



Operation & Maintenance Manual

Arms Vault

Thank you for your purchase of an Armag Corporation Arms Vault. We have invested decades in perfecting our pre-fabricated semi-permanent structures and the processes that fabricate them. Many of our products built as early as 1969 are still in service and, given proper care, your Arms Vault should provide years of useful life. We hope your purchase meets your expectations. Should you have any questions or concerns, do not hesitate to contact us at (502)348-3987 or at info@armagcorp.com.

Dated 26-February-2020

Table of Contents

Contents

I. Product Identification.....	3
II. Installation.....	4
A. Offloading.....	4
B. Anchoring.....	4
C. Grounding.....	5
D. Caulking.....	6
E. Paint.....	6
F. Ventilation.....	6
G. Power.....	6
H. HVAC.....	7
I. Lights.....	7
J. Dehumidifier.....	7
K. IDS Prep.....	7
L. Emergency Shut-off.....	8
M. Other.....	8
III. Maintenance Schedule.....	9
IV. Warranty.....	10

I. Product Identification

Each Armag has a product number and serial number. The serial number is welded to the exterior body of the unit, typically to the bottom right of the primary entrance door. A data label can be found on the inside of the primary door. Typical locations are shown in Figure 1. Typical information found on data label is shown in Figure 2.

Armag Portable Arms Vaults are constructed to spec NSWC 3046-93-2.

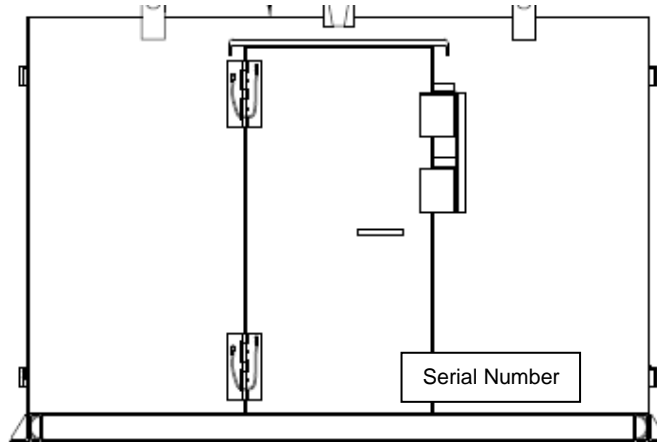


Figure 1. Typical serial number location.



Figure 2. Sample data label.

II. Installation

Installation requirements for Armag Arms Vaults vary depending on the options selected at time of purchase. Below are common installation procedures, but other procedures may be required as necessary. Please consult Armag if you are uncertain of your requirements.

A. Offloading

Armag Arms Vaults are built with a steel base structure and two or four top-mounting lifting lugs. We recommend the use of a crane or forklift for offloading. Offloading requirements will vary depending on the size and weight of the Arms Vault. Please consult Armag or a local contractor before lifting. The weight of the Arms Vault can be found on:

- Armag data label
- Armag drawing
- Armag quote

For crane offloading, Armag recommends using slings long enough to project a minimum angle of 60 degrees with the horizontal. Spreader bars are not required but can be used. See Figure 3 for typical lifting arrangement. Exact location of lifting lugs can be provided by Armag upon request.

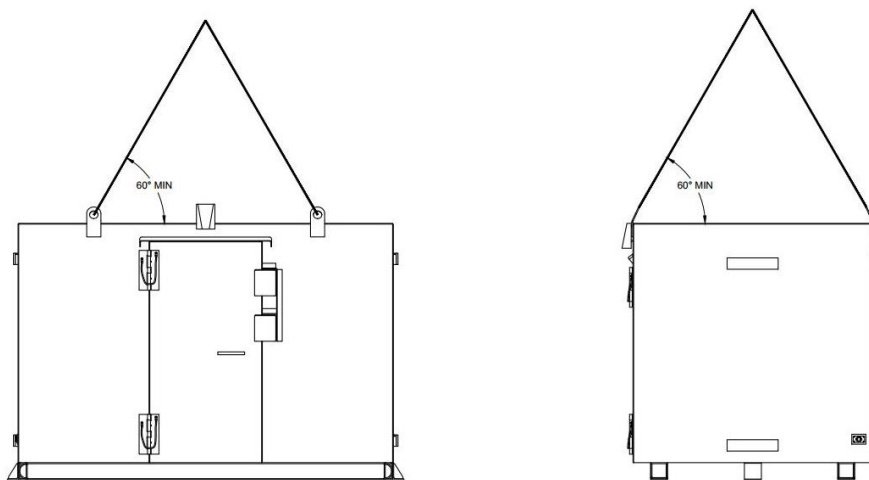


Figure 3. Typical lifting arrangement.

B. Anchoring

Each Arms Vault is equipped with no less than four Anchor brackets; typical arrangement is one on each corner. Anchor bolts are supplied by Armag as an option but are typically provided. The anchor bolts are $\frac{3}{4}$ " x 6" concrete expansion anchors, which are installed after placement of the Arms Vault. **Holes for anchor bolts should not be drilled prior to placement.** See figure 4 for installation example. Detailed installation instructions are as follows:

1. Drill the hole perpendicular to the work surface with a solid carbide bit that meets ANSI B212.5 specifications. The drill bit diameter will be the same as the anchor diameter that

you are installing. *To assure full holding power, do not ream the hole or allow the drill to wobble.

2. Drill the hole 1 diameter deeper than the intended embedment of the anchor, but not closer than two diameters to the bottom (opposite) surface of the concrete.
3. Clean the hole using compressed air and a nylon brush. A clean hole is necessary for proper performance.
4. Insert anchor into hole until washer rests solidly against fixture.
5. Tighten 1.5 to 3 turns past hand tight position but to a maximum torque of 170 ft-lbs

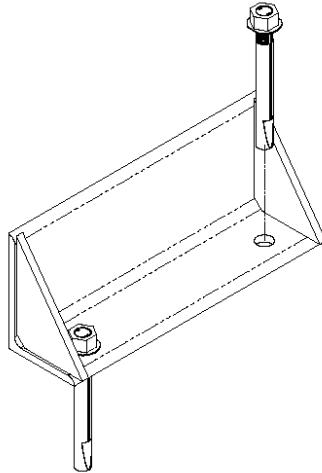


Figure 4. Anchor bracket with bolts

C. Grounding

Each Arms Vault is equipped with grounding lugs welded to the exterior body. Grounding rods, cables, and clamps are supplied by Armag as an option but are typically provided. See Figure 5 for a list of grounding materials. Materials supplied by Armag are designed to comply with NFPA 780. Please consult a licensed electrician for proper installation of grounding systems.

Some Arms Vaults are equipped with top-mounted copper air terminals. Your product drawing will determine whether or not the air terminals were purchased and installed. If air terminals have been provided, these are screw-in type. The lugs are welded to the body of the Arms Vault, which is $\frac{1}{4}$ " steel. The body acts as a faraday cage and a downward conductor to the ground rods.

For double-wide and multi-plex units, a jumper cable is required between each section at both ends of the roof. A lug is welded to the body of the Arms Vault so that the cable can be screwed into place. This cable is provided by Armag and generally installed by an Armag technician upon installation.

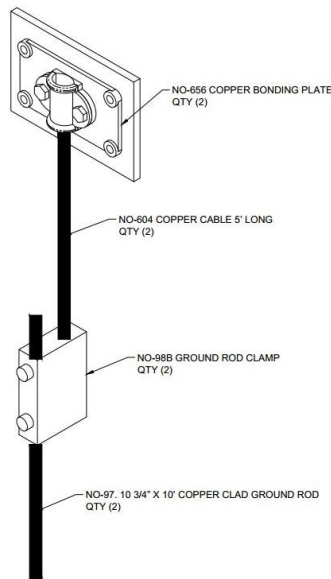


Figure 5 Ground Kit Materials

D. Caulking

Upon delivery, we recommend inspecting the Arms Vault to determine if any cracking in the caulk has occurred during transit. The primary areas of concern are around the interior trim and the floor at the entrance(s). If touch-up caulking is necessary, use a Latex based caulk. If you have purchased a double-wide or multi-plex unit, the seams should be caulked using Silicone. This is generally applied by an Armag technician upon installation, but should be inspected every 60 days.

E. Paint

Upon delivery, we recommend inspecting the exterior of the Arms Vault to determine if any touch-up paint is required. Armag has supplied exterior touch-up paint to perform this operation. If additional touch up paint is necessary, we recommend a Urethane paint or equivalent.

F. Ventilation

Armag Arms Vaults are equipped with passive ventilation openings. The vents should remain open if the unit is being stored in a static state. The vents will be open upon delivery. We recommend closing the vents before operation of the HVAC. The louvers are commercial grade vent registers and can be closed by hand.

G. Power

Armag Arms Vaults typically have an exterior shunt trip disconnect which feeds an interior electrical distribution panel. The voltage and frequency of the electrical systems in the Arms Vaults are specified at time of order. Consult with an Armag Representative if you are uncertain for what type of power is needed to operate the Arms Vault.

H. HVAC

Armag Arms Vaults are equipped standard with a high efficiency HVAC unit. Your Arms Vault may have been purchased with a unique HVAC system; if so, please refer to the specific manual for that system. For the standard Arms Vault HVAC units, find the remote and manual that is stored inside the front cover as shown in Figure 6. Ensure the HVAC unit has been plugged into the 6-30R outlet provided, and refer to the HVAC manual for startup, operation, and maintenance.

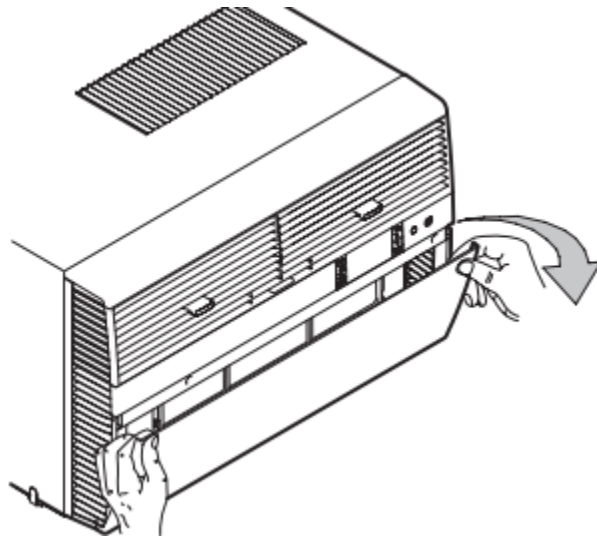


Figure 6 HVAC Manual Location

I. Lights

Arms Vaults are equipped standard with long life, high efficiency LED RAB SEAL4-50/D10 lights internally and a RAB SLIM18/PC photo sensing light above the exterior. The lights are designed to last up to 50,000 and 100,000 hours respectively. If the lights need to be replaced during the life your Arms Vault, please refer to RAB website for instructions. Your Arms Vaults may be equipped with other types of lights; if so, please refer to their specific manual.

J. Dehumidifier

If your Arms Vault is equipped with a dehumidifier, please refer to the manual sent with the Arms Vault for startup, operation, and maintenance. There should be an outlet installed close to the dehumidifier to provide power for the dehumidifier. If you are unable to locate the operator's manual for the dehumidifier, please contact an Armag Representative.

K. IDS Prep

Armag Arms Vaults are equipped with prep conduit and junction boxes for installation of an Intrusion Detection System. The exterior includes a junction box and wall penetration to feed communications lines. Armag has pre-designated a location for installation of the control panel, balanced magnetic switches (BMS), and passive infrared motion sensors (PIR). Locations for other types of sensors may have been prepped for installation.

L. Emergency Shut-off

Armag Arms Vaults are equipped with an Emergency Shut-off button in the event that the Vault needs to be powered off immediately. The button is found near the primary entrance door. The stop button triggers the exterior main breaker to flip when pressed. To return power to the Arms Vault:

1. Pull out the button from the stop position
2. Flip the exterior main breaker to on
3. Check the main breaker in the interior distribution panel
4. Check any other breakers that may have been tripped

M. Other

Your Arms Vault may be equipped with other options that are not listed in this manual. If so, all necessary installation information is provided as a hard copy with your Arms Vault. Please consult Armag if you need additional assistance.

III. Maintenance Schedule

Your Armag generally requires little maintenance, but following the maintenance schedule below is critical for maximizing the life of the unit. The maintenance schedule below should be performed every 60 days to identify any potential issues in a timely manner. If you have any questions regarding maintenance of your unit, please contact Armag.

Maintenance Item	Action
Door Hinges	Grease door hinges with Chevron Ultra EP#2
Exterior Paint	Inspect exterior paint for any chipping, scratching, or peeling; touch up as required with supplied touch up paint or contact Armag if more is required
Foundation	Inspect perimeter of unit (including HVAC housing if applicable and vents) for cracks, leaks, or blockages; repair as required or contact Armag for assistance
Issue Door	Ensure slide bolts are properly functioning to open and/latch issue window
Interior Paint	Inspect interior paint for scratches or peeling; touch up as required with supplied touch up paint or contact Armag if more is required
Interior Lights	Replace bulbs and/or fixtures as necessary
Floor Tile	Inspect for loose or damaged tiles; repair as required
Weather Stripping	Inspect weather stripping around door and replace as necessary
HVAC	If unit is equipped with HVAC, refer to specific owner's manual supplied with the equipment for maintenance and operation
Electrical	Contact a local licensed electrician for electrical support; if unable to find support, contact Armag for further assistance
Multiplex Assembly Connections	If the Armag is a duplex or multiplex, check the exterior bolts connecting sections to ensure they are tight; re-tighten if necessary. Check to see if there are any cracks in the caulk at the seams. Reapply Silicone caulk as needed
Miscellaneous	Each Armag is custom and may be equipped with specific equipment that requires its own maintenance schedule; please refer to each specific equipment's owner's manual for these or contact Armag for support

IV. Warranty

12 Month Limited Structural Warranty

For a period of 12 months from the earlier of the date of shipment or the date Armag informs purchaser that the product is available for shipment (the "Warranty Period"), Armag Corporation ("Armag") warrants to the original purchaser that the steel structure, the lumber interior and the exterior coating of the Armag product will be free from defects due to faulty materials or workmanship. This warranty excludes all other items/parts built into or included with the Armag product including, but not limited to, parts subject to a manufacturer's warranty, including any original equipment manufacturer (OEM) warranty, moving parts, removable accessories, electronics, and HVAC. During the Warranty Period, Armag will cause to be repaired or, at its option, to be replaced (or at Armag's option, pay the original purchaser the reasonable cost of repairing or replacing), the steel structure, the lumber interior and the exterior coating of the Armag product, necessitated by a defect in material or workmanship, and Armag shall pay the full cost of labor and materials for any such repair or replacement.

Armag's total, aggregate liability is limited to the purchase price paid by the original purchaser for the product (excluding the cost of parts not included within the scope of the warranty). Steps taken by Armag to correct defects shall not act to extend the terms or duration of the warranty. Armag shall not be obligated to remedy any defects covered by this warranty unless Armag is notified in writing of the defect before the expiration of the applicable Warranty Period.

Limitations and Exclusions

Armag's warranty obligations extend only to the original purchaser of the Armag product. Repair or replacement of defective structure in accordance with this warranty shall constitute fulfillment of all liabilities of Armag with respect to the Armag product. Armag is not responsible for damage due to negligence or failure to properly maintain the Armag product in accordance with the owner's manual or other specifications.

Armag neither expresses or implies any warranty at all with respect to parts or accessories manufactured by others which are incorporated into the Armag product. Those parts and accessories may carry warranties of their respective manufacturers. Armag will supply the original purchaser with any information it possesses concerning the warranties on parts and accessories and the identity and location of their respective manufacturers. However, Armag does not express or imply that any parts and accessories meet or will meet the expressed or implied warranties of their respective manufacturers or of any other person with respect to the parts and accessories.

Items not covered by Armag's warranty include (1) repairs arising from failure to maintain the Armag product, negligence, alteration, improper use of the Armag product, accident, vandalism or other casualty, or operation beyond rated capacity or specification; (2) repairs arising from abuse or neglect; (3) normal maintenance services, including bleeding rust issues associated with movable steel parts (door hinges, lift hooks, D-rings, etc.); (4) replacement of wear items; (5) claims involving an Armag product that was damaged in transit; (6) claims involving an

Armag product not then-currently owned and used by the original purchaser; (7) a lost or stolen Armag product; (8) repairs arising from any unauthorized modifications to the Armag product or unauthorized third party repairs; (9) removal and replacement of non-Armag parts; economic loss including lost profits; (10) unauthorized modifications or "field fixes"; and (11) defects in, or caused by, materials, work, designs or plans supplied by anyone other than Armag or its employees, agents or subcontractors.

Armag does not authorize any person to create for it any other obligation or liability in connection with an Armag product.

This warranty shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky, except for its conflict of laws principles, and the parties submit to the exclusive jurisdiction of the federal and state courts located in Louisville, Kentucky. By using your Armag product, you are agreeing to be bound by the terms of this Exclusive Certificate of Warranty.

IT IS THE MUTUAL INTENT OF ARMAG AND THE ORIGINAL PURCHASER THAT THE EXCLUSIVE WARRANTY AND EXCLUSIVE REMEDY SET FORTH ABOVE ARE GIVEN BY ARMAG IN LIEU OF: (1) ALL OTHER EXPRESS OR IMPLIED WARRANTIES AND REMEDIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF HABITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND WORKMANLIKE CONSTRUCTION, WHICH ARE HEREBY DISCLAIMED; AND (2) ALL OTHER CONTRACTUAL, EQUITABLE, OR TORT-BASED CAUSES OF ACTION OR REMEDIES WHATSOEVER RELATING TO ARMAG'S WORK, IT BEING THE EXPRESS INTENT OF THE PARTIES THAT THE PURCHASER'S SOLE REMEDY WITH RESPECT TO THE ARMAG PRODUCT IS THE EXCLUSIVE WARRANTY AND EXCLUSIVE REMEDY. IN NO EVENT SHALL ARMAG BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, INDIRECT OR PUNITIVE DAMAGES ARISING FROM A DEFECT IN THE ARMAG PRODUCT OR NONCONFORMITY IN ARMAG'S PERFORMANCE OF ITS OBLIGATIONS HEREUNDER OR FROM THE FAILURE OF THE ARMAG PRODUCT.