# **INTERNATIONAL STANDARD**

**ISO** 22341

> First edition 2021-01

# Security and resilience — Protects security — Guidelines for crime prevention through environmental design Sécurité et résilience — Sécurité préventive — Lignes directric la prévention de la criminalité par la conception environneme Security and resilience — Protective

té et rés. évention de Sécurité et résilience — Sécurité préventive — Lignes directrices pour la prévention de la criminalité par la conception environnementale





© ISO 2021

rentation, no part of rical, including processed from All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org

Website: www.iso.org Published in Switzerland

Contents				Page	
Forew	vord			iv	
Intro	duction	1		v	
1	Scope	<u></u>		1	
2	Norm	Normative references			
3		Terms and definitions			
4	Understanding environmental context of crime and security risk				
5	<b>Basic</b> 5.1	cs of CPTED			
	5.2	CPTED strategies			
			General		
		5.2.2	CPTED strategies for planning stage		
		5.2.3			
		5.2.4	CPTED strategies for site and social management stage		
6	Process of CPTED implementation				
	6.1		alght body, performance target statement and project team		
	6.2				
	6.3		) process		
		6.3.1 6.3.2	Step 1 — Communication and consultation		
		6.3.3	Step 2 — Scope, context and criteria Step 3 — Risk assessment		
		6.3.4	Step 4 — Risk treatment		
		6.3.5	Step 5 — Monitoring, review, recording and reporting		
	6.4		al principles for CPTED process		
		6.4.1	General		
		6.4.2	Balanced CPTED concept approach		
		6.4.3	Cost-effectiveness	14	
		6.4.4	Sustainability and resilience		
		6.4.5	Green environment (ecological) approach		
		6.4.6	Adaptive application		
		6.4.7	Evidence-based approach		
Anne	<b>x A</b> (inf	ormative	e) <b>Key considerations of CPTED</b>	17	
Anne	<b>x B</b> (inf	ormative	e) Fundamental CPTED concepts	21	
Biblio	graph	y		23	
				5	

### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 292, Security and resilience.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

### Introduction

This document is intended to promote a common understanding of crime prevention through environmental design (CPTED) in the field of security, law enforcement and related risks, and their preventive measures, through environmental design and management.

CPTED concepts have been used since the 1970s and CPTED-style security measures can be traced to early human settlements. The term CPTED was first introduced in 1971 by C. Ray Jeffery, see Reference [5]. CPTED concepts originated from criminology and crime opportunity theories and studies. Since then, it has been included as part of many other crime prevention strategies that are utilized today. These include, but are not limited to, defensible space, broken windows theory, routine activity theory, rational choice, situational crime prevention and crime free housing.

CPTED has an increasingly sound theoretical foundation based on firm evidence of significant crime and fear reduction gained from a series of formal and rigorous evaluations in the field of environmental psychology, criminology and crime science. When well-planned and wisely implemented, CPTED improves community safety and industrial security in a cost-effective manner.

Figure 1 illustrates the framework of CPTED for crime prevention and security.

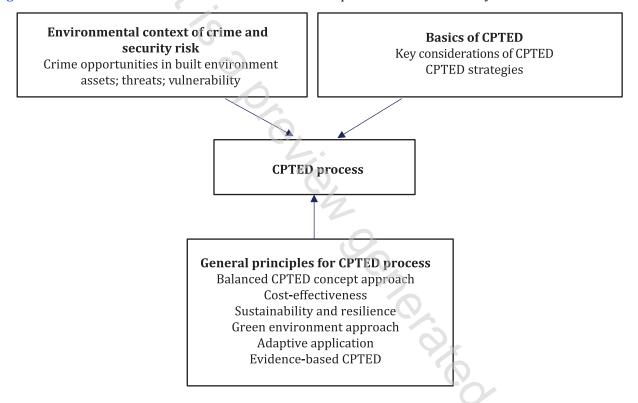


Figure 1 — Framework of CPTED for crime prevention and security

This document starts with understanding the environmental context of crime and security risk factors, causes of vulnerabilities and risk levels. This is followed by the basics of CPTED through its historical background, four key considerations of CPTED (places generating crime, types and causes of the risk, CPTED interested parties and countermeasures) and CPTED strategies. Better understanding of the risk and CPTED considerations leads to a better selection of tailored countermeasures. The process of CPTED begins with the establishment of an oversight body, performance target settings and organizing a project team, risk assessment and risk treatment, evaluation of treatment, corrective actions and feedback to the initial stage of CPTED for continual improvement. It is followed by the fundamental principles for CPTED process, such as balanced conceptual approach, cost-effectiveness, sustainability and resilience, green environment (ecological) approach, adaptive application and an evidence-based approach.

### ISO 22341:2021(E)

TED show nether culture. The use of CPTED should be applied universally in an equal manner and should not be applied with any prejudice (whether cultural, racial, religious or any other bias).

# Security and resilience — Protective security — Guidelines for crime prevention through environmental design

### 1 Scope

This document provides guidelines to organizations for establishing the basic elements, strategies and processes for preventing and reducing crime and the fear of crime at a new or existing built environment. It recommends the establishment of countermeasures and actions to treat crime and security risks in an effective and efficient manner by leveraging environmental design.

Within this document, the term "security" is used in a broad manner to include all crime, safety and security-specific applications, so it is applicable to public and private organizations, regardless of type, size or nature.

While this document provides general examples of implementation strategies and best practices, it is not intended to provide an exhaustive listing of detailed design, architectural or physical security crime prevention through environmental design (CPTED) implementation strategies or restrict the potential applications to only those examples provided in this document.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 22300, Security and resilience — Vocabulary

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 22300 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

### 3.1

# crime prevention through environmental design CPTED

process for analysing and assessing crime and security risks to guide development, urban design, site management and the use of the built environment in order to prevent and reduce crime and the fear of crime, and to promote and improve public health, quality of life and sustainability

Note 1 to entry: Environmental design refers to the applied arts and sciences dealing with creating the human-designed environment.

### 3.2

### capable guardianship

willingness to supervise, detect and take action to prevent or discourage the occurrence of crime