

# COORDINATION OF VERTICAL TRANSPORT SYSTEMS DESIGN

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## **Introduction:**

Many of new building projects in UAE require VT systems such as elevators, escalators, moving walks to facilitate vertical & horizontal movement of occupants.

VT systems are essentially electro-mechanical equipment which must be integrated into the building's frame work with a good amount of planning and coordination at the design stage.

Even though the Architects lead the building design, various other trades need to provide support while planning a VT system and identify various coordination requirements. The VT system must be built into the project with all the services & facilities intended to support the existence & trouble-free operation of VT systems.

## **Objective:**

This document discusses various coordination tasks required for the VT systems, which are essentially provided by a Vertical Transportation Specialist/Consultant. It clearly points out the important issues and records the coordination recommended by the specialist consultant.

Whatever may be the size of the project, this document would help in either resolving complex coordination requirements or at least serve as a record to guarantee the Architect that all important scenarios have been considered & allowed for. Typically, the below coordination inputs are essential from a vertical transportation specialist/consultant.

- Fire Safety Department [Fire emergency – rescue/evacuation]
- Life Safety Department [Earth quake, such life threatening scenarios – rescue/evacuation]
- Mechanical Department [Machine room heat rejection, smoke ventilation, pressurisation]
- Electrical Department [Normal/Generator/Emergency power supply]
- BMS Department [Centralised Monitoring and Control]
- IT/Communication (Low Voltage) Department [Centralised Intercom, Access control, Digital Media Displays]
- Architectural Department [Lift shaft, Lift machine room, Machinery space, heights and depths, Access doors, Door hand (Left/Right)]
- Structural Department [Structural openings, structural loads]
- Interiors Department [Entrance/Doors/Car/Truss cladding finishes, lighting concepts, Signal fixtures and car accessories]