MIL-HDBK-1013/1A

Table 10
Minimum Construction Requirements for Class A Vaults (DIAM 50-3)

Minimum Construction Requirement		Minimum Penetration Time (minutes)				
		Low	Medium	High	Very High	
Walls	8-inch (200-mm) Reinforced Concrete (a)	(c)	(c)	12 (b)	<1	
Floors	8-inch (200-mm) Reinforced Concrete (a)	(c)	(c)	18 (b)	<1	
Roof/Ceiling	8-inch (200-mm) Reinforced Concrete (a)	(c)	(c)	12 (b)	<1	
Door/Frame	Class 5 (Fed Spec AA-D-00600C)	(c)	10	2	<1	

- (a) Assumes standard reinforcing: The most commonly used to prevent forced entry incorporates No. 5 bars, 6 inches (15 mm) on-center each way, staggered each face.
- (b) Penetration time is for an upward attack for other than floors on grade (not practical to attack).
- (c) Not practical to attack at this threat severity level.

MIL-HDBK-1013/1A

Table 11
Minimum Construction Requirements For Class B Vaults (DoD 5200.1-R)

Minimum Construction Requirement		Minimum Penetration Time (minutes)				
		Low	Medium	High	Very High	
Walls	8-inch (200-mm) brick	(a)	2.5	2.5	<1	
	8-inch (200-mm) concrete block masonry units, concrete filled, rebar in each core (b)	(a)	4.0	4.0	<1	
	4-inch (100-mm) monolithic, steel reinforced concrete (c)	(a)	3.0	3.0	<1	
Floors	Minimum 4-inch (100-mm) monolithic concrete (c)	(a)	(1)	9 (d)	<1	
Roof/ Ceiling	Minimum 4-inch (100-mm) monolithic reinforced concrete slab thickness determined by structural requirements. (c)	(a)	5.0	5.0	<1	
Door/Frame	Class 5 (Fed Spec: AA-D-00600C)	(a)	10	2.0	<1	

- (a) Cannot be defeated at this threat severity level.
- (b) Assumes No. 4 (12.7-mm) rebar
- (c) Assumes 6- by 6-inch (150- by 150-mm) welded wire fabric.
- (d) Penetration time is for an upward attack for other than floors on grade (which are not practical to attack).