

# CASE STUDY

## UNDER HOUSE SEEPAGE FLOODING

**Location:** Paddington, Brisbane

### The Problem

This house sits on the side of a steep hill in Brisbane where water not only runs down the surface but also pours out of the rock strata wherever it is cut into. The owner planned extensive additions to the existing house by building extra rooms underneath it. He was acutely aware of the tens of thousands of dollars his neighbours had spent trying to cope with the constant flow of water, and sought out a more effective and less expensive option.



Note the fractured rock strata through groundwater runs freely.



Capiphon was laid flat on a thin layer of coarse sand (nominal 2% slope) on the upper concrete slab, then down the cut rock face and inserted into 50mm DWV pipe laid behind the block wall (about to be erected near the ladder). The DWV pipe joined the external stormwater pipes coming from the roof.

Capiphon was also laid flat under the lower concrete slab, again on a 2% slope on coarse sand, before being inserted in 90mm stormwater. This time the DWV pipe was laid into a trench which was to carry the sewerage and other services.



The slab ready for pouring. Note that the Capiphon has been covered with more coarse sand and plastic sheeting before the reinforcing has been laid.

Discharge from the pipe under the slab, some 3-4 days after the slab had been poured. Note that there had been significant rain before the slab was laid but none since. Click on the image for video.

The satisfied owner calls every now and again after one of Brisbane's notorious downpours.



The slab immediately after pouring. Note the discharge pipe (arrow) exiting from under the slab.

