



# Security Newsletter

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## Physical Security in Macau

*Physical Security: The various physical, electronic and human resource measures designed and deployed to safeguard your personnel, your property and your key information.*

The next few issues will examine the structures, processes and practices that are used to keep ourselves and our properties safe and secure.

### Physical Security

Physical security structures, systems and processes are designed to **deter** and prevent unauthorized entry to or wrongful actions within a facility, to **slow** any unapproved access, to **respond** to any breach of security, to **apprehend** perpetrators if necessary unauthorized persons within a facility for the authorities to take action, to **investigate** breaches of security and to review security requirements.

### The Shield of Physical Security

The various elements of a physical security structures and processes include:

- Threat assessment.
- External Perimeter and Building security. Locks and Alarms
- Security of internal sub-spaces.
- Close protection of key staff.
- Electronic surveillance
- Security lighting
- Human guarding
- Vehicular and pedestrian access control.
- Security control and supervision services. And
- Security of Entertainment gatherings and major functions.

While touching on these various elements, it may be useful to look at them as part of a **security audit process**.

### When Should we Review our Physical Security Protections

We usually review and examine our physical security when we are:

- Designing and Building a new facility.
- Moving into an already built facility.
- Conducting a major security review.
- Conducting a security audit.
- After the occurrence of a serious security breach.

### The Elements of Physical Security

All facilities require some measure of physical security. These can range in complexity from the simple such as domestic dwellings, retail spaces, commercial and office buildings, to the more complex such as banks, airports and casinos. In the requirements for security coverage, one size certainly does not fit all of these. What physical security elements are necessary for a particular location or facility?

From the perspective of a security audit, the first element to be considered will be what is the threat? What exactly do we need to secure? What is the value of the product, stock, equipment, facility, personnel, information and reputation contained therein?

Supplied with this information we can start to examine the various physical security

elements in use, to identify any weaknesses and to determine whether the systems and procedures in place are fit for purpose.

### Perimeter and Building Security

Some facilities possess an external perimeter barrier while for most, the building itself forms the outer barrier. The following are some of the questions that would be used during a security audit.

#### For an external perimeter barrier:

- What material is the external barrier made from?
- What is its Design? Composition? Height? Thickness?
- Are there any additional security measures on the top of the barrier?
- Is the barrier in a secure state? Any damage? Any deterioration?
- Is the barrier obstructed or overreached by any means (trees etc.)?
- Is the area between barrier and buildings properly illuminated?
- Is there any CCTV coverage? Is it adequate?
- Where does the CCTV coverage terminate? What are the procedures for observation/review etc.?
- Are there any alarm systems or sensors fitted to the barrier? If yes, how effective are they? What are the processes for an alarm activation?

## CPTED

When designing and building a new facility, **crime prevention through environmental design (CPTED)** principles should be used together with security efficiency planning principles to ensure that the likelihood of malicious activity is minimized and that appropriate security systems are incorporated. The aim being to keep the overall security costs down while ensuring effective crime prevention coverage. These principles should also be applied when moving into an already created facility and also incorporated into any security review or external security audit.

**An example:** Venetian Macau has one of the best CPTED planned crowd and vehicle management casino property in Macau. With an average of 75,000 visitors daily at the Venetian, it has the highest visitor ratio for a property in



1. Good pedestrian scaled lighting 2. Promotes casual supervision of sidewalk 3. Non Intrusive CCTV  
4. Pavement and architectural treatments to define entry/exits and off-limits  
5. Waist level fences along property lines to control access

Macau. The design has helped improve crowd movement and safety, and made Venetian one of the most efficient places to visit.

The two main entries, Porte Cochere and the shuttle bus depot (West Lobby), are designed with the consideration of natural surveillance including limiting

landscaping. A potential criminal is less likely to attempt a crime if he or she is at risk of being observed. At the same time, natural access control guides people entering and leaving a space through the placement of entrances, exits, barriers, directional signage and lighting allowing an optimal crowd movement.

- How many access points are there in the external barrier? Vehicle? And Pedestrian?
- What are the access control protocols for the barrier access points? Are they effective?
- Is the security deployment on barrier access adequate and fit for purpose?
- What locks are used? And what are the key security protocols?
- Have there been any security incidents related to the barrier and or barrier access?

### Where the building itself forms the outer barrier:

Similar questions would be used for a building without perimeter fencing.

- There would be more emphasis on access control points and windows.
- With more access points in building access control protocols would be closely examined.

- Unlike an outer perimeter barrier, the incidence of any security incidents at the building limits and building access points will indicate any security concerns.

The answers to these questions and others and the overall result of any security audit will indicate the effectiveness of the current physical security measures utilized on external perimeters or the building itself as a perimeter barrier.

## Security of Internal Sub-spaces

Many organizations are too small to control a complete building and therefore utilize subspaces inside a larger facility. As a result, they have the benefit of the building acting as their perimeter security protection. However as with the security all facilities, complexes and buildings, their physical security systems widely differ. Some have extensive security protections in place while others can have none.

### A review needs to be conducted answering some of the following questions:

- Again, what is your risk? What is the value of your content?
- A review of the overall security of the building needs to be conducted to discover whether their protections are adequate for your needs. And
- If the building protections do not meet your needs you need to design and add-on system that does.

In a subsequent issue we will continue to examine aspects of physical security and security auditing. We will cover the close protection of key staff, electronic surveillance, security lighting, human guarding, vehicular/pedestrian access control, security control, supervision and management and the security requirements for entertainment gatherings and major functions.

## About the Author

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