

THE PROTECTOR

A QUARTERLY NEWSLETTER



A MESSAGE FROM THE CHIEF:

THIS REPRESENTS THE OFFICIAL RELAUNCH OF A QUARTERLY NEWSLETTER BY THE PROTECTIVE DESIGN CENTER. THE OBJECTIVE OF THE NEWSLETTER WILL BE TO PROVIDE THE FEDERAL GOVERNMENT SECURITY COMMUNITY WITH INFORMATION RELATED TO PROTECTIVE DESIGN, PHYSICAL SECURITY, HARDENED STRUCTURES, AND ACCESS CONTROL.

DoD MINIMUM AT BUILDING STANDARDS

LATEST RELEASES

- New versions of UFC 04-010-01 and UFC 04-010-02 were released in February 2012.
- In the latest versions, generic standoff distances are replaced by standoff distances that are based on the ability of specific wall and roof construction to provide the required protection. In general, the resulting standoff distances are less than previously required with the generic standoff distance model.
- The latest versions of UFC 04-010-01 and UFC 04-010-02 can be found at <https://pdc.usace.army.mil/library>. UFC 04-010-01 can also be found at <http://dod.wbdg.org>.

WAIVERS AND EXCEPTIONS

- Headquarters, Department of Army released an All Army Activities message, ALARACT 2154/2011, on 12 July 2011 to define a UFC requirements waiver and exception process for CONUS Army facilities. The Navy and Air Force processes are addressed in OPNAVINST 11010.20G Change 1, 2 Sept 2010 and in the Air Force Guidance Memorandum to AFI 10-245, Antiterrorism, respectively.
- The waiver and exception processes provide Commanders with a means to attain temporary and long-term relief from DoD AT construction standards that cannot be met.
- The Protective Design Center has developed a standardized procedure for granting Army waivers and exceptions. That process is currently awaiting Department of Army final approval.

PROTECTIVE DESIGN CENTER SERVING THE NATION AND THE WORLD

AVAILABLE SUPPORT SERVICES

- Design of Hardened Structures
- Analysis of Hardened Structures
- Risk and Vulnerability Assessments
- Infrastructure Assessments
- Protective Design
- Blast Resistant Window Design
- Access Control Point (ACP) Design
- Chemical/Biological Protection
- Blower Door (Building Leakage) Testing
- Criteria Development
- AT Plan Development
- UFC Compliance Reviews/Assessments
- Security Engineering and ACP Training
- Blast Design Training

OVERHEAD COVER PROTECTION

APPLICATIONS AND USES

Overhead cover systems have been designed and tested that provide protection from indirect fire weapons with contact or super quick fuses, such as rocket, artillery, and mortars (RAM). The systems are usually installed over inhabited structures or where personnel routinely gather. [Read more...](#)

SYSTEM TYPES

Typical overhead cover systems fall in to one of three different categories:

- A **single layer** that will detonate the weapon and resist the weapon effects. **Example:** Heavy concrete roof.
- A **spaced system** with a pre-detonation layer, a space to provide standoff, and a material layer to resist blast and fragment effects. **Example:** Insulated panel pre-detonation layer with several feet of standoff from a light concrete roof.
- A **multi layered system** with layers that detonate the weapon, provide some standoff and attenuation of the blast effects, and a final layer that resists the residual blast and fragment effects. **Example:** Standard Middle East roof consisting of concrete pavers over waterproofing and insulation layers on a concrete roof.

For assistance with design or review of overhead cover systems, contact:

Bruce Walton, 402-995-2380, bruce.a.walton@usace.army.mil

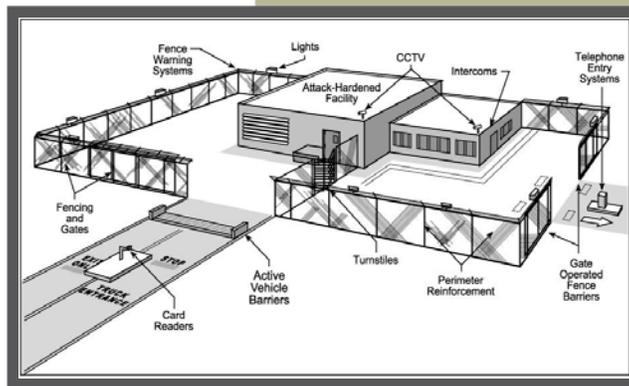
DESIGN AND ANALYSIS OF HARDENED STRUCTURES

The Protective Design Center is the Mandatory Center of Expertise for hardened structures and protective design for the Army. Over thirty engineers work fulltime providing support to various DOD and other Federal Government agencies using a variety of software, like Vulnerability Assessment Construction Option (VAPO), to design and analyze buildings and other structures. [Read more...](#)



RISK AND VULNERABILITY ASSESSMENTS

The Protective Design Center (PDC) has been executing various types of on-site antiterrorism/force protection and physical security assessments for nearly three decades. The on-site assessment process can be adapted to focus on hard assets, soft assets, or process/mission or a combination. Assessments can also gauge compliance with applicable standards and regulations. [Read more...](#)



ACCESS CONTROL POINTS (ACP)

CENTER OF STANDARDIZATION

The Protective Design Center is collocated with and works closely with the Center of Standardization for Access Control Points. The charter of the Center of Standardization is to prepare ACP standard designs and assist installations in the planning for new Access Control Point projects using criteria developed by the Protective Design Center.

ACP CRITERIA

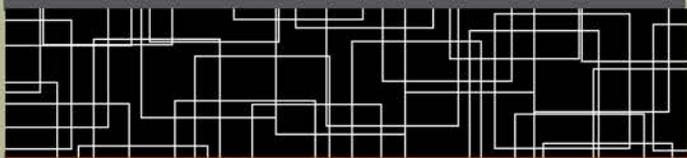
The Protective Design Center was tasked by the Department of the Army to execute a rewrite of *The Army Standard (AS) for Access Control Points (ACPs)*. The result is the latest version of the Army Standard that was approved for implementation on April 13, 2012. The new standard incorporates numerous cost saving initiatives and corrects problems identified in the older version.

ACP DESIGN AND ANALYSIS

Access control points (ACPs) act as the first and perhaps most critical layer of protection for military installations. The Protective Design Center (PDC) has been developing criteria and assisting in the design of ACPs for the Department of Defense for nearly a decade. The PDC has a group of engineers that is dedicated to responding to requests for support in design and criteria issues regarding ACPs to assure compliance with the latest regulations and standards. The PDC, as a Center of Expertise, also reviews ACP designs prepared by others.

AVB COMMISSIONING

The Protective Design Center will perform a commissioning of Active Vehicle Barrier (AVB) Control Systems for AVB's installed in new or reconfigured ACPs to ensure that they function as intended and that security and life safety are maintained under all scenarios (entrance, exit, reject, deliveries, visitors, etc.).



The Protective Design Center provides an **Access Control Point Training Course** that is intended for an interdisciplinary group including engineering planners and designers, as well as provost marshal/security and law enforcement personnel. The class is intended for civilian and military personnel involved in security or engineering support of security. [Read more...](#)

COURSE OUTLINE

- Introduction/Overview
- Army ACP Criteria/Standards
- Threat Scenarios/Performance Standards
- Active Barrier Control Systems
- Intrusion Detection Systems
- Closed Circuit TV (CCTV) Systems
- Data Transmission Systems
- Command and Control
- Lighting and Power
- Geometric Design
- Traffic Engineering Study
- Sizing ACP Features/Threat Response Time
- Signs & Pavement Markings
- Speed Management Strategies
- Testing and Commissioning
- Automated Installation Entry
- Limited Use and Pedestrian ACPs
- Costs

SECURITY ENGINEERING CLASSES

UPCOMING CLASSES

Contracted:

- 16-20 July 2012 – Department of the Army at Fort Belvoir
- 6-10 August 2012 – POJ at Camp Zama, Japan

Open Enrollment:

- 13-17 August 2012 – Open class at Fort Belvoir
- February 2013 – Open class at Fort Belvoir
- May/June 2013 – Open class at Fort Belvoir

To schedule a class, contact the Training Coordinator:

Ann Mittelsdorf, 402-995-2930, ann.m.mittelsdorf@usace.army.mil

To register for a class, contact the Registrar:

Katherine Barnett, 402-995-2393, katherine.d.barnett@usace.army.mil



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Blast Resistant Window/Door Design and Analysis:

Mr. Bill Veys 402-995-2379

Vulnerability Assessments and AT Plan Development:

Mr. Thomas Schuberth, Project Manager 402-995-2374

Infrastructure Assessments:

Mr. Bryan Cisar, Infrastructure Program Mgr. 402-995-2362

Access Control Point Design, Review, & Commissioning:

Mr. Brian Erickson 402-995-2930

Chemical/Biological Protection Design:

Mr. Ken Christenson, Project Manager 402-995-2361

Criteria Development:

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Blower Door (Building Leakage) Testing:

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