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