

# Implementing the Security By Design Concept in an Environmentally Sustainable Way



#### 1 WHAT IS SBD?

Security By Design or SBD is a concept that links with the protection of public spaces and promotes the idea of security through design.

#### 2 WHY SBD?

Religious sites are often targets of terrorist attacks, hate crime attacks and other incidents. Thus, religious sites are recognized as soft targets by the UN and the EU.

SBD aims to strengthen the security of religious sites while also keeping their openness and attractiveness.

#### 3 HOW?

SBD encourages architects to combine security measures seamlessly within the aesthetics of the building and landscape.

### 4 WHAT IS CPTED?

'Crime Prevention through Environmental Design' is the theory that supports the SBD concept. The theory focuses on the tactical design and the effective use of the built environment, which when applied, reduces both crime and the fear of crime. The main objective of CPTED is to reduce crime and promote positive interaction with the space in a 4-principles way.

A.Natural Access Control
B.Maintenance & Management
C.Natural Surveillance
D.Territorial Reinforcement

#### A Natural Access Control

Natural access control limits the need for sophisticated physical elements to keep intruders out of your site. Instead, by applying psychological barriers such as signs, nature strips, and Planters for Perimeter Protection (or Flower Pot Traffic Barrier) the site becomes unattractive to potential criminals.

#### B Maintenance & Management (M&M)

The M&M of the site can directly impact the likelihood of your site becoming a crime target. The M&M should be considered at the design stage & during renovations. For instance, your site can apply assisted natural ventilation & tools, which cut costs, are sustainable and are better for the environment.

#### Natural surveillance

The Natural Surveillance principle does not necessarily seek CCTV and elaborate video recording (yet beneficial). Natural Surveillance, under the CPTED theory, can be achieved by placing observers near a potential crime spot. Furthermore, ensuring that the building has sufficient natural lighting is essential (e.g., big windows, skylight, and light colours for the inside and outside walls). This will ensure a well-illuminated inner site and outer area and will eliminate the need to install high-energy-consuming systems.

#### Territorial reinforcement

This principle aims to define lines between your site & other sites. While we consider fences as territorial reinforcement, there are types of reinforcements that can be applied such as landscaping. By using the landscape to your advantage, we can create a sustainable & environmentally-friendly reinforcement.

#### **SBD AND SUSTAINABILITY**

The SBD can & is considering the environmental aspect, cost, aesthetics, efficiency, installation & sustainability to incorporate the idea of security through design.

Environmental sustainability, under SBD, considers building materials, architecture, environment, and awareness.

Find below 4 principles of Sustainable SBD



#### Long-term Solution

SBD provides a long-term solution requiring less 'hard' security measures that can be integrated into a holistic building or refurbishment scheme using environmentally friendly building materials.



#### Mental Health

Subtle physical security features (such as flower pots security barriers) contribute to long-term mental health & improve reassurance for building users.



3

#### Less Obtrusive Security

SBD Good landscaping and physical features rely less on obtrusive fencing and physical barriers. Thus, it merges the natural environment with the site.



## Formal & Informal surveillance

SBD takes its cues from human behaviour and relies upon both formal and informal surveillance to keep people safe. In turn, it encourages positive social activities and discourages crime.



