire Research Engineer, BRANZ
- Greg North – Associate Fire Engineer, Beca

Dates and topics

Fri 21 Jun	Fire and smoke stopping – designing before installing
Fri 5 Jul	BRANZ fire and smoke stopping research 1: background and fire tests
Fri 19 Jul	BRANZ fire stopping research 2: risk management
Fri 2 Aug	Construction monitoring

Each webinar starts at 12.30pm and is approximately 45–60 minutes long.

Online registration is available now.