Contact: info@applus.com

Building Construction Supervision and Technical Assistance

Applus+ has been involved in many different projects all over the world providing services in cultural, health and wellness, leisure, transportation, and institutional architecture.

We ensure the quality and control of the whole construction process. Our specialists in project management ensure a consistent and productive relationship between the client, the designers, and the construction and implementation teams. We always present to our clients the best result in terms of time, cost, quality, and suitability.

Applus+ is a company committed to the environment and it is accredited as Quality Control on Building Entity (ECCE) for the development of the external control of the energy efficiency certification. We develop services on LEED and BREEAM certification.

THE Applus+ SOLUTION

Engineering Services:

- Detailed design
- Design review
- Expert advisory: structural calculation review, asset integrity, HVAC, lighting and plumbing, geotechnical engineering, architectural review, material testing

Supervision Services:

- Supervision of structures and civil works
- Control of secondary works

- Quality control of finishes and testing for commissioning

- "Due Diligence" maintenance audits on CPDs and singular buildings
- Facilities management and maintenance (GEIME)
- Thermographic studies on facilities and closing systems

Applus+ Norcontrol certifies the execution and positioning of the materials used for the work finishes, following the criteria established on the current regulation of on-site testing.

Acoustics and Vibrations

The services of quality control on acoustics and vibrations are divided into two categories: civil work and building.

Applus+ Norcontrol has all the necessary equipment to carry out the works of quality control, such as five sets of equipment for acoustic monitoring, six sonometers, two sets of testing equipment for acoustic isolation on-site, one vibration tester, three accelerometers with high sensibility, software for the post-processing, etc.

Offered services:

- Testing of acoustic isolation accredited by ENAC, following the rules UNE-EN ISO 140-4/5/7.
- Noise monitoring generated by works. Realization of long-term acoustic measurements (from 24 hours to one week) recording continuously and getting a noise sample every 10 seconds. Analysis of tonal, impulsive, and low-frequency components.
- Acoustic measurements to assess the noise levels generated by works, fans, truck traffic, etc. Analysis of compliance with the corresponding Ordinance or Law.
- Measurements of vibrations caused by blasting, machines, etc. Analysis of compliance with the corresponding Ordinance or Law.

Asset Integrity Services:

- Structural evaluation of existing edifications, preparation of reports of current state and pre-diagnosis.
- Project and execution control of new plant structures.
- Structural reinforcements.
- Structural pathology studies.
- Studies of existing facilities for rehabilitation (structural diagnosis, prospecting testing, and testing of materials and building systems).
- Damages studies and existing facilities evaluation.

- Inventory of the aesthetic condition of finishes and facilities.
- Cracks protocol.
- Structures monitoring and enclosures thermography.
- Technical advisory services on projects and works.
- Execution control on new plant works.
- "Due Diligence" audits on buildings.

Testing on structures:

- Load tests in structures for commissioning
- Integrity testing of piles
- Tensioning tests and supervision of anchors on piling walls and post-tensioning on reinforcements
- Auscultation of reinforced concrete structures (ultrasound, Schmidt rebound hammer test, rebar detection system)
- Internal analysis of timber beams
- Technical supervision of testing on works

Remarkable Projects:

- Supervision consultancy services and surveillance for the extension works at the 'Gran Canaria' Airport.
- Supervision consultancy services for the new University Central Hospital in Asturias.
- Supervision consultancy services for the new University Central Hospital in Guadalajara.
- General inspection of reinforced concrete structure, pathology analysis, on-site testing, QA documents review, and improvement measures for the new Muscat terminal airport, Oman.
- Framework Contract: Technical Services Advisory for Sareb.
- Asset Integrity Services for Aspire Logistics in Qatar.

Target customers

This service is needed where a new building is being constructed or when there are extension or improvement works in a building. This portfolio is mainly offered to public administrations, private customers, and construction companies.

Key customer benefits

Applus+ value-added services provide numerous advantages to the design, construction, and operation processes.

- Owners are ensured that the construction complies with quality standards.
- Early detection of construction defects avoids cost overruns and delays.
- Facilitates communication through one contact person responsible for the quality control of the construction works.
- Our worldwide coverage ensures high-quality service in all countries.
- We cover all the building process stages, from the design review to the post-sale service, all through the construction.
- Our knowledge is extensible as much for the public field as for the private, providing solutions and products adapted to every client.

We have a highly qualified and experienced technical team, which allows us to offer comprehensive and innovative solutions that ensure the reliability, energy saving, and sustainability of the works. Thanks to our specialists in various disciplines, we can offer a global services proposal, supported by the guarantee and strength of our laboratories.