

JOB ROLE – UNARMED SECURITY GUARD

Sector – Security
(Qualification Pack Code: MEP/Q7101)



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UNIT 4: ACCESS CONTROL

Session 2: Structures and Techniques for Access Control

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Session Objectives

The students will be able to:

- ❑ Describe the importance of access control system;
- ❑ Identify and explain the purpose of various access control systems;
- ❑ Describe the procedure of vehicle screening and search; and
- ❑ Identify the role and functions of an unarmed security guard in access control.

Introduction

Access control system helps in effectively keeping an area or a building safe and secure by controlling the movement of people and vehicles in and out of the area or building. The duty of a security guard involves some type of access control at each site, where the person works but the type of access control varies from site-to-site. Access control ensures that only authorised people have access to a person, property or data. The security guard should have the knowledge of the structures and procedures of access control as per the organizational policies, norms and regulations. The access controls include use of fences, doors, biometric controls, etc.

Access Control

Access control ensures that only authorised people have access to an asset, a person, property or data. Therefore, the security guard needs to ensure that no unauthorised person enters a building. The access control system must enable the security guard to determine the **identity** of any individual entering the building, authenticate his/her by an **authentication system** to ensure that only the right person is granted access and then **authorize** or grant an individual access to the building or other restricted areas, based on the **set criteria**.

Access Control

Access control policies are high-level requirements that specify how access is managed and who may access information under what circumstances. Organisations have their own access control policies, types and levels of access control. The amount of access control needed at each site varies from minimum to maximum, depending on what needs to be protected and the vulnerability of the site.

- **Minimum** access control
- **Medium** access control
- **Maximum** access control

Access Control

Minimum access control: Access control procedures are kept minimum. It is assumed that everyone enters for a legal purpose. Denial of entry is rare and is done when a law is violated. It is done at sites that allow general admission, such as cinema halls and shopping malls.

Medium access control: Such kind of access control is usually seen in offices or residential areas. Compared to a Mall, it is difficult for an anti-social element to enter a residential complex, manned by an Unarmed Security Guard.

Maximum access control: This is often the case in high security sites, such as defence production units, research labs, military bases, etc. It uses a combination of security personnel and alarm systems to have complete access control in all parts of the property.

Access Control

Access control at property perimeter: Barriers, such as walls, gates, boom barriers, watch towers and booths are used to control access to a property. The CCTV system allows one to monitor the property perimeter, as well as, inside the buildings. However, it cannot substitute a patrol.

Building perimeter and entrance: Once inside the premises, all people do not have access to all buildings or rooms. An alarm system will often be attached to doors and windows on the outside of the building. Nowadays, employees have electronic identity cards, which provide them access only to those rooms or buildings where they are supposed to work.

Access Control

Access Control in the absence of Equipment: The security guard may be asked to stand or sit at the main entrance of a site. The guard's main tasks are to check the identification of people entering a site and decide if they are authorised to do so. The security guard lets in only those people whom s/he is able to recognize or those who possess ID cards or pass issued by the company or organisation. The staff working in an organisation, where the security guard is employed, may also inform the guard in advance if they are expecting a visitor.

Electronic Access Control System

The principal components of an electronic access control system are as follows:

- (i) Security tokens
- (ii) Input (fingerprint scanner or card reader)
- (iii) Decision making element (processor or computer)
- (iv) Output (signal to alarm is used to inform in case of unauthorised access power for the lock of the door, signal to cameras to click photo on entry, barriers or other devices)

Electronic Access Control System

Aadhaar based Biometric Attendance System (BAS) is used to mark the attendance of employees and students, using the Aadhaar card number and the fingerprint stored in the Aadhaar server. Aadhaar is a 12-digit unique identity number issued to all Indian citizens by the Government of India, based on their biometric and demographic data.



Electronic Access Control System

Benefits of Electronic Access Control System: Some of the benefits of electronic access control system are as follows:

- (i) It can be connected to doors, which are electronically powered, and therefore, deny access to unauthorised persons.
- (ii) It can store all details of those who have made authorised access.
- (iii) It can be efficiently linked with the CCTV system for effective access control.
- (iv) It can be linked to an alarm system that would alert the security in case of a security breach.

Alarm Systems

Alarms are used for identifying intrusion, thereby, controlling access. They are also used for identifying smoke and fire.

It is easy to think of an alarm sounding system as:

- (i) the **sensor** is like the senses of the body.
- (ii) the **transmitter** is like nerves in the nervous system of the body, which carries information from the senses to the brain.
- (iii) the **control panel** is like the brain, which processes the information and sends back the message related to appropriate response.

Vehicle Screening and Search

Vehicle screening and search measures may serve as a significant deterrent to those intending to bring in items, which are dangerous or explosive in nature. The aims of vehicle search are as follows: (i) prevent pilferage of stores, and (ii) ensure that forbidden articles like weapons or IED are not brought into the premises.

Usually, vehicles are searched at short distance from the main building often near the entry gate in a less crowded region. This prevents any kind of damage to the building and crowd by a vehicle-borne IED.

Vehicle Screening and Search

A quick screening and search of vehicles is carried out in the following manner:

- (i) Look for harmful or dangerous objects or material inside the vehicles.
- (ii) Open the bonnet and luggage boots of the vehicles to ensure that nothing is hidden there.
- (iii) Search beneath the dashboard.
- (iv) Search under the driver's seat and seat covers.
- (v) Examine spare wheel (deflated one may denote something between the cover and the thread).
- (vi) Use under carriage mirrors to look for explosives, etc., which might be hidden on the underside of the vehicle.

Vehicle Screening and Search

A record of items allowed inside is made to ensure that old items are not taken inside and new items are not brought out, without authorization. The store or the concerned department is informed of the arrival of the consignment by a particular vehicle. Similarly, the vehicles are searched and a record of the items going out, along with a copy of the gate passes, is kept at the gate. After the vehicles are searched, an entry is made in the register.

Queues and Access Control

Queues are a common occurrence at the security checkpoint. There are different types of queues.

(i) Structured queues: People form a queue at a fixed place in a predictable manner, for example supermarket checkouts.

(ii) Unstructured queues: Such queues are formed in unpredictable and different locations. For example, a queue formed while boarding a train is an unstructured queue.

Queues and Access Control

Some of the techniques to manage a queue are as follows:

Physical barriers or railings: They are aimed at guiding queue formation and organising it in the most efficient way.

Signage and signaling systems: In such systems, LED screens are used to manage customers by way of indicating their place in the queue.

Summary

In this session, you have learnt about the purpose of various access control systems, including manual and electronic access control. You have learnt that an access control system must enable the security guard to determine the **identity** of any individual entering the building, authenticate his/her by an **authentication system** to ensure that only the right person is granted access and then **authorize** or grant an individual access to the building or other restricted areas, based on the **set criteria**. You have also learnt about the procedure of vehicle screening and search.

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