# Secure Building Design

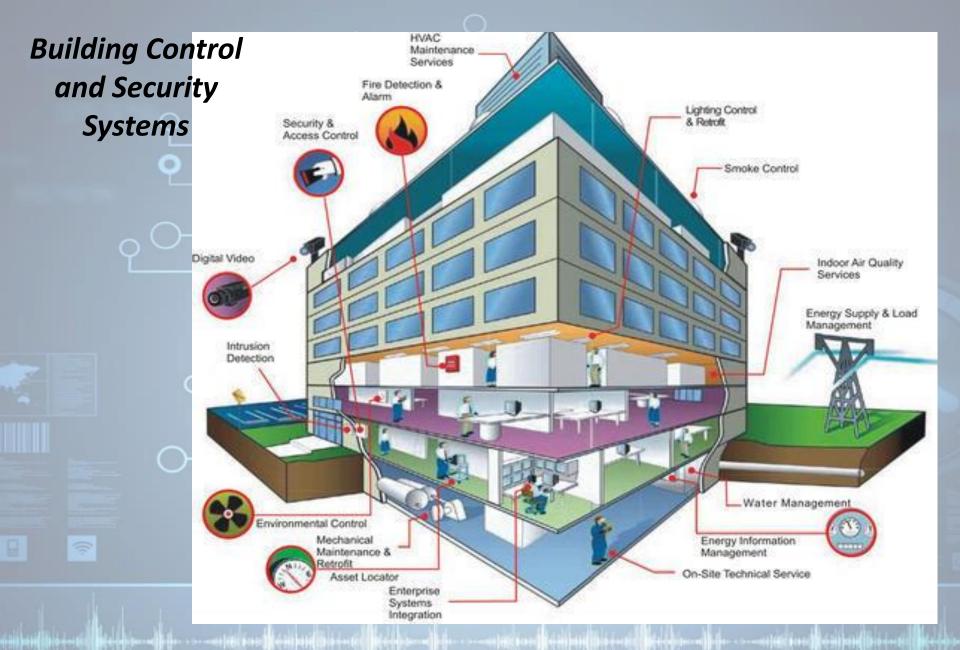
**Subject: Work Place Design-II** 

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### What is Secure Building Design?

- Security systems are indispensable to any type of building.
- Building security and control system have become necessary with increasing size and complexity of buildings.
- The building security and control system is designed to monitor and control:
  - mechanical and electrical installations
  - fire protection, escape, burglary, assault
  - emergency communication



Energy Management System (EMS), Building Automation System (BAS) and Building Management System (BMS) are used to describe these systems.

### Why is it necessary?

- Creating a safer and more secure building is essential
- A secure building design in place will:
  - decrease the chance of security threats occurring
  - avoid common threats such as robbery and damage to your property
  - give protection to your staff
  - provide consistency in business operations
  - safety of tangible assets, intellectual property
  - and above all human life
- Keeping security systems up to date ensures safe working environment for all employees and customers
- Therefore, monitoring and surveillance are the ways to keep building secure & safe

### Monitoring

### Surveillance

Refers to systematic, continual, active/ passive observations of persons, places, things or processes

Routine recording of activities to warn of trouble or for accounting purpose

Eg: open spaces such as airports, malls where large number of people gather are monitored to help assure public safety and security.

Carried out in covert ways, used to indicate targeted monitoring of activities

Focuses on individuals, buildings, properties, vehicles deemed suspicious by credible information source

Eg: Targeted monitoring of people suspected of committing crimes or other civil wrongdoings.

## Monitoring and Surveillance Tools in a Building

- CCTV (closed circuit television)
- Monitors & Cameras
- Electronic access cards
- Electronic video recorders
- Electronic listening & recording devices
- Binoculars
- Night-vision equipments

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- Burglary alarms
- Medical alarms
- Smoke detector
- Water sensors
- Heat sensors
- Global positioning & tracking devices
- Metal or contraband detection devices
- Fire-safety systems





**CCTV**, monitoring cameras



Electronic access card and system



Smoke detector



Burglary alarm system



Fire alarms



Night vision equipments



Contraband and Metal detectors

# Ways of Monitoring and Surveillance in a Building

- There are many ways in which you can do this, some of the most important ones are listed below-
  - Secure Access Control
  - Photo Identification
  - Security Conscious Team
- It involves- variety of communications, computing, electromechanical, imaging, robotics, sensing devices & systems.
- It also includes combinations of alarms and warning systems that signal when something unusual occurs, or when a desired state or condition has not been met.

#### Secure Access Control

- By having secure access control one can know who is coming in the building and who is going out.
- This makes it much more difficult for anyone to break in the building.
- One could have access cards as these are harder to copy than a set of keys.
- Cards will prevent a potential break in with traditional keys, it is much harder to do.

#### Photo Identification

- It is very effective to have photo employee cards.
- This ensures that everyone in the building is supposed to be there and makes them identifiable should anything be out of the ordinary.
- There is also the added benefit of customers knowing who the member of staff is that they are dealing with.
- With photo ID one can easily know who should be in the building and who should not.

### Security Conscious Team

- It is important to get the whole team involved in security.
- Staff should be made aware of the security policies in place.
- When hiring new staff ensure they are the right fit for the job and that they are a long-term employee before informing them about your security procedures.
- It is important to be able to trust all staff with security.

