

MONITORING SURVEYS

Monitoring is considered to be one of the most diverse survey disciplines, however when we at Murphy Surveys combine our years of experience and knowledge in addition to our requirement for state of the art equipment it's just another day at the office.

Monitoring Surveys are designed to isolate, or quantify expected or potential displacements. After determining whether or not movement is taking place and subsequently whether the structure is stable and safe it can be further analysed to see ascertain the cause and determine future movement.

It is during construction such as temporary works, post construction works or in the aftermath of landslides or other such natural occurrences that the survey is most commonly used. Monitoring Surveys can act as an early warning system or can provide data comparing actual displacement to predicted levels.

Deformation monitoring is the systematic measurement and tracking of the alteration in the shape or dimensions of an object as a result of the application of stress to it. Deformation monitoring is a major component of logging measured values that may be used for further computation, deformation analysis, predictive maintenance and alarming.

Deformation monitoring is primarily related to the field of applied surveying, but may be also related to the civil engineering, mechanical engineering, plant construction, and soil and rock stability mechanics.

The causes for deformation monitoring are changes in the bedrock, increase or decrease of weight, changes of the material properties or outside influences.

Deformation monitoring systems provide a proactive control of a hazard related to possible change or failure of a structure.

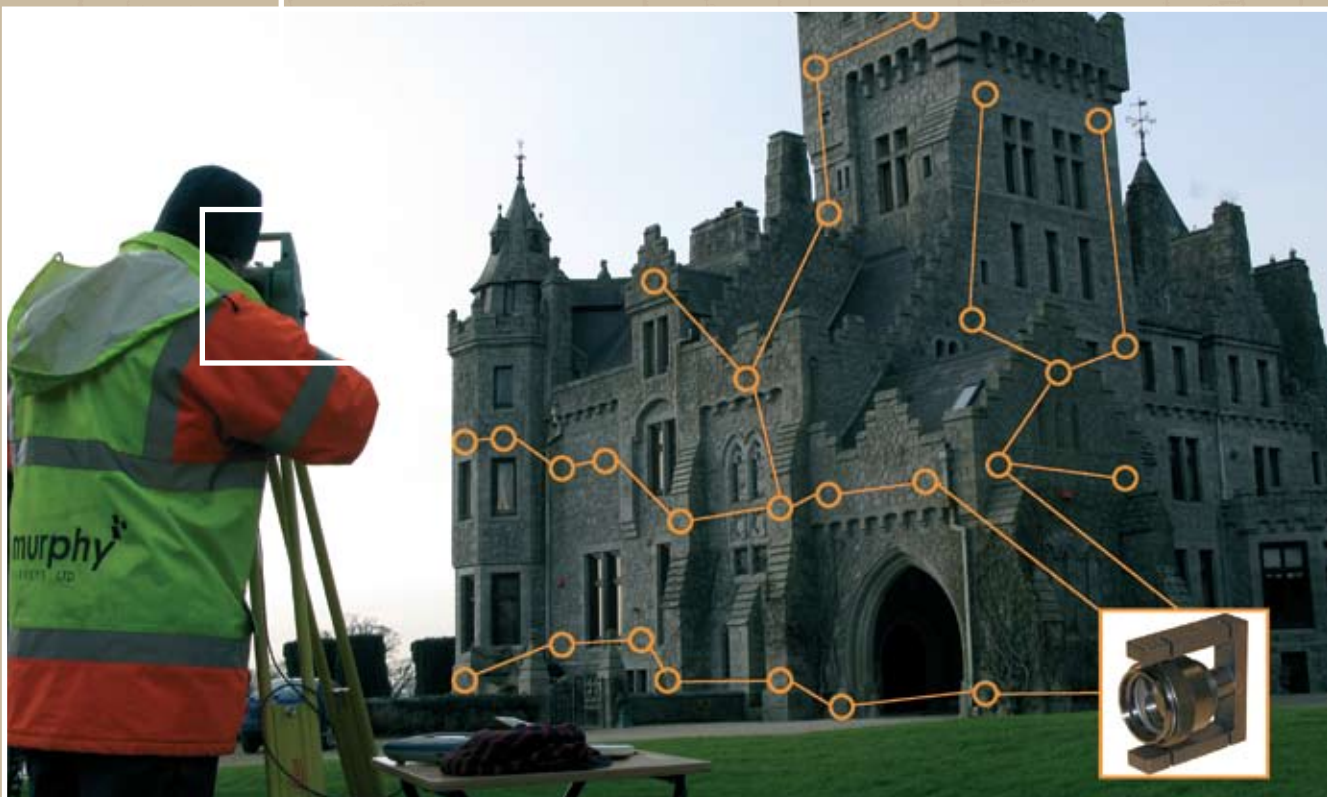
Policyholders can reduce risk exposure before and during construction and throughout the lifecycle of the structure and hence decrease the insurance premium.

Murphy Surveys precise equipment measures geo-referenced displacements or movements in one, two or three dimensions. It includes the use of instruments such as total stations, levels and global navigation satellite system receivers. Our surveyors have extensive experience in dams, roads and bridges monitoring.

As with all of our services, Murphy Surveys will work to the specification of client when completing the Monitoring Survey. We will offer advice and consultation where it is felt to be of benefit.

COMMON USES OF MONITORING SURVEYS:

- Landfill Settlement Assessment
- Post Construction
- During Demolition Works
- During Temporary Works
- Monitoring of Tunnelling Works
- After naturally caused land movements



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