

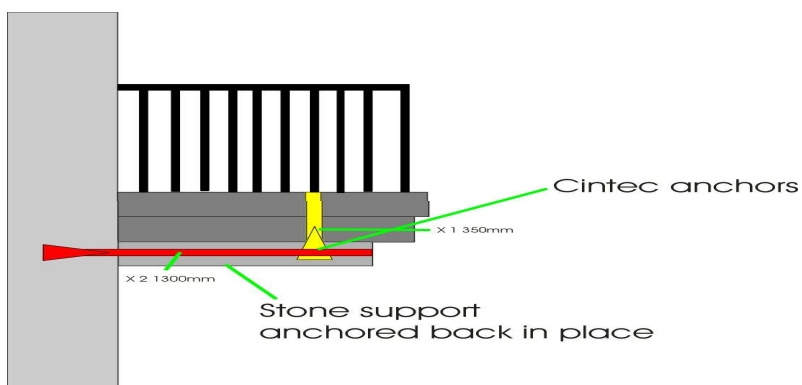
Sydenham School Balcony Repairs Somerset UK

Two balconies at Sydenham School required structural repairs. One of the main balcony supports (shown in the picture below) had failed and had fallen to the ground below.



There were three other balcony supports still in place, but the structural condition of these were questionable. The second balcony was missing an essential support that was vital to its structural strength. The School and the Local Education Authority (LEA) were obviously concerned.

A solution was devised Cintec anchors secured in "under-cut" holes. It was calculated that this combination system would achieve the "pull-out" loads required to safely secure the balcony whilst overcoming the problem of inadequate material surface area to anchor to.



The diagram above shows a 1300mm Cintec anchor installed in a 50 mm hole profiled out to 65 mm over the bottom 250 mm, together with a 350 mm Cintec anchor installed in a 50 mm hole profiled to 65 mm over the last 200 mm.

Drill Review

The balcony supports were made from hard stone, which made hand drilling the parallel hole hard work, but the under-cutting in this stone was achieved with little effort. After drilling all 12 holes into the hard stone, the diamond on the Profile Drill showed little wear. The extra time required to achieve the profile was approximately 2 minutes per hole. The under-cut drill bit utilises specially design and manufactured diamond segments.