

Instructions for Structural Certification of Arms Vault

This checklist pertains specifically to the requirements for the structural construction of the Arms Vaults in Army Reserve facilities per AR 190-11, Physical Security of Arms Vaults, Ammunition, and Explosives. Requirements for certification and construction are located in Section 2.2 and Appendix G of AR 190-11. Additional requirements for the Arms Vault, including electrical, lighting, IDS, and others are listed in UFC-4-171-05 and AR 190-11.

As required by AR190-11, Section 2.2 (shown below), a qualified engineer will verify the structural composition of the Arms Vault and prepare DA Form 4604. A usable DA-4604 is located at http://armypubs.army.mil/eforms/DA4400_to_DA4999_1.html. Specific requirements should be listed on the form to assist with future recertification. An example form is attached. The signed DA 4604 shall be posted in the interior wall of the Arms Vault.

In addition to posting of the DA Form 4604, field personnel shall coordinate with RSC security personnel on the delivery of information concerning the construction of the arms vault to include but not limited to:

- Completed checklist
- Digital photographs showing rebar construction and measurements
- Manufacturers data for door and lockset
- As built plans of Arms Vault
- Additional copy of signed DA Form 4604

Excerpt from AR 190-11 Section 2.2

“d. Qualified engineer personnel will verify the structure composition of AA&E storage facilities (for example, walls, ceilings, roofs, floors, and doors). Statements will be prepared on DA Form 4604–R (Security Construction Statement). Statements will indicate the highest construction category met for storage of AA&E, for example, Category I, II, III, or IV AA&E items and date of applicable regulation. (See para 2–4 for procedures when structural deficiencies exist.) The DA Form 4604–R will be affixed to the interior wall of each AA&E storage facility. The DA Form 4604–R will be locally reproduced on 8 1/2–x 11–inch paper. “

Arms Vault Security Construction Checklist

Facility _____

Preparer _____

Date _____

	<u>YES</u>	<u>NO</u>	<u>N/A</u>
<p><u>Walls</u> 8 inches of reinforced concrete with No. 4 reinforcing bars at 9 inches on center in each direction and staggered on each face to form a grid approximately 4-1/2 inches square. Reinforcement in the walls is tied into floors and ceilings. (Provide picture showing required spacing)</p>	_____	_____	_____
<p><u>Ceiling</u> 6 inches minimum reinforced concrete with No. 4 bars or larger, and forming a grid so that the area of opening does not exceed 96 square inches. (Provide picture showing required spacing)</p>	_____	_____	_____
<p><u>Floors</u> On Grade - 6 inches of reinforced concrete with 6 inch x 6 inch, W4 x W4 welded wire fabric or equivalent steel reinforcing bars (based on area of steel per square foot). square foot). Where the floor slab acts as the ceiling of an underlying room or area, the ceiling standards will apply. Where equivalent steel reinforcing bars are used, bar spacing will form a grid so that the area of any opening does not exceed 96 square inches. Reinforcement in the floor is tied to the walls. (Provide picture showing required spacing)</p>	_____	_____	_____
<p>Not of Grade (Above 1st Floor) – Utilize Ceiling Criteria</p>	_____	_____	_____
<p><u>Doors</u> GSA approved Class 5 armory door per GSA Fed Spec AA-D-600D with mechanical lockset meeting Fed Spec FF-L-2937 combination lock. (Include door and lock manufacturers cut sheet information)</p>	_____	_____	_____
<p><u>Openings</u> All opening (ducts, vents, other) greater than 96 square inches or more with the least dimension greater than 6 inches secured in accordance with one of the following: (Provide picture showing required spacing)</p>			
<p>1. Sealed with material comparable to that forming the adjacent wall</p>	_____	_____	_____
<p>2. Fitted with any of the barriers below with bars or steel mesh securely embedded in the structure of the building or welded to a steel frame that will be securely attached to the wall with fasteners inaccessible from the exterior of the arms storage facility:</p>			
<p style="padding-left: 20px;">a. Three-eight inch or larger hardened steel bars with vertical bars not more than 4 inches apart and with horizontal bars welded to the vertical bars so the openings do not exceed 32 square inches.</p>	_____	_____	_____
<p style="padding-left: 20px;">b. A minimum of 8-gauge high carbon manganese steel mesh with 2 inch diamond grind.</p>	_____	_____	_____
<p style="padding-left: 20px;">c. 6 gauge cold drawn steel wire mesh with 2 inch diamond grind when 8 gauge mesh above is not available.</p>	_____	_____	_____

Remarks