Elevator Door Systems

Elevators without doors?

Known as the Paternoster Elevator or the Stair Elevator, it is a continuous belt elevator in use in many European cities. Transit System?

Outline

- Define associated terminology
- Describe the basic operation of elevator doors
- Identify associated components
- Identify different door configurations
- Be able to differentiate between a right and left handed door
- Identify different types of door systems
### Key Terms

- Automatic door re-opening device
- Car door
- Clutches
- Daylite
- Door closers
- Door hanger assembly
- Door hanger track
- Door panel
- Door restrictor
- Door sill
- Floor level
- Gate switch
- Gib
- Hoistway doors

### Key Terms

- Interlock
- Jamb
- Leading edge
- Left opening doors
- Multi-speed doors
- Operator
- Pick-up roller assemblies
- Return column
- Right opening doors
- Single speed doors
- Spirator
- Spring closer

Thinking back to course 200 or any previous elevator experiences so far, what are some things you may remember about elevator doors?
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Basic Operation

Objective: Describe the basic operation of elevator doors.

Elevator Doors – 2 linked together
- Car door attached to car and moves from floor to floor with the car
- Hoistway doors are stationary and present at each floor level known as landings or hoistway openings.

Car Door
Hoistway Doors
Each door set is linked together by a clutch on the car door and a Pick-up roller assembly on the hoistway doors.

Initial Door Movement

Pick-up rollers engage the clutch.

Clutch engages the interlock on hoistway door & disengages the door restrictor on car door.

Allows the operator to function and begins door movement.