



**STANGERS**

## Building Condition Survey

### Condition Surveys

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



### Testing of Repairs

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 waterlightness 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



**STANGERS**

### **Condition Surveys Process**

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 backup our services.

- 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 electronic or mechanical system



### **Construction and Material Testing**

As well as structural inspection 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, the following:

- 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



### **STANGER ASIA LIMITED**

705-706, 7/F., Fuk Shing Commercial Building,  
28 On Lok Mun Street, On Lok Tsuen, Fanling, New Territories, Hong Kong.

Tel: (852) 2682 1203

Fax: (852) 2682 0046

Email : [stanger@stanger.com.hk](mailto:stanger@stanger.com.hk)

Website : [www.stanger.com.hk](http://www.stanger.com.hk)