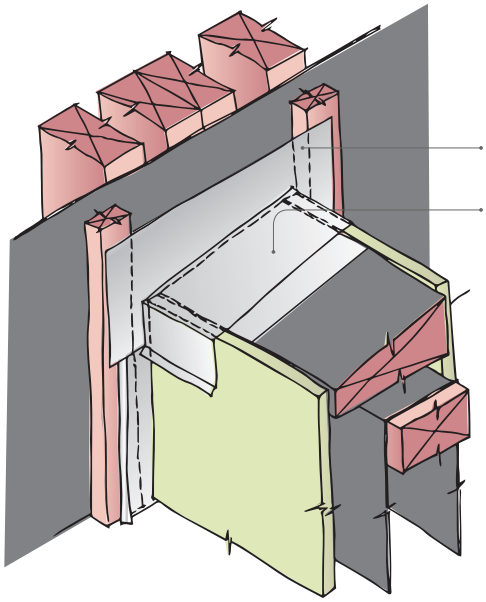
FREE TO ALL BUILDERS | ISSUE 83 | APRIL 2017

BRANZ

builder's mate



Note: Capping with matching cross-fall to be fitted over saddle flashing.

Figure 1. Minimum 5° cross-fall to balustrade saddle flashing (E2/AS1).

DRAINED IN A FLASH!

Flashings provide vital weathertight protection at junctions in (and between) walls and roofs and walls and windows. Cross-falls are required to make sure rainwater drains properly from the flashing surface.

The folds (and therefore cross-falls) in metal flashings are typically made to order for a specific job. They can be made off site by the manufacturer or on site by the installer or plumber.

Minimum cross-falls specified in E2/AS1 for flashings common in house building include:

- 5° for a saddle flashing on a balustrade or parapet
- 10° for sill flashings to stucco and horizontal profiled metal cladding
- 15° for a window head flashing
- 15° for inter-storey flashings.

Raking apron flashing

The E2/AS1 drawing of a raking apron flashing at roof/wall junctions (Figure 8B in the Acceptable Solution) shows a slope but doesn't give an angle. BRANZ recommends 10° minimum >

INDUSTRY NEWS

Guidance on supervision

The Building Practitioners Board heard a complaint about the supervision carried out by a licensed building practitioner. (Supervision involves overseeing work to make sure it is done competently and complies with a building consent.)

The Board's decision gives useful guidance:

- The more complex and risky the job, the more supervision required.
- What's required depends on a worker's level of care. A thoughtful worker with an eye for detail requires less supervision than a slapdash worker who doesn't read plans.
- Someone who has done a job expertly many times needs less supervision than someone new.
- The supervisor should normally be on site – proper supervision can't be done from a distance through phone calls etc.

Retention money

Subcontractors are better protected now if a building firm they work for goes bust. New rules from the end of March aim to ensure payment of retention money to subbies, even in the event of company insolvency. You can find more at: www.building.govt.nz/projects-and-consents/why-contracts-are-valuable/construction-contracts-act-2002

HAMMER 'N' NAILS

> Continued from previous page

(Figure 4). Not having a cross-fall here can lead to rainwater running down the flashing and being trapped by the metal stop-end. Any dirt at the stop-end could retain the moisture, leading to corrosion.

In some cases, manufacturers may set greater minimum cross-falls than appear in E2/AS1 or may require cross-falls not specified in E2/AS1. For example, the NZ Metal Roof and Wall Cladding Code of Practice states (page 161) that parapet cappings (other than those that follow the roof slope) must have a slope of 10° – greater than the 5° minimum required in E2/AS1.

For the sill flashing to the top of direct-fixed vertical profiled metal terminating below a window, E2/AS1 once again shows a slope (Figure 95 in the Acceptable Solution) but doesn't give an angle. However, the NZ Metal Roof and Wall Cladding Code of Practice states (page 216) "All exposed horizontal metal flashings including the head or sill flashings must have a minimum 10° pitch to avoid ponding and the build up of dirt and debris."

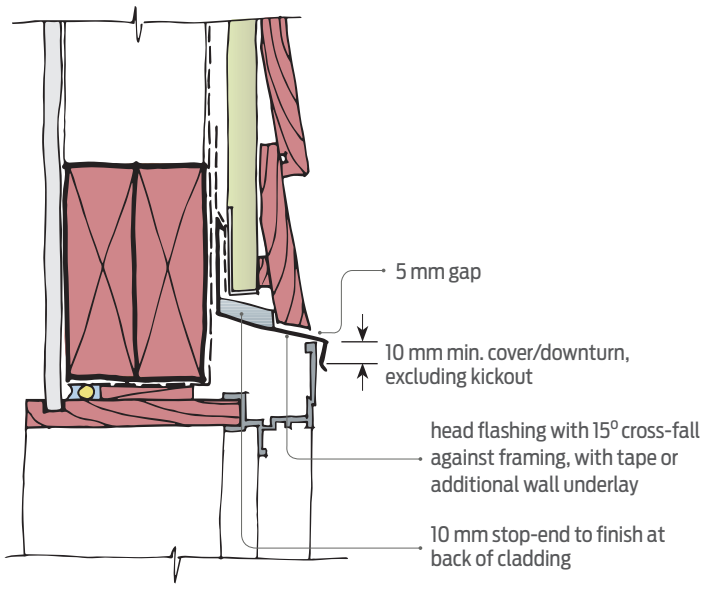


Figure 2. Minimum 15° cross-fall for head flashing to a window.

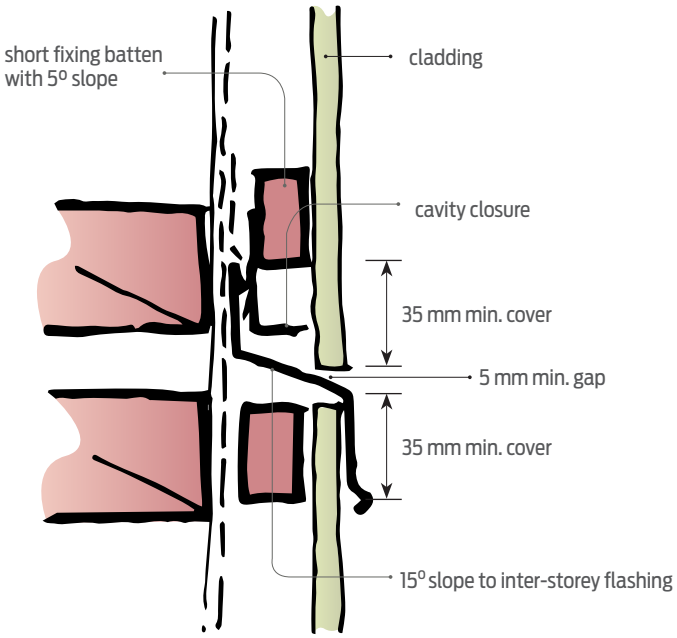


Figure 3. Minimum 15° cross-fall for inter-storey flashings.

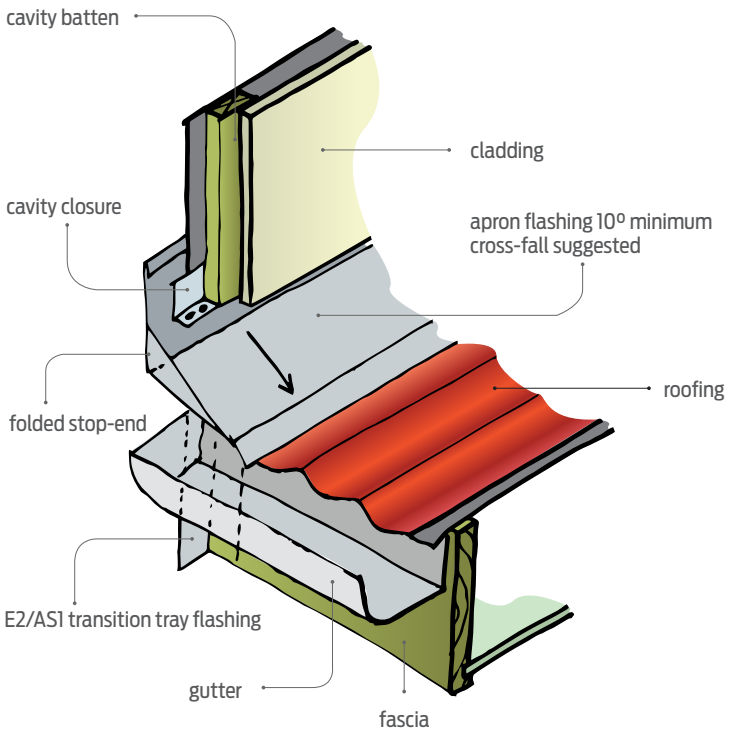


Figure 4. Raking apron flashing: BRANZ recommends a 10° minimum cross-fall and the stop-end folded to direct water into the gutter.

A builder's dozen

Here are 12 key rules that everyone on site should follow:

1. If the job requires a building consent, don't start work until the consent has been granted.
2. Stick to the materials specified in the plans and consent documents. If you need to make a change, talk with the designer/client to get their approval and get a variation or amendment of consent.
3. Don't carry out work beyond your area of licence, skill, expertise and insurance cover.
4. Make sure that any restricted building work on the job is carried out or supervised by a licensed building practitioner.
5. "Do it once, do it well" – in other words, do a quality job that avoids the need for rework. Rework is all money out the door – you don't get paid for it.
6. Keep your skills and knowledge up to date. (BRANZ seminars, publications and websites like www.level.org.nz can help here.)
7. Make sure you have the right personal protective equipment for the job – eye protection, masks, ear muffs and so on – and use it.
8. Respect those you are working with – take care not to damage the work of trades who came before you on site.
9. Reduce waste and recycle – the average house build produces 4 tonnes of waste.
10. Keep good records. Photograph the work you're doing, especially work that will later be closed in.
11. Communicate (a) – During the build, if there is a problem or the work is behind schedule, make sure anyone who needs to know knows – including the client.
12. Communicate (b) – After the build, give the client key ventilation and maintenance requirements for the house. Better yet, give them a maintenance schedule.

Mouthpiece

Getting the fire-rated construction right in a building can literally be a matter of life or death. Occupants rely on this construction to contain a fire to certain areas in a building, preventing it spreading to other parts and other buildings. They rely on it to protect fire escape routes so they can get out of a burning building alive.

Some construction elements in a building are required by law to be fire-rated. This can include walls, floor/ceiling assemblies, doors, ducts and so on. The plans and specifications for the building will identify which parts are to be fire-rated. They may be different for each building, depending on the design.

These things are important when building or installing fire-rated elements in a building:

- Use the fire system specified in the contract documents.
- Take care to install the system exactly as described in the manufacturer's technical literature. This includes correct material selections, thickness, fixing types and spacing etc.
- Find out if an element is fire-rated before cutting openings or making changes to it.
- Ensure that any work that requires running pipes or cables or installing other services through a fire separation is done using an approved method. If they aren't made properly, holes cut through a fire separation to run services can significantly reduce the fire rating.
- Seek help if you are uncertain about what system is required and how to install it.

The effective performance of fire-rated construction depends on getting the details right. If not done correctly, occupants' lives may be at risk if there is a fire.

Colleen Wade
Principal Fire Scientist
BRANZ

Competition

Here's a tool

What is it?

WIN!

A Milwaukee jigsaw worth $429

This powerful 710 W jigsaw has pendulum action with four adjustment levels for faster cutting. Precision blade guidance. Keyless blade change. Variable speed.

The prize is provided courtesy of The ToolShed.

All you need to do to win is tell us the name of the mystery tool (above).

Email your answer to **buildersmate@branz.co.nz**. Put "April Competition" in the subject line. The message should include your answer, your name, postal address and phone number. One entry per entrant please.

Don't forget to tell us where you picked up your copy of ***Builder's Mate***! The winner will be the first correct entry drawn at 9 am on Friday 12 May 2017. Details will be posted on the BRANZ Ltd website (www.branz.nz) and in the next edition of ***Builder's Mate*** due out on 1 June 2017.

Winner of the December competition, Cameron Diack, receives his prize from Duane Coker, the manager of The ToolShed Tauranga branch.

Winner of the ***Builder's Mate* 82** competition was Brian Fisher of Mt Wellington, Auckland. Brian wins an Arges rotary hammer drill worth $269. The mystery tool was a soft face hammer.

Terms and conditions:

Entry is open to all New Zealand residents except employees and immediate families of BRANZ and The ToolShed shops. The competition will close at 9 am on Friday 12 May 2017. The prize is not transferable for cash. The judge's decision is final. No correspondence will be entered into.

+ BUILDERS' APPS

In this series, we introduce some great apps and tools for your smartphone. The apps can be found in the iPhone store and/or the Android store. If you know any you'd like to recommend, email us the details at buildersmate@branz.co.nz.

CALENDAR

A calendar app such as Fantastical 2 or Google Calendar helps you with your scheduling on a day, week or month view. The best apps can be customised to meet your needs and let you set up reminders.

MAPS

It may be obvious, but finding your way to a new address is much easier with a map app. Ones with GPS support can be accessed when there's no internet coverage. Google Maps is free and well reviewed.