Testing & Commissioning
The purpose of the commissioning plan is to provide direction for the commissioning process during construction, providing resolution for issues such as scheduling, roles and responsibilities, lines of communication and reporting, approvals, and coordination.

Commissioning is a systematic process of ensuring that the building systems perform according to the design intent and the owner’s operational requirements.
Scope of T&C

The basic scope of work:

The Validation and Approval of the Testing & Balancing (TAB) Activities Undertaken by each Contractor

In general, the scope is: to act as a representative of the client, to validate and supervise the testing & commissioning activities undertaken by each Main Contractor and their specialist suppliers/sub-contractors.
T&C Plan and Strategy

• Validate and supervise the tasks and functions in the specifications ascribed to the Testing & Commissioning of all building services, as prescribed within the designer’s specifications and drawings.

• Ensure that the commissioning activities are coordinated on an integrated program and undertaken in a logical, sequential and efficient manner using consistent protocols and forms, centralized documentation, clear and regular communications and consultations with all necessary parties, frequently updated timelines and schedules and technical expertise.

• Coordinate the commissioning work with the contractor and construction manager, to ensure that commissioning activities have been incorporated into the Contractor’s master schedule.

• Coordinate the commissioning activities to ensure all items are in place for any Local Authority approvals / inspections.
T&C Process

- Validate and Supervise Test & Commissioning Activities
- Supervise and Approve Detailed Testing Procedures
- Review Equipment Warranties
- Agree Training Requirements and Oversee Training of Owners Personnel
- Prepare Commissioning Record
- Review & Approve Contractors As-Built Drawings and O&M Manuals
- Compile Systems Manual
- Prepare Asset Register

... and other tasks, as required depending on each project scope.
The **COMMISSIONING** team has comprehensive engineering knowledge and field expertise, which have been enhanced by its experience with specialized facilities, and has intimate knowledge of the following systems:

**Building Commissioning:**

- HVAC Systems
- Central Plants
- Chilled Water
- Heating Water
- Steam
- Ice Storage
- Humidification
- Geothermal Heat Pump
- Electrical Systems
- Lighting Control
- Emergency Power
- Photovoltaic
- Utility Metering
- Thermo-graphic Survey
- Building Controls
- Systems Integration
- Building Envelope

**Life Safety Systems Commissioning:**

- Smoke Control
- Fire Alarm Systems
- Fire Protection
- Mass Notification

**Specialty System Commissioning:**

- Laboratory Air/Exhaust
- Medical Gas
- Vacuum Processed Cooling
- Water
- Toxic Gas
- Compressed Air
- Security MATV/CCTV
- Public Address

**LEED Commissioning:**

- NC (New Construction)
  Schools/Healthcare/retail/Homes
- CS (Core Shell)
- CI (Commercial Interior)
- EB (Existing Building)
About SDT

SDT international was established in 1991 as an engineering consultancy company that provides comprehensive range of services in the Structural, Mechanical, Electrical, Infrastructure, Environmental and Plumbing design.

For the past 22 years, we have been a pioneering force in the planning, design and implementation of development projects in the Middle East, UK and Australia.

With six offices in six countries, we employ high caliber specialized engineers capable to apply innovative approaches to design and deliver practical and cost effective solutions.