



# Guideline

## June 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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### **Builders' invoices – a cautionary tale**

#### Be vigilant

Sending out invoices and getting paid for building work is essential to staying in business, but you have to be vigilant. News reports have surfaced recently where builders' emailed invoices have been hacked. What appears to be a legitimate invoice to the client sees your money being paid into a stranger's account. Anyone with information regarding bogus invoices should contact Christchurch Police on (03) 363 7400.

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### **More on slip resistance**

#### Minimum slip resistance value

MBIE is intending to reference the 2013 slip resistance standard AS 4586-2013 *Slip resistance classification of new pedestrian surface materials* this year. The requirement under it will be a minimum slip resistance value (SRV) of 39, which is the same as 0.40 coefficient of friction. (The SRV figure is an average of five test pieces.) An SRV of 39 is also equivalent to an R11 (ramp test) rating.

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### **Frameless structural glass balustrades**

#### New requirements

Acceptable Solution B1/AS1 now incorporates Amendment 13, which cites the glass barrier requirements in section 22 of NZS 4223.3:2016 *Glazing in buildings – Part 3: Human impact safety requirements*.

From 1 June 2016, all new structural glass (toughened or toughened laminated) framed barriers complying with B1/AS1 will need to have an interlinking top rail combined with an edge support system. Interlinking rails must be designed to resist serviceability limit state (SLS) loads specified in AS/NZS 1170 *Structural design actions* and B1/VM1 in the event that a glass pane breaks.

Also from 1 June, frameless glass barriers (no interlinking top rail) must be constructed from laminated toughened or laminated heat-strengthened safety glass with a stiff interlayer designed to retain glass and prevent collapse, if broken. The stiff interlayer must be capable of preventing collapse in the event of a breakage of both panes of glass.

Building consent applications for glass barriers that were accepted before 1 June 2016 may use the old version of B1/AS1 (Amendment 12) to show compliance with the Building Code. Building consent applications for glass barriers made on 1 June 2016 or later must comply with the new barrier requirements in Amendment 13 of B1/AS1 (i.e. section 22 of NZS 4223.3:2016). If an alternative method is proposed, the application should include appropriate documentation to show compliance with clause B1 Structure.

Only section 22 of NZS 4223.3:2016 comes into force in B1/AS1 on 1 June. The other remaining sections of NZS 4223.3:2016 are not part of B1/AS1 Amendment 13 but may be used as part of an alternative method.

Existing glass barriers are not required to be upgraded to comply with the new requirements, although retrofitting structural glass barriers to comply with NZS 4223.3:2016 may be possible.

## Roof penetrations

### Where to find details

E2/AS1 covers the installation of pipe penetrations of up to 85 mm diameter through a roof where the roof slope is between 10° and 45°. Proprietary boot flashings must be installed on the diagonal as shown in E2/AS1 Figure 53.

Details for larger penetrations and for lower-slope roofs are given in:

- the New Zealand Metal Roofing Manufacturers *Code of Practice for Metal Roof and Wall Cladding* (section 6)
- BRANZ Good Practice Guide *Profiled Metal Roofing*.

## Stair terminology

### Design requirements

D1/AS1 defines a number of different stair types based on the space they serve and therefore the amount of use they are likely to be subjected to:

- Service – a stairway that is used or intended to be used infrequently by service personnel to gain access to spaces for the purposes of maintenance and the movement of goods.
- Private – a stairway used or intended to be used by the occupants of a single household unit.
- Minor private – a private stairway not on a main thoroughfare and intended to provide infrequent access to a single room that is not a living area or kitchen.
- Secondary private – a private stairway other than a main or minor private stairway intended to provide access to another floor containing only bedrooms, bathroom or similar accommodation.
- Common – a stairway that is used or intended to be used by the public, whether as of right or not, and is not a private stairway, service stairway or accessible stairway.
- Main private – a private stairway intended to provide access to and between frequently used spaces such as living areas, kitchens and garages and includes all exterior private stairways.
- Accessible – a stairway having features for use by people with disabilities.

Each stair type has different design requirements for slope or pitch, riser height and tread width. Design limits for each stair type in D1/AS1 Figure 11:

	Maximum pitch	Maximum riser height	Minimum tread
Service, minor private	47°	220 mm	220 mm
Secondary private	41°	200 mm	250 mm
Common and main private	37°	190 mm	280 mm
Accessible	32°	180 mm	310 mm

## **BRANZ ALF 3.2 reminder**

### How to use

When using BRANZ ALF 3.2, remember to:

- log in to the program before entering any data as this ensures any data entered is saved
  - check that there are no zeros included in any data field as this will prevent the calculation being completed.
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## **Sourcing formal contract documentation**

### Range of sources

From 1 January 2015, all building work over \$30,000 (including GST) must have a formal written contract between the contractor and the client.

Organisations such as the Registered Master Builders Association, New Zealand Certified Builders and the New Zealand Institute of Architects have forms of contract available for their members.

If you are not a member of any of the above organisations, these are your options to obtain a form of contract:

- obtain NZS 3902:2004 *Housing, alterations and small buildings contract* or NZS 3916:2013 *Conditions of contract for building and civil engineering – Design and construct* from Standards New Zealand
  - have your lawyer draft up a contract
  - obtain a free BuildRight contract from [BuildSafe](#)
  - purchase a contract form from [The New Zealand Building Economist](#).
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## **BRANZ Answers 2016 seminar**

### Register now

Detailing or construction that is incorrect can have significant implications on the performance of the completed building. Many design and construction issues that arise could have been addressed if that design or construction was questioned.

The key to any question is getting the right answer. If a question has been asked, usually more than one person needs to hear the answer.

This seminar aims to cover questions that have been asked of BRANZ recently. These range from the latest updates on newly released standard NZS 4223.3:2016 *Glazing in buildings – Part 3: Human impact safety requirements* to specific technical topics:

- Location influences on material durability
- Balancing concrete cover with bending steel
- Insulating existing external walls
- Waterproofing wet areas
- Achieving clearances
- Defining the thermal envelope
- Identifying Schedule 1 exemptions
- Avoiding apron flashing moisture traps
- How good are our consent documents?
- Constructing barriers
- Basement damp-proofing
- Installing bevel-back claddings
- Role of CodeMark
- Detailing roof space ventilation

- Proving product provenance
- Using H3.1 treated timber outside.

This seminar, delivered by Greg Burn and Trevor Pringle, is a must for BCAs, architects, designers and builders. This 3-hour CPD/LBP points event will be delivered at 21 locations around the country between 7 June and 20 July.

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.

### ***Dates and locations***

<b>Date</b>	<b>Location</b>	<b>Venue</b>
Mon 27 June	Timaru	Landing Service Conference Centre
Tue 28 June	Christchurch	Addington Events Centre
Wed 29 June	Blenheim	Scenic Hotel Marlborough
Mon 4 July	Whangarei	Forum North
Tue 5 July	Auckland – Mount Wellington	Waipuna Hotel & Conference Centre
Wed 6 July	Wellington	InterContinental Wellington
Mon 11 July	Auckland – North Shore	QBE Stadium
Tue 12 July	Hamilton	FMG Stadium Waikato
Wed 13 July	New Plymouth	The Devon Hotel
Mon 18 July	Tauranga	Trinity Wharf Tauranga
Tue 19 July	Rotorua	Holiday Inn Rotorua
Wed 20 July	Auckland – Central	Crowne Plaza Auckland

[Online registration](#) is available now.

### **BRANZ Maintenance Schedule**

Free to use

BRANZ Maintenance Schedule is now available as a free web-based tool that allows you to simply select the materials and finishes used in a building via dropdown boxes.

With its enhanced features, the tool creates a professional maintenance schedule for a new or renovated home, which can be supplied to clients or local authorities.

To access, go to [www.maintenanceschedules.co.nz](http://www.maintenanceschedules.co.nz), where you can:

- record in one handy place all materials used in a building
- create a comprehensive maintenance guide to give your clients.

### **Constructive – NZ Construction Industry Forum 2016**

21–23 September

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](#).

