

D is for drainage and drying

Continuing our alphabetical guide to the science of building, D is for two crucial functions, drainage and drying.

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WHEN THERE IS LOTS of water, it impacts on our buildings. Add wind into the equation driving rain at walls and roofs, and some water is likely to get past the wall or roof cladding during the life of the building.

Gravity friend and foe

While gravity is the most common mechanism behind leaks, it is also our biggest ally (see Figures 1-3). It ensures most water is drained via:

- the face of a wall cladding
- a roof slope
- roof gutters installed to a fall.

Gravity drainage is also the way water gets out of wall cavities behind claddings as it assists water to get to the next gap or base of the wall where it can drain.

The right gaps allow drying

Another D - drying - will remove that portion of water that has been absorbed by a cavity batten or the cladding itself.

Gaps at the base of the cladding and also gaps above flashings allow air to circulate within the drainage cavity. It is this air that dries any remaining moisture. ◀

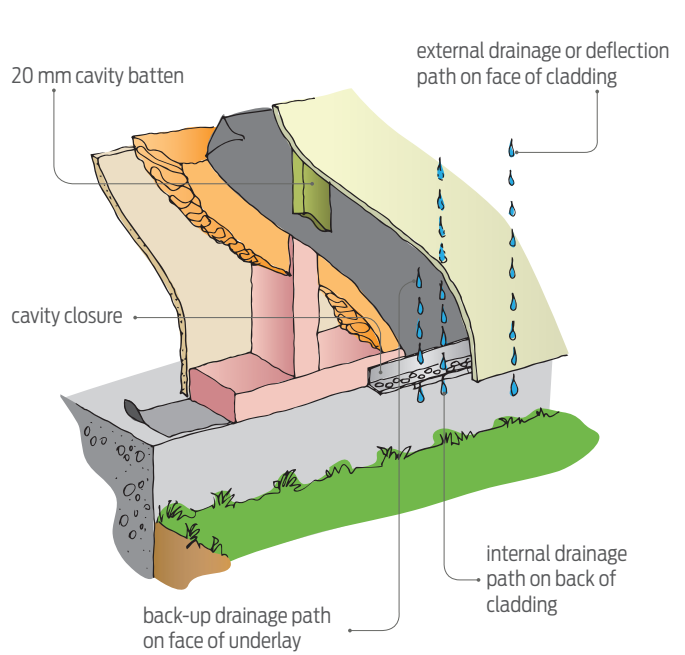


Figure 1: Drained and vented cavity showing three drainage paths.

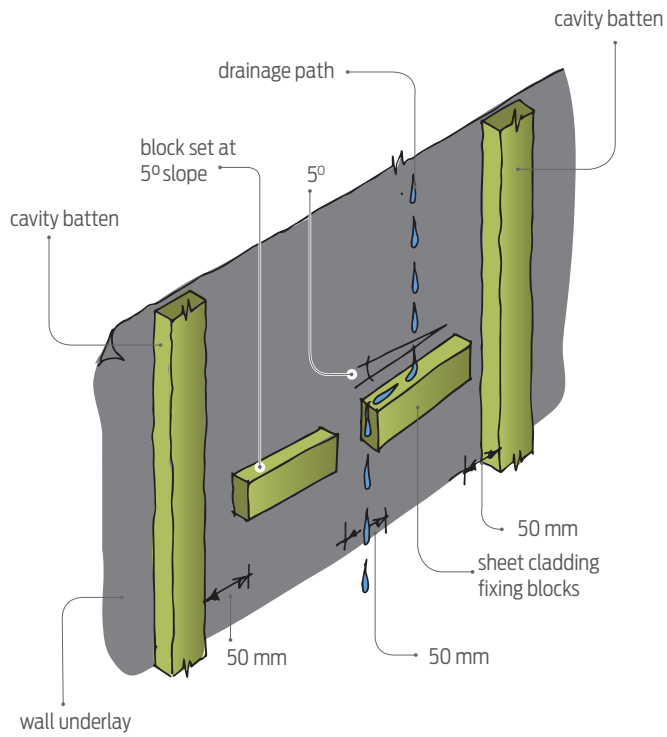
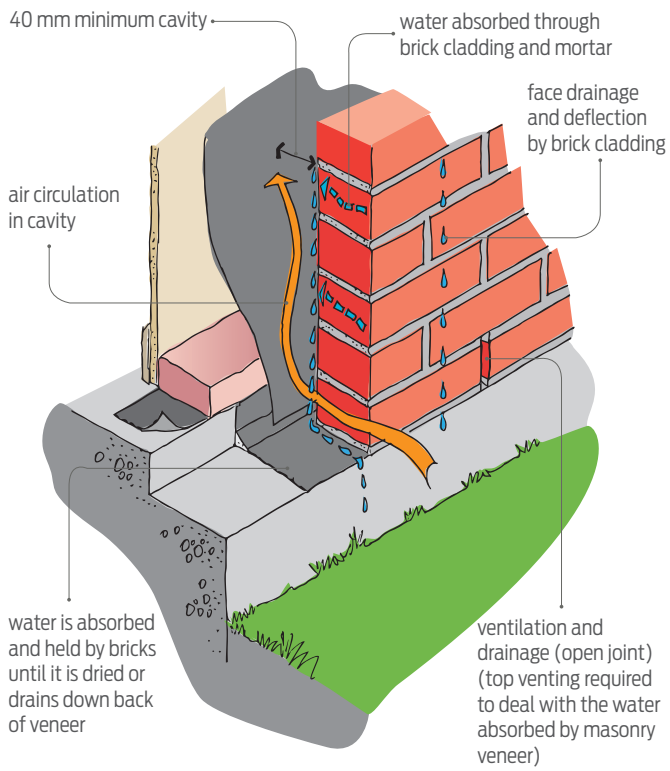


Figure 2: Cavity fixing blocks need to be positioned correctly to allow drainage and venting.



Note: Insulation and veneer ties not shown for clarity.

Figure 3: Masonry veneer wet cavity system.