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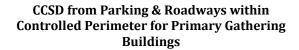
 ${\it The quarterly newsletter of Baldridge \& Associates Structural Engineering, Inc.}$

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There is a **new version of UFC 4-010-01 "DoD Minimum Antiterrorism Standards for Buildings"** dated 09 February 2012 that has some major changes. Perhaps the most significant change involves revisions to the Conventional Construction Standoff distances (CCSDs). CCSDs are now dependent on exterior wall material type.

This new approach is more transparent in its development and may prove beneficial in relaxing constraints on site planning and building layout. As indicated in the table below, the new CCSDs are greatly reduced for some wall types (i.e. reinforced concrete and masonry) and greater for others.



Exterior	Load Bearing		Non-Load Bearing		
Wall Material	Old UFC (ft)	New UFC (ft)	Old UFC (ft)	New UFC (ft)	
Reinforced Concrete	82	16	82	13	
Reinforced Masonry	82	30	82	13	
Metal Studs with EIFS	82	151	82	167	

It is important to note, however, that the new UFC eliminated windows and doors from any consideration of CCSD. Windows (and doors) must now be analyzed/designed for the blast pressures resulting from the applicable charge weight located at the "actual" standoff distance. This may result in heavier and hence costlier windows and doors when using the new CCSDs.



The table below illustrates the difference in glazing requirements for a typical 3 ft x 5 ft window subjected to a Type II explosive weight at various standoff distances (all meeting the CCSDs for reinforced concrete and masonry).

Glazing Cor	-	for Dif	fere	ent St	an	doff	•
Standoff							

Standoff Distance (ft)	Estimated Required Glazing *	
82	1/4" Laminated Glazing	
50	3/8" Laminated Glazing	
30	5/8" Laminated Glazing	
16	ASTM methodology N/A. Must use dynamic analysis or testing.	

- Assuming annealed glass and using the UFC 3-second design load approach (ASTM E 1300 and ASTM F 2248)
- Frames, connections etc. may also get heavier as standoff distance decreases.

Understanding the implications of AT/FP criteria on the overall building design is now more critical than ever. BASE's expertise in AT/FP coupled with our multi-hazard approach to design results in innovative and efficient solutions to the most challenging projects.