

[INCH-POUND]
AA-C-2786
September 7, 2004

FEDERAL SPECIFICATION

CABINET, SECURITY, INFORMATION PROCESSING SYSTEM STORAGE, CLASS 5

The General Services Administration has authorized the use of this federal specification by all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers uninsulated security cabinets which are designed to conform to the standards for physical security as set forth in the Information Security Oversight Office Directive No. 1, governing the classification, declassification, downgrading and safeguarding of national security information. The cabinets provide protection against unauthorized entry for the period of time specified in 1.2.1.

1.2 Classification.

1.2.1 Class, and style. The cabinets furnished under this specification shall be of the following class, type, and size, as specified (see 6.2).

Class 5 - Resistant to 20 man-hours surreptitious entry, 30 man-minutes covert entry, and 10 man-minutes forced entry.

1.2.2 Styles. The cabinets shall be of the following styles, as specified (see 6.2).

Style A - With channel base assembly.

Style B - Without channel base assembly.

1.2.3 Design of combination lock. The combination locks on cabinets furnished under this specification shall meet the requirements of FF-L-2740.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any other data which may improve this document should be sent to: General Services Administration, National Furniture Center, Engineering Division (3FNE-CO), 1901 South Bell Street, Room 403, Arlington, VA 22202.
--

AA-C-2786

2. APPLICABLE DOCUMENTS

2.1 Specifications and standards. The following specifications and standards of the issues in effect on the date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

Federal Specifications:

TT-C-490 - Cleaning Methods and Pretreatment of Ferrous Surfaces for Organic Coatings.

FF-L-2740 - Locks, Combination

PPP-B-621 - Boxes, Wood, Nailed and Lock-corner

PPP-B-585 - Boxes, Wood, Wirebound

PPP-B-1055 - Barrier Material, Waterproof, Flexible

Federal Standards:

FED-STD-123- Marking for Domestic Shipment (Civilian Agencies).

FED-STD-595- Colors.

(Activities outside the Federal Government may obtain copies of federal specification, standards, and commercial item descriptions as specified in the General Information section of the Index of Federal Specifications, Standards and Commercial Item Descriptions from the General Services Administration, Federal Supply Service, Specification Section, East 470 L'Enfant Plaza SW, Suite 8100, Washington, DC 20407.)

(Single copies of this specification and other federal specifications required by activities outside the Federal Government for bidding purposes are available without charge from Business Service Centers at the General Services Administration Regional Offices in Boston, New York, Washington, DC, Atlanta, Chicago, Kansas City, MO, Fort Worth, Denver, San Francisco, Los Angeles, and Seattle.

(Federal government activities may obtain copies of federal standardization documents, Handbooks and the Index of Federal Specification, Standards and Commercial Item Descriptions from the established distribution points in their agencies.)

Military Specifications and Military Standards:

MIL-L-10547 - Liners, Case and Sheet, Overwrap, Water-Vaporproof, or Waterproof, Flexible.

MIL-STD-129 - Marking for Shipment and Storage.

(Copies of Military Specifications and Standards required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

AA-C-2786

2.2 Other publications. The following document forms a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

American National Standards Institute (ANSI)/American Society for Quality (ASQ):

ANSI/ASQ Z1.4 - Sampling Procedures and Tables for Inspection by Attributes

(Application for copies should be addressed to ANSI, 11 West 42nd Street, New York, NY 10036.)

American Society for Testing and Materials (ASTM):

ASTM B633 - Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel.

ASTM D5486 - Tape: Pressure-Sensitive Adhesive, Waterproof, For Packaging.

ASTM D5168 - Standard Practice for Fabrication and Closure of Triple-Wall Corrugated fiberboard Containers.

ASTM D5486 - Standard Specification for Pressure-Sensitive Tape for Packaging, Box Closure, and Sealing.

ASTM D6251 - Standard Specification for Wood-Cleated Panelboard Shipping Boxes.

(Application for copies should be addressed to the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428- 2959)

Society of Automotive Engineers (SAE):

SAE-AMS-QQ-C-320 - Plating, Chromium (Electrodeposited).

SAE-AMS-QQ-P-416 - Plating, Cadmium (Electrodeposited).

Application for copies should be addressed to the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096-0001

National Motor Freight Traffic Association, Inc., Agent:

National Motor Freight Classification.

(Application for copies should be addressed to the American Trucking Association, Inc., Traffic Department, 1616 P Street, NW, Washington, DC 20036)

AA-C-2786

Uniform Classification Committee, Agent:

Uniform Freight Classification.

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

3. REQUIREMENTS

3.1 Qualification. The security cabinets furnished under this specification shall be products which have been tested, and have passed the qualification tests specified in section 4, and have been listed on or approved for listing on the applicable qualified products list (QPL).

3.1.1 Qualification suspension.

3.1.1.1 Development of entry techniques. The cabinets qualified under this specification will be continually tested by the Government during the term of qualification to determine whether the security protection afforded by the cabinets should or can be improved. If, at any time, entry techniques are developed within the framework of the specification which affect a cabinet's security integrity, it shall be removed from the QPL and the manufacturer will be required to modify the product to the extent necessary to defeat the techniques, and have the cabinet requalified.

3.1.1.2 Change in specification requirements. This specification will be continually reviewed by the Government to determine whether specification requirements should or can be changed to improve product quality. If, at any time, requirements are changed, and such changes affect the qualification status of a qualified cabinet, it shall be removed from the QPL and the manufacturer will be required to modify the product to the extent necessary to comply with specification changes and have the cabinet requalified.

3.2 Material. Material used in the cabinet's construction shall be as specified herein. Material not definitely specified shall be of good commercial quality, suitable in all respects for the purpose intended.

3.2.1 Steel. Steel used in the cabinet shall be of a type, thickness, and strength to meet all applicable requirements of this specification. Steel shall be free from rust, scale, pits, buckles, and other imperfections which might adversely affect the appearance or the serviceability of the finished product.

3.2.2 Face hardware. Material used in the cabinet door handle and lock bolt operating handle shall be satin-finished anodized aluminum, type 430 corrosion resistant steel, brushed chromium on steel, or on die-cast zinc, brass or bronze, or electrolysis nickel coating. Chromium plating shall be as specified in 3.2.3.2.

AA-C-2786

3.2.3 Finishing materials.

3.2.3.1 Enamel and lacquer. The final coat for the cabinet shall be either an enamel of the baking type, or it may be an air-dry, textured finish, nitrocellulose lacquer or water reducible coating. The quality of the final coat and its application shall be in accordance with good commercial standards and practices. The color shall be as specified in 3.2.4.

3.2.3.2 Chromium plating. Chromium plating shall be class I, type II, of SAE-AMS-QQ-C-320.

3.2.3.3 Cadmium plating. Cadmium plating shall be in accordance with class I, type I, of SAE-AMS-QQ-P-416.

3.2.3.4 Zinc coating. Zinc coating shall be in accordance with type I, class 2, of ASTM B 633.

3.2.4 Color of finish. The color of the finish shall be as specified (see 6.2) from the following colors as identified in FED-STD 595:

Gray Color - No. 26134

Black Color - No. 27040

Parchment - Color No. 27769

(Sample panels of the standard color are obtainable, without charge, from the Business Service Center, General Services Administration, Federal Supply Service, Washington, D.C. 20407, or from the Business Service Center in the nearest Regional Office.)

3.3 Construction.

3.3.1 Design. The design and general appearance of the cabinet shall be consistent with the intended use. Cabinets shall be vertical (upright) with a single or double, hinged door(s).

3.3.2 Assembly. The top, sides, back, bottom, and case frame members shall be assembled into a rigid unit. All welding, brazing, and mechanical attachments shall accomplish secure and rigid joints in proper alignment. Welding and brazing shall be sound without porosity. All protruding and depressed welds on the cabinet's exterior shall be filled and sanded or ground smooth.

3.3.3 Sizes. Each cabinet with different dimensions shall be submitted to GSA for evaluation and testing. All single door containers shall have at least one dimension of 30 inches or less.

AA-C-2786

3.3.4 Weight. The net weight of the cabinet shall not exceed the pounds per square foot of cabinet base area specified hereunder. The cabinet's base and top area shall be of the same dimensions. The weight shall be clearly and permanently marked on the cabinet base so as to be visible from the front. The weight per square inch of base interaction with the floor shall also be marked.

Class 5 - 250 pounds per sq. ft. of base area.

3.3.5 Door(s). The cabinet shall have a hinged door(s) which shall swing outward to the open position. The door(s) shall be in alignment and move easily and smoothly on the hinges. The door(s) in any open position shall not overbalance the empty cabinet. The cabinet door(s) shall be tested as specified in 4.4.9.1. The door should open to allow complete access of the entire opening

3.3.5.1 Door handle. The door shall have a handle to provide easy and convenient operation to open and close the door. The handle may be integral with the throw-bolt mechanism. The handle shall be of any of the materials specified in 3.2.2, and of sufficient strength to withstand hard usage. Exterior surfaces shall be finished by a method to eliminate roughness and sharp edges. The handles shall be securely and firmly staked to the door in a manner to withstand hard daily usage and shall withstand the test in 4.4.9.5. The door handle shall extend past the lock dial to protect the lock from damage.

3.4 Lock and locking mechanism. The cabinet shall be locked by a positive bolt mechanism, which incorporates a detent feature to hold the lock bolts in a retracted position when the door is open. A changeable combination lock shall be mounted in the door to control the locking of the entire cabinet. The lock shall be tested as an integral component of the cabinet. The lock shall meet the requirements of Federal Specification FF-L-2740.

3.4.1 Combination lock installation. The lock's dial ring shall be mounted so as to be flush to the front surface of the door front. The attachment of the dial ring to the door shall be firm and secure so that there is no movement or side play. The lock case shall be securely attached to the door with screws which shall be retained by lock washers or other suitable and effective means so that there is no movement or side play. The lock shall not be changed or altered in any manner from the formation supplied by the lock manufacturer. No lubricant other than that supplied by the lock manufacturer shall be used with the lock case.

3.4.2 Lock and lock mounting drawings. Upon the specific written request of the purchaser, the manufacturer of the cabinet shall supply complete and exploded view drawings of the cabinet's locking mechanism and lock mounting, with individual parts indexed.

3.5 Cabinet cooling. The cabinet shall contain a cooling system capable of removing heat generated by the installed electronic device(s). The cooling equipment shall consist of vents, tube axial fans and/or blowers, or self contained air conditioning equipment. The cooling equipment shall occupy the minimum space practicable inside the cabinet. Cooling requirements shall be based on the rated power input of the equipment, the acceptable air temperature rise within the cabinet, the installed electronic device population, and the cabinet size. The type, amount and configuration of cooling equipment within the cabinet shall be specified by the purchaser (see 6.2). All fans, blowers, and air conditioning equipment shall comply with the appropriate standard. The design and construction of the vent and other opening shall provide the specified Class protection level. Any condensate resulting from air conditioner operation shall be run to the outside of the container through an appropriate tube so the condensate does not remain inside the container to damage the electronic equipment or container itself.

3.6 Power and data openings. The security container shall contain a secured cable opening for data and power cables. The design and construction of the opening shall provide the specified Class protection level and provide the appropriate strain relief without sharp edges.

3.6.1 Separate Power Opening. The container may provide a separate, secured opening for power lines. The opening shall have a maximum diameter of one inch with an appropriate sleeve to prevent abrasion of the power lines. The design and construction of the secured power line opening shall provide the specified Class protection level and required grounding.

3.6.2 Junction Box Attachment. The cabinet may have blind threaded holes to allow the attachment of a junction box to the cabinet. The junction box shall be positioned over the data and power entry ports allowing unrestricted entry of cables into the security container. The threaded holes shall be a minimum of 3/8 inch deep and shall be backed by steel plates to protect against using the holes to gain entry into the container. If threaded holes for junction box mounting are provided, they shall be located as shown in Figure 1.

3.7 Channel base assembly. The channel base assembly for the style A cabinet shall consist of two channel formed, removable steel bases attached to the cabinet's bottom. One base shall extend from front to back on the left underside of the cabinet; the other from front to back on the right underside. The bases shall be 4 inches high and 5 inches wide, $\pm 1/4$ inch. The side of the base which bears on the floor surface shall have a return flange from each side so as to provide a lengthwise slot approximately 2 inches wide. The slot may extend the full length of the base or it may run to within approximately 2 inches from each end of the base. The outer edges of the base shall be recessed approximately $1/2$ inch in from the side, front, and back edges of the cabinet base. The front and rear ends of the bases shall have metal caps which shall be removable when it is desired to anchor the cabinet to the floor. Attachment of the base assembly shall not weaken the tamper resistance quality of the cabinet and the assembly shall withstand the test in 4.4.9.3.

AA-C-2786

3.8 Pretreatment and finishing.

3.8.1 Pretreatment. All exterior and interior ferrous metal surfaces of the cabinet shall be treated for painting in accordance with any of the types in TT-C-490.

3.8.2 Finishing. The final coat shall be applied to all exterior and interior metal surfaces except plated metal. The minimum total finished film thickness of the final coat shall be not less than 1.0 mil. The final coat shall level out to produce uniform exposed surfaces without runs, grit or other foreign matter, areas of thin film or no film, and without separation of color. Special attention shall be given to the base and interiors to insure that all surfaces are adequately protected against rust. The final finish shall withstand the test in 4.4.9.6 without evidence of cracking, flaking, or loss of adhesion of the finish. Two test panels of 0.0359 inch steel in 3 by 5 inch size shall be furnished for purposes of the test. One panel shall be prepared to reflect the inner coating and one to reflect the outer coating used.

3.8.3 Bolts, screws, and nuts. Bolts, screws, nuts, and similar hardware shall be made to resist rust by electrogalvanizing or by zinc coating, cadmium, or chromium plating as specified in 3.8.2, or shall be made of stainless steel.

3.9 Lubrication. All of the cabinet's moving parts requiring lubrication shall have a lubricant applied which is suitable to the varied climatic conditions likely to be encountered during the service of the cabinet.

3.10 Surreptitious, covert, and forced entry. Cabinets shall be tested as specified in 4.4.9.4, and the surreptitious, covert, and forced entry protection afforded by the cabinets shall be for not less than the periods of time specified hereunder.

Class 5 - 20 man-hours against surreptitious entry, 30 man-minutes against covert entry and 10 man-minutes against forced entry.

3.11 Identification labels. Each cabinet furnished by contract or order under this specification shall bear metallic labels as specified hereunder. The GSA label and cabinet number label shall be attached with a durable adhesive and either two rivets or two drive screws.

3.11.1 GSA label. The label shall be affixed to the outside surface of the door. The label shall have a silver background and blue letters not less than 1/8 inch in height. The label shall show the following:

GENERAL SERVICES ADMINISTRATION
APPROVED IPS SECURITY CONTAINER
(Not for the storage of hard copy materials)
MANUFACTURER'S NAME OR LOGO
AA-C-2786

AA-C-2786

3.11.2 Cabinet identification and contract number. This label or labels shall be affixed to the inside face of the door. The label shall show in easily read letters, the manufacturer's name and address, the cabinet's model and serial numbers, date of manufacture, and the Government contract number.

3.11.3 Certification label. This label shall be affixed on the inside face of the door and shall be clearly visible when the door is open. The label shall show the following in easily read letters not less than 1/8 inch in height:

"This is a U.S. Government Class 5 security container, which has been tested and approved by the Government under Fed. Spec AA-C-2786. It affords the following security protection:

20 man-hours against surreptitious entry.
30 man-minutes against covert entry.
10 man-minutes against forced entry."

3.11.4 Number label. All security cabinets under this specification shall have a number label affixed to the front face of the product. The label attachment shall not degrade the cabinet security. The label shall be mounted on the cabinet frame above or to the left side of the door. The label shall be nominal 0.020 inch thick, satin finished aluminum and shall be 2-1/2 by 11/16 inches. The label numbering system shall be established by the manufacturer to provide nonrepetitive numbers. The label numbers shall be minimum 3/16 inches high and shall be embossed.

3.12 Workmanship. The workmanship shall be of a quality to produce a serviceable and well finished end item able to withstand hard daily usage. The edges of all exposed parts shall be protected by folding, beading, flanging, or grinding to eliminate burrs, roughness, and sharp edges. The bending of channels and flanges shall be straight and smooth. Welding and brazing shall produce rigid and secure connections. Lock washers, cotter pins, clips, retainers, or built-in features shall be used to prevent loosening of screws, bolts, and nuts, which may cause disengagement of parts and possible lockout. Care shall be taken to insure that face hardware including door handles and combination locks are securely and firmly mounted on the cabinet by methods to prevent their loosening in operation. The cabinet door and locking mechanism shall operate smoothly without binding or jamming of parts. To assure compliance with the requirements for lock installation, particular attention shall be given to the quality of workmanship and the method used in installation of the lock in the cabinet door. The cabinet shall be free of any defect or feature which may affect its appearance and serviceability, or which may cause personal injury.

3.13 Replacement of component parts. Component parts, such as suspensions, racks, combination locks, and external face hardware shall be capable of identical replacement in the field without the use of specialized tools or specially qualified personnel and without weakening the security protection of the cabinet.

AA-C-2786

3.14 Assembly drawing and parts list. A parts list of all cabinet parts which may be subject to subsequent replacement because of wear or damage shall be furnished with each cabinet delivered under contract. The parts list shall clearly identify the parts by description, location and part number. When necessary, assembly drawings shall be provided to show the location of the parts. The parts list shall be printed on heavy paper or other suitable material and bonded by glue or adhesive to an inside surface of the cabinet in a location accessible to maintenance personnel.

4. QUALITY ASSURANCE PROVISIONS

4.1 Inspection responsibility. Except that testing for qualification shall be performed by an agency designated by General Services Administration, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own or any other inspection facility or service acceptable to the Government. Inspection records of the examinations and tests shall be kept complete and available to the Government as specified in the contract or order. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to the prescribed requirements.

4.2 Component and material inspection. In accordance with 4.1, the supplier is responsible for insuring that components and materials used are manufactured, tested and inspected in accordance with the requirements of referenced subsidiary specifications and standards to the extent specified, or, if none, in accordance with this specification.

4.3 Examination of preparation for delivery. An examination shall be made to determine that the packaging, packing and marking comply with the requirements in Section 5 of this specification. Defects shall be scored in accordance with table I. The sample unit shall be one shipping container fully prepared for delivery. Sampling shall be in accordance with ANSI/ASQ Z1.4. The lot size shall be the number of containers in the inspection lot. The inspection level shall be I and the AQL shall be 4.0 defects per hundred units.

Table I Classification of preparation for delivery defects

Examine	Defects
Markings (exterior)	Omitted; incorrect; illegible; improper size, location, sequence or method of application.
Materials	Any component missing or damaged.
Workmanship	Inadequate application of components such as incomplete closure of container flaps or shroud.

4.4 Testing procedures and tests.

4.4.1 Testing agency. Qualification tests accomplished on cabinets submitted for approval for inclusion on the applicable Qualified Products List (QPL) and any retesting that may be required shall be performed by a testing agency specifically designated by the General Services Administration.

4.4.2 Test costs. All testing costs entailed in determining the qualification of the supplier's product, changes submitted after product approval and costs of retesting of a qualified product if subsequently disqualified under 3.1.1, shall be borne by the supplier, and shall be payable to the General Services Administration.

4.4.3 Test procedures. The following procedures shall govern the testing of all cabinets submitted for qualification under this specification:

(a) Samples shall be submitted for qualification only after the supplier has obtained written authorization from the General Services Administration.

(b) A qualification test may be discontinued at the Government's testing facility at any time the product fails to meet any one or more of the requirements set forth in this specification. The manufacturer may be permitted to make modifications on the sample during the testing phase where such modifications, in the judgment of the General Services Administration and the testing facility, are clearly in the interest of the Government.

(c) In case of failure of the sample, consideration will be given to the request of the manufacturer for resubmission for retest only after it has been clearly shown that changes have been made in the product which the Government considers sufficient to warrant retest.

(d) The manufacturer or his representative will not be permitted to observe the actual tamper resistance tests conducted on his product at the testing facility. However, when samples tested fail to comply with the requirements of this specification, the sample may be examined by the manufacturer or his representatives and full details of the failure may be made known to them in a manner which, for reasons of security, will be in the best interest of the Government.

4.4.4 Test samples. Two qualification test samples shall be forwarded at a time and to a place designated by the General Services Administration. In the event the samples are destroyed or damaged to such an extent during testing that testing cannot be completed, the Government reserves the right to require the manufacturer to furnish additional samples to complete the testing. Samples delivered to the test facility shall have a tag attached which shall reference this specification and identify the sample by class, style, and size.

AA-C-2786

4.4.5 Drawings and material specifications. The manufacturer shall furnish two complete sets of construction and assembly drawings and material specifications with the sample submitted for qualification. When samples have been tested and the product is approved for inclusion on the applicable QPL, the manufacturer shall furnish three complete hard copy and one electronic copy in DWG or DXF format of the assembly and construction drawings and material specifications lists to the General Services Administration for the Government's use in inspection and acceptance of the product after award of contract. All material so furnished by the manufacturer will be held in proprietary confidence.

4.4.6 Changes in construction or construction drawings. No changes shall be made in the construction or construction drawings of the cabinet after it has become qualified and is furnished under contract or order unless prior written authorization to make changes is obtained from the GSA contracting officer. Upon written authorization, the manufacturer shall furnish three complete sets of hard copy drawings, and one electronic copy in DWG or DXF format of the changes to the General Services Administration.

4.4.7 Qualification testing. Qualification testing shall consist of the following tests described under test methods in 4.4.9. Failure of the sample to withstand one or more of these tests shall provide reason to consider the product as having failed to meet qualification requirements.

- (a) Door test - 4.4.9.1
- (b) Drop test - 4.4.9.2
- (c) Channel base test - 4.4.9.3
- (d) Surreptitious, covert and forced entry tests - 4.4.9.44
- (e) Service test - 4.4.9.5
- (f) Finish test - 4.4.9.6

4.4.8 Acceptance after award of contract. The Government reserves the right to inspect and test each cabinet, including all component parts thereof, delivered for acceptance under this specification after award of contract.

4.4.9 Test methods.

4.4.9.1 Door test. For the purpose of this test the cabinet shall be empty and shall not be anchored to the floor. The cabinet door shall be opened 90 degrees from its closed position and 150 pounds of weight shall be loaded on the top edge of the door opposite and furthest from the hinged side. The cabinet shall be allowed to remain in this condition for approximately 24 hours. The cabinet shall then be examined. It shall have failed the test if the weighted door has caused the cabinet to tip over or if the door fails to operate easily and smoothly.

4.4.9.2 Drop tests. All sample cabinets shall be subjected to the tests specified in 4.4.9.2.1 and 4.4.9.2.2. Cabinets shall be loaded with weight to simulate 150 pounds of stored material. Cabinets shall then be locked and drop tested as specified. Style A cabinets shall be tested with channel base assembly attached. This test does not apply to type III cabinets.

4.4.9.2.1 Thirty-six inch test. The cabinet shall be raised until its base is 36 inches above the floor surface. It shall then be allowed to free fall, onto a hard, level surface. Any resulting lockout requiring destructive force to reduce shall provide reason to consider the cabinet as having failed to withstand the test.

4.4.9.2.2 Thirty foot test. The cabinet shall be raised until its base is 30 feet above the floor surface. It shall then be allowed to free fall, base down, onto a hard, level surface. Any damage which results in the releasing or making accessible without further force, any part of the stored material shall provide reason to considered the cabinet as having failed to withstand the test.

4.4.9.3 Channel base assembly test. This test shall only apply to Style A cabinets. The cabinet, loaded as specified in 4.4.9.2, shall be locked and then raised until the bottom of the channel base assembly is 6 inches above the floor surface. The cabinet shall then be allowed to free fall base down, onto a hard level surface. The test shall not cause appreciable distortion to the assembly nor weaken its attachment to the cabinet.

4.4.9.4 Surreptitious, covert and forced entry tests. There shall be sufficient time and opportunity to study the design and construction of the cabinet and to develop testing methods prior to the start of testing. There shall be no limit to the number of methods of surreptitious and forced entry attempted. Not more than two men shall be used simultaneously during each attempt at entry. The man-minute working time shall cover the period during which a surreptitious, covert or forced entry test on the cabinet is in progress and shall be exclusive of time required for safety precautions and rest periods.

4.4.9.4.1 Tools and devices. Tools and devices used in the surreptitious entry tests are unlimited, except that the total weight of the tools used for a single test shall not exceed 150 pounds. The tools and devices used in the entry tests shall be limited as specified below. Power tools, electrically or battery powered shall be commercially available equipment, and shall be limited to drills not exceeding 5000 rpm. Pressure rigs may be used, with a lever arm not exceeding 36 inches. Tools may be reasonably modified, i.e., special chucks on drills, ground or shaped chisels or pry bars, etc. Electrical tools shall be able to operate on electricity available in normal office space. Tools and devices shall be capable of being carried in two cases or bags, each case or bag not exceeding 1.5 cubic feet in volume. The total weight of the tools used in a single test shall not exceed 150 pounds, exclusive of the weight of the case. Devices for the application of heat shall be limited to single tank propane, butane or equivalent devices which fall within the weight and dimension limits specified above. Acetylene, MAPP or equivalent shall not be used. Electric arc or any form of burn bars, oxidizer assisted products or explosives shall not be used. The test tools and devices selected for a particular attempt shall be weighed prior to commencement of the test.

AA-C-2786

4.4.9.4.2 Timing. The time clock shall be started when the test equipment is picked up to approach the sample and shall not be stopped during the test except as specified above. Any change or repair of tools taken from the carrying case during a test shall only be done while the clock is running. The tests must be conducted in a manner that is repeatable. Any surreptitious, covert or forced entry into the cabinet under the above conditions, within the time specified for the cabinet's class, shall provide reason to consider the cabinet as having failed to meet the requirement.

4.4.9.5 Service Test - The container shall undergo 10,000 opening and closing cycles. One cycle shall consist of turning the handle to retract the locking mechanism, pulling the door open ninety degrees, closing the door and extending the locking mechanism via the bolt hold-open detent or handle assembly. After the completion of the specified number of cycles, the container shall not show any damage or wear that affects the serviceability of the container.

4.4.9.6 Finish test. The steel panels prepared in accordance with 3.8.2 shall be bent around a ¼ inch rod to an angle of 180 degrees. The panels shall then be examined for compliance with 3.8.2.

4.4.10 Inspection. The cabinet shall be inspected for compliance with requirements of this specification for dimensions, weight, color and finish, and workmanship.

5. PREPARATION FOR DELIVERY

5.1 Packaging. Packaging shall be level A, B, or C, as specified (see 6.2).

5.1.1 Level A and B. Cabinets shall be protected from marring or surface abrasion by cushioning with fiberboard pads, cellulose wadding or comparable fiberboard pads of sufficient width and thickness to afford maximum protection against stresses of shipment and storage. The fiberboard pads and cushioning material shall be secured in place with tape conforming to ASTM D5486, class 3.

5.1.2 Level C. Cabinets shall be cushioned and protected in accordance with the manufacturer's commercial practice.

5.2 Packing. Packing shall be level A, B, or C, as specified (see 6.2).

5.2.1 Level A.

5.2.1.1 Cabinets weighing 1,000 pounds or less. Each cabinet, cushioned as specified in 5.1.1, shall be packed in a box conforming to PPP-B-621, class 2; PPP-B-585, class 3; ASTM D 6251, overseas; or to ASTM D5168, class 2, grade A respectively. Each shipping container shall be provided with a sealed case liner conforming to MIL-L-10547. Closure and strapping shall be in accordance with the appendix to the applicable box specification.

AA-C-2786

5.2.1.2 Cabinets weighing over 1,000 pounds. Each cabinet, cushioned as specified in 5.1.1, shall be packed in a crate. The cabinet shall be blocked, braced, and anchored to prevent movement within the crate during transit and shall be shrouded with paper conforming to PPP-B-1055. The shroud shall completely enclose the cabinet and shall extend to the base of the crate.

5.2.2 Level B. The cabinets shall be packed as specified in 5.2.1, except that the containers shall be domestic class and type and caseliners and waterproof shrouds shall not be required. Closures, strapping, blocking, and bracing shall be in accordance with the Appendix to the applicable container specification.

5.2.3 Level C. The cabinets shall be packed to insure carrier acceptance and safe delivery to destination in containers complying with the rules and regulations applicable to the mode of transportation.

5.3 Marking.

5.3.1 Civil agencies. In addition to any special marking required by the contract or order, shipping containers shall be marked in accordance with Fed. Std. No. 123.

5.3.2 Military requirements. In addition to any special marking required by the contract or order, shipping containers shall be marked in accordance with MIL-STD-129.

6. NOTES

6.1 Intended use. The filing cabinets under this specification are intended for the storage of electronic media and communication devices. The container shall not be used for the storage of hard copy, classified materials.

6.2 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in procurement documents:

- (a) Title, number, and date of this specification.
- (b) Class, style, and size required (see 1.2.1).
- (c) Type of cooling equipment (see 3.5).
- (d) Selection of applicable levels of packaging, packing, and marking required (see 5.1, 5.2, and 5.3).

6.3 Qualification. With respect to products requiring qualification, awards will be made only for such products as have, prior to the time set for opening of bids, been tested and approved for inclusion on the applicable Federal Qualified Products List, whether or not such products have actually been so listed by that date. The attention of suppliers is called to this requirement, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification so that they may be eligible to be awarded

AA-C-2786

contracts or orders for the products covered by this specification. The activity responsible for the Qualified Products List is Furniture Commodity Center, Federal Supply Service, General Services Administration, Washington, D.C. 20406, and information pertaining to qualification may be obtained from that activity.

6.4 Definitions of terms used in this specification.

6.4.1 Entry. For the purpose of this specification, entry means: (1) the opening of the cabinet, or (2) provision of a gap, crevice or hole of any dimension in the cabinet from which material can be extracted.

6.4.2 Surreptitious entry. For the purpose of this specification, surreptitious entry means a method of entry, such as lock manipulation or radiological attack on the combination lock, which would not be detectable during normal use or during inspection by a qualified person.

6.4.3 Covert entry. For the purpose of this specification, covert entry is defined as a method of entry which causes physical damage to the cabinet or lock such that the damage can be repaired to the point where it would not be detectable by a user during normal use. However, the damage would be detectable during inspection by a qualified person. If replacement parts, including replacement lock parts, or paint, are necessary to conceal the damage caused by the entry attempt so it cannot be detected during normal use, the entry method shall be considered covert.

6.4.4 Forced entry. For the purpose of this specification, forced entry means a method of entry which would leave evidence of the act and which would be readily discernible in the normal use of the cabinet. Forced entry is considered to be an attack in which the attacker has no concern over leaving evidence that the container has been opened.

6.4.5 Normal use. For the purpose of this specification, normal use means the opening of the combination lock, releasing the locking mechanism, opening the cabinet door to the extent necessary for the reception or withdrawal of material; and closing and relocking the cabinet. During normal use, the cabinet's top and front are exposed to view and touch; the rear and sides exposed to view only; and the base is not exposed to view or touch.

6.4.6 Lock manipulation. For the purpose of this specification, lock manipulation is defined as the opening of the combination lock without alteration of the physical structure, or disarranging of parts. Ordinarily, manipulation would be accomplished by movement of the lock dial.

6.5 Samples. All samples required for test purposes shall be furnished at no expense to the Government and the manufacturer shall pay all transportation charges to and from the point where the tests are performed. All tested samples shall become the property of the Government but may be released to the manufacturer at the option of the Government. Upon request, the manufacturer shall furnish to the Government testing facility, a cabinet equal in every respect to that of the qualified sample for use, of inspection and test during the term of qualification. The cabinet shall be furnished at no expense to the Government and will be returned to the manufacturer upon removal of his product from the qualified products list.

AA-C-2786

6.6 Special techniques. Information relating to special techniques will be disclosed to qualified suppliers and personnel of the Federal agencies on a need-to-know basis.

Preparing activity:
GSA-FSS

AA-C-2786

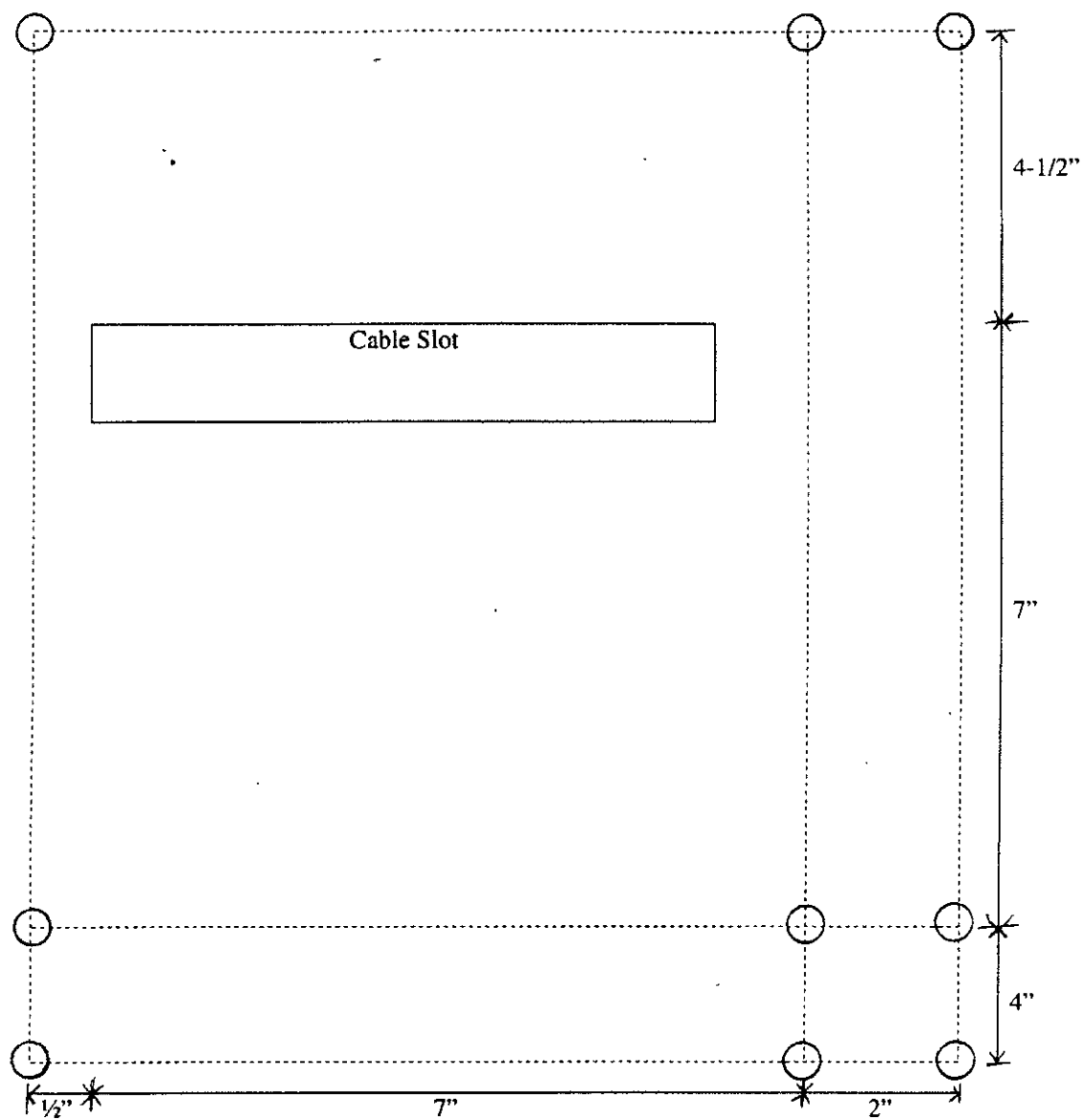


Figure 1
Threaded Hole Placement