



PD602

Elevators and Escalators Combo Course

(**PD100**: Introduction to the Maintenance & Inspection of Elevators and Escalators & **PD102**: ASME 17.1 Safety Code and A17.2 Inspection Requirements)

Day One

- Introduction and terminology
- Hoistway and equipment
- Safety while servicing elevators
 - Reference the *Elevator Industry Field Employees' Safety Handbook*
 - Applicable codes and publications
- Types of elevators
- Types of driving machines
- Control and operations, including firefighters' service and drives

Day Two

- Doors and gates
- Car and counterweight safety and pit equipment
- Machine space and equipment
- Emergency evacuation
 - Reference *The ASME A17.4 Guide for Emergency Evacuation of Passengers from Elevators*
- Escalators and moving walks

Day Three

- Introduction to applicable codes
- Service safety video
 - Exercise on service safety
- Applicable codes
 - Exercise on applicable codes
- Inspection inside the car
- Inspection outside of the hoistway
- Inspection in the machine room
- Review

Day Four

- Hoistway and top of car inspection
- Rope and fastening inspection
- Inspection in the Pit
- Elevator construction safety video
 - Exercise on construction safety
- Acceptance and periodic tests of electric elevators
 - Car and counterweight governors
 - Car and counterweight safeties
 - Standby power operation
 - Car and counterweight oil buffers
 - Brake
 - Terminal stopping devices
 - Static controlled elevators
 - Winding drum machine slack rope
 - Standby power
 - Ascending car and unintended motion
- Exercise on sample elevator
- Exercise on testing
- Firefighters' service tests and checklist

Day Five

- Exercise on firefighters' service
- Hydraulic machine room
- Hydraulic hoistway and pit
 - Hydraulic acceptance and periodic test
 - Relief valve setting
 - Flexible pressure hose
 - Unexposed cylinder and piping
 - Pressure switch
 - Operating pressure verification
 - Bottom plunger clearance
 - Speed-rated speed up and operating speed down
- Sample hydraulic elevator
- Review study and open questions
- Final test