

CASE STUDY

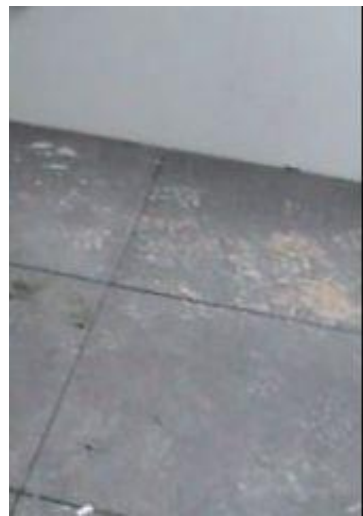
Overcoming Gravity

Location: Swan Street, Richmond, Victoria

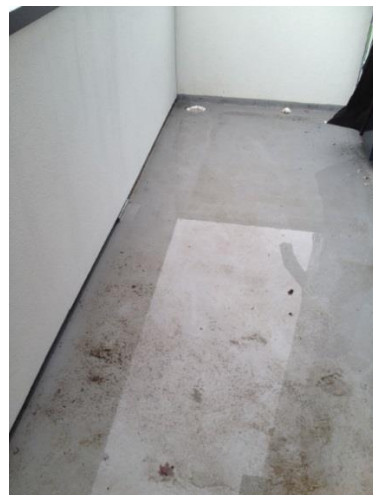
The Problem

The balconies of a new apartment block remained flooded after rain. It was apparent that the outlet drain sat above the floor of the balcony. This may not have been considered to be a major problem because a tile floor was to be suspended on adjustable pads, concealing the water on most balconies. However, on some, the water level was so deep that a residue of silt remained on the tiles after the rain event.

In any case, the project manager was unhappy about having water pooling there under the tiles for a significant period of time.



Above: The suspended tiles on the apartment balcony. Below: Silt on the tiles, and water pooled under the tiles.



The Solution

The obvious solution would have been to build up the surface of the balcony but this would have been expensive and, worse, would have raised the tiles to the point that the balcony railing would have been less than the legal minimum height. The Project Manager searched for solutions online, and found Capiphon Drainage.



Although Capiphon is usually installed under the surface and the capillary action works best when in contact with the soil, there appeared to be no reason why the belt would not remove water by syphoning.

It has been established that Capiphon belt will start syphoning when subject to a 10mm head, so an connector was devised to create a head to start water flowing in the belt, and to take the belt into the balcony drain to create a syphony head.



The connector is made from PVC pipe with a slot cut into it to take 5cm wide Capiphon belt. The connector was sealed into the drain pipe and the belt inserted into the slot and sealed above and at the sides with silicone sealant.



[Click here to see the Capiphon belt syphoning water from the flooded balcony.](#)

