Non Destructive Testing Report

REPORT NUMBER 131212/1

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1. Introduction

United Scanning Services were instructed to undertake NDT on the underside of the a First Floor beam and produce a report on the findings, in order to ascertain what the condition is of the repair work carried out.

2. Findings

As can be seen in each of the images, and especially image 5, there is a very clear definition around the bars indicating a strong and uninterrupted adhesive to the bars this indicates good preparation of the bars before patching.

The images from the radar show a very small pocket of concrete of a different density (the HP 70 used to patch) this is the only blemish in the otherwise well placed concrete.

Nowhere was there found any delamination, or deboning between the bars and concrete interface.

Nowhere was there found signs of air bubbles.

The concrete and concrete interface between the originally poured concrete and the patching mixture is very small and is almost undetectable. This is consistent with a method that includes good preparation of the concrete before applying of the patching mixture.

In conclusion, there is no honey combing, air bubbles, delamination or debonding to speak of and this points to a very well patched area in our opinion.
Before patching

Image 1

Inadequate vibration causing porous concrete.
After patching

Image 2
Image 5
As can be seen in the areas circled, these are the pockets that have been patched, shown here as a different density than the originally placed concrete. It shows very good adhesion to the original concrete.
Image 12