

The logo for INSi, consisting of the letters 'INSi' in a white, bold, sans-serif font inside a dark blue square.

Specialized Inspection Services

GEO-Instruments' INSi solution helps construction contractors manage risk more effectively. GEO-Instruments offers turnkey inspection services that ensure the peace of mind of its clients by producing a complete portrait of the structures around a site.



Why the INSi solution?

The INSi solution exemplifies the GEO-Instruments' team know-how and uses state-of-the-art technologies to produce complete, efficient and cost-effective inspections.

Pre- and post-construction surveys

Construction activities may impact nearby buildings or structures. Pre-construction surveys are used to identify and detect anomalies. This allows special attention to be paid to buildings in poor condition or vibration thresholds to be adjusted accordingly.

Why do a pre- and post-project inspection?

Preventive and subsequent surveys are used to visually assess the condition of adjacent properties before and after construction. They provide valuable documentation, which can serve either to offer the contractor and developer some protection from unjustified damage claims or to help assess actual damage caused by the construction work in order to adequately compensate the property owner.

How it works

After having carried out a technical evaluation of the mandate, GEO-Instruments will recommend the appropriate combination of the following services:

- **Visual inspection** The visual inspection is generally an essential component of any report, as it helps contractors make informed decisions on where to focus their efforts during the next steps.
- **Use of high-performance cameras** High-performance cameras record high-resolution images, which can reveal details that are difficult to see with the naked eye. We archive the images on our servers to keep the data needed to reproduce the evaluation in the report.
- **Production of videos** A video often provides excellent value for money, as it can cover large areas and include additional audio comments.
- **Use of drones** Drone-based aerial inspections provide entirely new opportunities for external inspections of large structures, facades and linear constructions. They allow you to reduce your costs while ensuring a quality inspection is performed.

❑ Demolition and/or reconstruction of buildings or infrastructure in urban areas

Major urban construction projects, such as the reconstruction of interchanges or bridges, can have significant impacts on nearby buildings as they generate ground vibrations or induce differential settlements.

❑ Blasting, pile driving, vibratory sheet pile driving or any other work that generates vibrations

Any operation that generates a significant amount of vibration can pose a risk to nearby structures. In addition to being an important part of a risk management protocol, accurate knowledge of the condition of nearby structures helps operators and builders adjust the power of their operations to actual damage thresholds rather than simply basing it on a safety factor.

❑ Subsurface work

The rationale and planning of subsurface work requires a complete and thorough inspection of the structure to be corrected.

❑ Deep excavation and tunnel work

Underground work is liable to create differential settlements that can affect buildings. Pre- and post-work inspections limit the potential for litigation.

Options

❑ Choice of inspection type

Several options are available with respect to the content and scope of the inspection. Inspections can be customized to all types of mandates. The basic options are as follows:

- A photo inspection with a deficiency report for any building or structure included in the area likely to be affected by the work.
- A video inspection of the site before the work is carried out.
- A combined photo and video inspection with a deficiency report.
- A video and/or aerial photography inspection with a report of structures or areas that are difficult to access.



Technical information

Generally, the report includes an overview photo and several detailed photos of each item with the identification and location of the elements to be monitored. Each inspection can be customized according to the nature of the project. A qualified representative will be glad to help you make the right choice.

Contact us to discuss the options available to you at 1 450 441-5444 or by email info@geo-instruments.com.