



STANGERS

## Building Condition Survey

Used to verify the existing condition of buildings and structures, condition surveys require an initial visual inspection to be carried out, before a final structural survey is conducted, which may require some of the testing techniques below:

- Visual inspection
- Crack Mapping
- Hammer Tapping
- Infrared Thermography
- Microwave Moisture Testing
- Radar Survey for voids/rebar details
- Reinforcement Cover Survey
- Ultrasonic Pulse Velocity Measurements
- Corrosion Surveys;
- Pull-off Testing on concrete repairs
- Tile Testing
- Concrete Carbonation Depth
- Water Seepage Investigation
- Chemical Analysis
- Core Drilling and Concrete Testing
- Crack Monitoring
- Other specialist testing

We can provide a follow-up service to repaired structures, which verifies that the repairs have been carried out adequately. These include:

- infrared thermography on external walls to confirm tile/render bonding and watertightness of waterproofing membranes;
- pull-off tests on repair mortar and tile repairs;
- radar surveys to confirm if repairs of concrete voids have been carried out properly;
- hammer tapping to verify bonding of repaired tiles/render and substrate.





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## Condition Survey Process

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Careful selection of the most appropriate testing techniques is a key factor in achieving optimum results. As well as the diagnostic tests listed here, we have a wide range of laboratory facilities staffed by experienced technicians, engineers and professions to ensure that we are able to fully back up our services. These include:

- pre-survey inspection
- desk study to access factors involved;
- visual inspection including defect and crack mapping;
- selection of the most appropriate test methods and confirmation of frequency test;
- analyze results and prepare draft report, then carry out any follow-up checking;
- report reviewed by appropriate professional;
- meet with client to review findings;
- if crack monitoring is required, installation of electronic or mechanical system.

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## Construction & Material Testing

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As well as structural inspections and building services, we can also provide a comprehensive range of services for virtually all construction materials testing. These include, but are not limited to:

- laboratory and site testing of concrete;
- field and laboratory testing of soils, including triaxial consolidation and shear box test;
- welding inspection of structures using UT, MT, VT and RT tests, welder qualification and preparation of welding procedures;
- non-destructive testing of piles using PDA, PIT and sonic techniques.