

Church of St. Antoni Padewski

Poznań

Renovation of a religious complex consisting of a church, Franciscan monastery and vicarage building. The progressing failure condition of the structural elements caused by the adaptation of the building's foundation to the varied susceptibility of the subsoil imposed the commencement of the modernization works and works connected with the strengthening of the church foundation.



The project

Control of internal pillar displacements for the entire period of foundation work performed to compensate for the displacement of the sacred complex.

The challenge

Conducting measurements of displacements of pillars in the active church in such a way that the measured data allow for quick verification of the method of conducting works related to the strengthening of church foundations, and also in such a way that the installation of equipment does not interfere with the daily use of the church.

The solution

Automatic monitoring of vertical displacements was used, based on a Hydrostatic Precision Leveling system connected to a recording computer that continuously transmits measurement data to a server. Application of QuickView software enables monitoring of current data and application of alarm thresholds. The frequency of readings of the measured parameters was designed in 5 minute intervals. In order to verify the correctness of the sensor readings, three geodetic benchmarks were additionally installed. The whole measuring system was mounted at a height of about 3 meters from the floor level, thus enabling the free use of the temple.

Project facts

Owner(s)

Monastery of Franciscans in Poznań

Keller business unit(s)

GEO-Instruments Polska

GEO-Instruments UK

Main contractor(s)

Zakład Sztukatorski Renowacja Obiektów Zabytkowych

Witold Domaniecki

Engineer(s)

Jerzy Pieronkiewicz - Dyrektor Techniczny

Sam Kettle - Starszy Inżynier Monitoringu

Paweł Faryna - Brygadzysta

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