

CLADDING JUNCTIONS WITH A DIFFERENCE

Current designs for both domestic and commercial buildings often have more than one cladding system. These can be tricky, so what is the best way to detail these junctions?

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Junction details designed for buildings with more than one cladding system need to meet several requirements, including being:

- aesthetic – the transition needs to look good
- weathertight – the completed junction must keep water out
- durable – the cladding and junction materials must be compatible.

A good junction is always going to be much easier to achieve in new construction (see Figure 1). There are a range of published details, such as those in BRANZ Weathertight Solutions, that give options describing vertical, corner and horizontal junctions for a range of different cladding types.

For many cladding types, it is much more difficult to join a new cladding to an existing one, even where the same cladding material is used on the building extension.

Some claddings easy to join

With some claddings, it is relatively easy to merge the new into the old where the wall is extended.

TIMBER WEATHERBOARDS

Running joints in timber weatherboards are relatively easy to merge. Options (from easiest and safest) are to:

- install a cover board over the joint (see Figure 2)
- install soakers for bevel-back boards
- use a scarfed joint, provided the end of the original board is accessible to allow the 45° cut to be made.

When joining, always check the size of the profile as there may be a difference in width and thickness. Small variations in thickness can be masked when a soaker or cover board is used, and for bevel-back boards, the lap can be

increased where new boards are slightly wider. Where there is a significant difference in size, options are to use a cover board and accept the difference, have a matching run manufactured or replace the existing.

FIBRE-CEMENT WEATHERBOARDS

Options for running joints in fibre-cement weatherboards (from easiest and safest) are:

- to install a cover board over the joint
- to install soakers
- for fibre-cement bevel-back boards that match timber profiles, it may be possible to use a scarfed joint, provided the end of the original board is accessible to allow the 45° cut to be made
- for traditional fibre-cement planks, proprietary off-stud jointers.

PLASTIC WEATHERBOARDS

Match plastic weatherboards using a soaker designed for use with the specific system – some systems allow off-stud jointing.

OTHER MATERIALS

Other materials where it is relatively easy to merge the new into the old include:

- aluminium weatherboards – use a system-specific jointer
- profiled sheet steel (both vertical and horizontal

installation) – the existing cladding is usually able to be unfixed to allow the installation of flashings to joints (considered preferable for vertical joints in horizontal installations) or material may be side or end lapped

- vertical board and batten or sheet cladding with battened joints – the module is simply continued from the existing
- sheet claddings installed with expressed vertical joints or jointers and flashed horizontal joints – match the joint details where the new abuts the existing (provided a sound edge can be exposed) and lap the flashing
- timber shingles
- single-skin concrete masonry – use a movement control joint detail at the cladding junction
- vertical shiplap.

Other claddings more difficult

Claddings that are difficult to merge into and maintain the continuity of the cladding include:

- stucco
- EIFS
- texture-coated fibre-cement.

The reasons for this include the difficulty and risks associated with: →



Figure 1: Detailing junctions between different claddings is much easier for new construction than for extensions.



Figure 2: A cover board is the easy way to join weatherboards.

- exposing the existing reinforcing to the plaster or joint without damaging it to allow the new plaster to be merged in and continuous
 - the condition of the existing metal reinforcing in old stucco (see Figure 3)
 - matching the texture
 - the damage likely to be caused when cutting the existing textured finish and the potential for damage to the materials behind
 - the difficulty (impossibility) in inserting new flashings behind the existing cladding
 - shrinkage of new cement plaster from the old.
- Where a joint is to be made in a wall being extended, it is better to remove the existing cladding back to a defined point, such as an external or internal corner, or to a part of the wall where the joint can be masked, such as at a door where a facing can hide most of the joint.

Where this is not practical, it may be possible to make a defined vertical joint by cutting the

existing cladding as is done with a movement control joint. However, there are also some drawbacks with this such as:

- being able to prepare the edge of the existing cladding to enable the joint to be sealed
- reliance on sealant getting in as a back flashing (almost impossible)
- the integration of the new cavity with the existing cladding – pre-2005 construction is unlikely to have a cavity. *Build 122* (February/March 2011, pages 15–16) gives a number of options for integrating a cavity into existing construction.

Interlocking zinc, titanium or copper cladding systems (see Figure 4) will also be difficult to extend.

Masonry veneer

Where a masonry veneer wall cladding is being extended, the easiest option is to create a

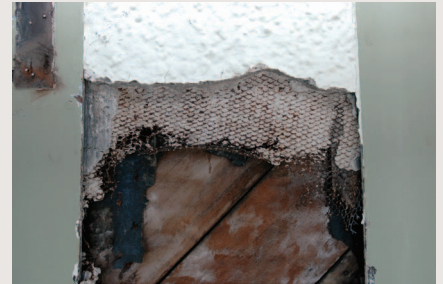


Figure 3: This stucco reinforcing (and paper slip layer) was too corroded to allow new stucco to be applied so all existing stucco was removed.

movement control joint between the existing and the new (see Figure 5).

A second more difficult option involving a lot more work is to remove some of the existing bricks to allow the new bricks to be seamlessly integrated into the bond pattern. The integration will be more seamless where an exact colour match is possible. ◀



Figure 4: Interlocked cladding systems will be more difficult to merge at a junction.

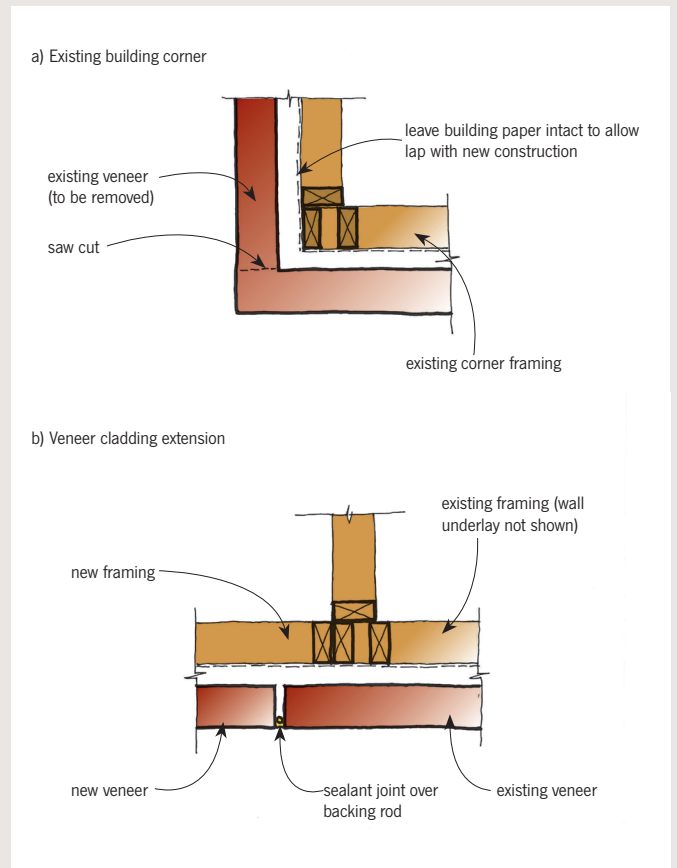


Figure 5: Masonry veneer extension detail.