

Physical protection measures that you can adopt for your workplace

December 2019

Whether you are a building owner or an occupier, there are physical protection measures that you can adopt to safeguard your workplace against attacks. A multi-layering approach can help strengthen the security of your workplace. Here are **5 layers of protection** to consider:

1. Deter

The deterrence layer forms the first layer of protection surrounding your building. Visible security measures serve as a clear warning that a building is protected. Some examples are:

- Surveillance technology/ cameras along the perimeter with adequate lighting
- Visible guards and regular patrols

2. Detect

The second layer is detection of threats. Having an intruder detection and alarm system can help detect threats so that alerts can be raised as early as possible.

Some detection devices include:

- Motion and seismic detectors: Detect motion from intruders on your workplace premises.
- Duress buttons: Allow guards to alert the security team in the event of an attack or sudden intrusion.
- Magnetic switches: Track the movement of doors, gates and entry points. The contact sensors inform the security system when any door, gate or any entry point is open or if an intrusion is detected.



Once triggered, the system will generate a local alarm and/or transmit the alarm signal to a monitoring centre for follow-up actions.

3. Delay

This third layer consists of placing physical barriers to delay perpetrators or lessen the impact of an attack. It also helps to buy time for appropriate response by the security team. Such barriers can take the form of Blast Resistant Doors & Protective Windows, or Intruder Resistant Doors and Windows.

Blast Resistant Doors & Protective Windows:

- They will help reduce the impact from blast loads, bullets, fragments and shrapnel.
- Windows:
 - Protective glazing materials & laminated glass can effectively control the way glass shatters
 - Anti-shatter film (ASF) may be used to retrofit existing windows where installation of protective windows is not feasible

Examples of use: sensitive locations such as security control room, safe areas and VIP rooms.



Intruder Resistant Doors and Windows:

- Doors: Doors opening outwards can help mitigate forced entry or blast effects from external surroundings. Ability to lock down specific areas can help limit movement of perpetrators.
- Windows: Adding steel grilles is a cost-effective solution that provides protection even when the windows are open.

4. Deny

This layer pertains to implementing access control measures to verify identities of people who enter the building. Unauthorised persons would be denied entry. The three core elements to access control are identification, authentication and authorisation. Identification is authenticated through passwords, encryption keys, biometrics, smart cards or PINs to ensure that only the right persons are granted access.

Here are some access control measures you can consider using:

- Magnetic swipe cards
- PIN verification
- Biometric turnstiles
- Interlocking door access controls
- Requirement for all visitors to register for a 'Visitor' pass and be accompanied by staff at all times



5. Response

This last layer refers to responses taken to counter an intrusion or attack. Staff should be trained to identify threats relevant to your workplace as well as the security measures in place.

To ensure efficient response in event of an emergency, relevant staff should be well educated about your company's Standard Operations Procedures (SOPs) for emergencies. These SOPs should also be regularly updated and tested for robustness.



Everyone has an active part to play in detecting, preventing and responding to the threat of terrorism and the security of their facilities.

For a complete guide, refer to [The Guidelines for Enhancing Building Security in Singapore](#) by MHA.

SGSecure@Workplaces Bulletin

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