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ENGINEERING AND CONSTRUCTION BULLETIN

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SUBJECT: Revisions to Antiterrorism Criteria for Buildings.

CATEGORY: Directive and Policy.

1. **Purpose.** This ECB provides information and guidance relevant to the recently published revision to UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings. The revised standard provides engineering solutions intended to reduce the risk of mass casualties and collateral damage resulting from terrorist attacks. The revision also provides construction standards that are cost effective, implementable, and enforceable. Stakeholders, engineers, security and antiterrorism personnel may consider site-specific threats, mission assurance and constraints that might dictate measures above these minimum standards.

2. **Background.**

a. UFC 4-010-01 establishes the minimum antiterrorism standards for DoD buildings, referred to as the baseline construction. UFC 4-020-01 is used by installation Planning Teams to establish security engineering design criteria. That design criteria may justify design features of buildings that exceed the provisions of the minimum standards. Currently UFC 4-020-01 defers to UFC 4-010-01 for requirements of the low and very low levels of protection. UFC 4-020-01 is in the process of being updated to better align with the new standards and to accommodate the low and very low levels of protection that were removed from UFC 4-010-01.

b. UFC 4-020-01 includes guidance on how to address protection against 13 potential threats to multiple levels of protection. Where risk and threat analysis using UFC 4-010-01 indicates threats of vehicle and hand placed explosives Appendix B of UFC 4-010-01 provides guidance on how to address protection against those threats. That guidance includes most of the guidance that formerly applied to Standards 1 through 5 and to Standards 10 and 12, including standoff distances and blast resistant building construction. The material in Appendix B will migrate to UFC 4-020-02, the DoD Security Engineering Facilities Design Manual, when it is completed.

c. Note that Geographic Combatant Commanders may have minimum requirements that are more stringent than the DoD Minimum Antiterrorism Standards for Buildings. That is particularly in Areas or Responsibility outside the United States. It is contingent on design teams to be aware of those requirements.

3. The revision to UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings has been published and is available on the Whole Building Design Guide website. The revised UFC can be downloaded at:

<http://www.wbdg.org/ffc/dod/unified-facilities-criteria-ufc/ufc-4-010-01>

4. **Applicability.**

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As the revisions to UFC 4-010-01 DoD Minimum Antiterrorism Standards will result in significant project savings, apply these new standards immediately to all projects for which it is applicable per the UFC, paragraph 1-5 APPLICABILITY.

5. Implementation.

a. With the publication of the revised UFC 4-010-01, UFC 4-010-01 Change 1, dated October 2013 is superseded.

b. With the publication of the revised UFC 4-010-01, UFC 4-010-02 DoD Minimum Antiterrorism Standoff Distances for Buildings (FOUO) is rescinded.

c. Implement this UFC in accordance with the Implementation, Administration, and Enforcement paragraph in UFC 1-200-01 DoD Building Code (General Building Requirements).

6. Guidance. The following summarizes changes between the UFC 4-010-01, Change 1 (2013) and this revision.

a. **Standard 1, Standoff Distance:** Changes to Standard 1 will have the most significant impact of the changes to this revision. The primary changes to this standard are that standoff distances are effectively eliminated, except for a small clear zone between buildings and installation perimeters. That means there no longer will be minimum standoff distance requirements to parking and roadways based on threat explosive weights, levels of protection, and building construction. The clear zone adjacent to the installation perimeter is limited to 20 or 50 feet (6 or 15 meters) depending on clear space outside the perimeter.

b. **Standard 2, Unobstructed Space:** The unobstructed space is retained, but it is a prescriptive 33 feet (10 meters) and is not dependent on threat explosive weights, levels of protection, and building construction. Parking is now allowed in the unobstructed space except during higher Force Protection Conditions.

c. **Standard 3, Drive-Up / Drop-Off:** This standard is eliminated because it was predicated on a threat explosive in a vehicle approaching a building.

d. **Standard 4, Access Roads:** This standard is eliminated because it was predicated on a threat explosive in a vehicle approaching a building.

e. **Standard 5, Parking Beneath Buildings or on Rooftops:** This standard is retained for new buildings but is no longer mandatory for renovations of existing buildings. Application for existing buildings will be based on risk and threat analysis in accordance with UFC 4-020-01, the DoD Security Engineering Facilities Planning Manual.

f. **Standard 6, Progressive Collapse:** This standard is retained for new buildings but is only recommended for renovations of existing buildings. Application for existing buildings will be based on risk and threat analysis in accordance with UFC 4-020-01, the DoD Security Engineering Facilities Planning Manual and any provisions of UFC 4-023-03, Design of Buildings to Resist Progressive Collapse.

g. **Standard 7, Structural Isolation:** This standard is retained without significant revision.

h. Standard 8, Building Overhangs and Breezeways: This standard is retained for new buildings but is no longer mandatory for renovations of existing buildings. Application for existing buildings will be based on risk and threat analysis in accordance with UFC 4-020-01.

i. Standard 9, Exterior Masonry Walls: This standard is retained for new buildings but is no longer mandatory for renovations of existing buildings. Application for existing buildings will be based on risk and threat analysis in accordance with UFC 4-020-01.

j. Standard 10, Windows and Skylights: This standard now only requires that windows for inhabited buildings meet a prescriptive standard. They must be a minimum of ¼ inch (6 millimeters) laminated glass with a minimum interlayer thickness and a minimum frame bite. There is no longer a requirement for designing windows and frames to be blast resistant. The prescriptive window, while no longer specifically blast resistant, will provide a reduced fragment debris hazard where there is an attack on a nearby building.

k. Standard 11, Building Entrance Layout: This standard is retained for new buildings but is no longer mandatory for renovations of existing buildings. Application for existing buildings will be based on risk and threat analysis in accordance with UFC 4-020-01.

l. Standard 12, Exterior Doors: This standard no longer requires blast resistant doors. It only requires that doors open outwards so they will tend to fail on rebound if there is a nearby blast event. Glazed doors are required to have glazing that complies with Standard 10.

m. Standard 13, Mail Rooms and Loading Docks: This standard is retained for new buildings but is no longer mandatory for renovations of existing buildings.

n. Standard 14, Roof Access: This standard is retained without significant revision.

o. Standard 15, Overhead Mounted Architectural Features: This standard is retained for new buildings but is only recommended for renovations of existing buildings.

p. Standard 16, Air Intakes: This standard is retained for new buildings but is only recommended for renovations of existing buildings.

q. Standard 17, Mail Room and Loading Dock Ventilation: This standard is retained for new buildings but is only recommended for renovations of existing buildings.

r. Standard 18, Emergency Air Distribution Shutoff: This standard is retained without significant revision.

s. Standard 19, Equipment Bracing: This standard is retained for new buildings but is only recommended for renovations of existing buildings.

t. Standard 20, Under Building Access: This standard is retained without significant revision.

u. Standard 21, Mass Notification: This standard is retained without significant revision.

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7. **Update.** This guidance reflects changes that have already been incorporated into the UFC. Future revisions will occur as normally scheduled and facilitated by the Discipline Working Group.

8. **Points of Contact.** HQUSACE point of contact for this ECB is Richard Ludwitzke, CECW-EC, (202) 761-1580. Protective Design Center point of contact for this ECB is Curt Betts, CENWO-ED-S, (402) 995-2376.

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LARRY D. MCCALLISTER, PHD, P.E., PMP
Chief, Engineering and Construction
Directorate of Civil Works