

DIVISION 12 - FURNISHINGS

SECTION 125116 – METAL CASE GOODS (Multimedia Rotary Storage Unit)

SECTION 125119 - FILING CABINETS (Rotary Storage Unit)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawing and general provisions of the contract, including general and supplementary conditions and related specification sections, apply to this section.

1.2 SUMMARY

- A. This section includes the following:
 - 1. Multimedia Rotary Storage Unit
 - 2. Filing Media Rotary Storage Unit

1.3 REFERENCES

- A. American National Standards Institute (ANSI) Standards
- B. American Society for Testing and Materials (ASTM) Standards

1.4 DESCRIPTION

- A. General: Multimedia Rotary Storage Unit and Filing Media Rotary Storage Unit
- B. Finishes:
 - 1. Metal Components and Accessories: All shelving components including accessories shall be finished with an electrostatically applied Gloss-Tek™ powder coat as outlined in Section 2.5 A and B which shall meet or exceed ASTM D3451-06 test requirements.
 - 2. Wood Cladding and Magnetic Overlays: If required shall be as specified in Section 2.3.C.1.a
- C. Sizes:
 - 1. Available in heights of and including plus sizes of: 2 tier 29 ½ inches (749 mm), 3 tier 41-5/8 inches (1058 mm), 4 tier 50-3/8 inches (1280 mm), 5 tier 60-7/8 inches (3068 mm), and additionally 66 1/8 inches (1680 mm), 71 3/8 inches (1813 mm), 76 5/8 inches (1946 mm), 82 inches (2083 mm), 89 inches (2261 mm), and 92 ½ inches (2350 mm).
 - 2. Available in widths of 30-3/4 inches (781 mm), 36-1/2 inches (927 mm), 38-1/8 inches (968 mm), 45-1/4 inches (1149 mm).
 - 3. Available in depths of 25 inches (635 mm) and 31 inches (787 mm).

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4. Units shall be available in standard sizes and configurations to facilitate a wide variety of markets and accommodate various types of media including but not limited to; Letter, Legal, EDP, and A4 file folders.
5. Units shall be available as Starter, Add-on, and Extended Add-on to accommodate multiple rotation units as to be determined by configuration.

1.5 PERFORMANCE REQUIREMENTS

- A. Design Requirements:
- B. Refer to plan view for starter and adder configuration, overall system dimensions, and location
- C. Refer to elevation view(s) for internal unit configuration and cabinet height.
- D. Seismic Performance: Provide rotary storage unit(s) capable of withstanding the effects of earthquake motion as required by applicable building codes.
- E. Varied Individual Unit Height: For space savings, flexibility, and practicality, the ability shall be provided to maintain various heights between the adjoining units without the necessity of side-by-side starter units.

1.6 SUBMITTALS

- A. Product Data: Submit manufacturer's product literature and installation instructions.
- B. Drawings: Provide layout of storage units including identification notations and dimensions. Provide elevation drawings of all units quoted.
- C. Initial Selection Samples: For initial selection of colors and textures, submit manufacturer's color chart(s) showing full range of colors and textures available.
- D. Samples: Provide minimum 3 inch (76 mm) square sample of each color and texture selected.
- E. Warranty: Submit a copy of manufacturer's warranty.
- F. Maintenance Data: Provide manufacturer's instructions for care and cleaning of the finish. Provide manufacturer's operation instructions for operating and locking the rotary unit.
- G. Reference List: Provide list of recently installed similar type of rotary storage units, some of which upon owner's consent may be visited by interested parties directly involved with this project.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Engage an experienced manufacturer who has been manufacturing this type of rotary storage unit continuously at the same location for a period of not less than 25 years.

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- B. Manufacturing Qualifications: Engage an experienced manufacturer whose internal processes meet or exceed ISO 9001 requirements.
- C. Installer Qualifications: Engage an experienced installer who is authorized by the manufacturer to install and service rotary storage units and who has successfully done so for a minimum of one year.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Follow manufacturer's recommendations for delivery, storage and handling requirements for rotary storage units.

1.9 PROJECT CONDITIONS

- A. Field Measurements: Verify quantities and configuration of rotary storage unit(s) before fabrication. Indicate verified measurements on shop drawings. Coordinate fabrication and delivery to ensure no delay in progress of the work.
- B. Established Dimensions: Where field measurements cannot be made without delaying the work, establish dimensions and proceed with fabricating the rotary storage unit(s) without field measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.10 SEQUENCING AND SCHEDULING

- A. Sequence rotary storage unit(s) with adjoining work to minimize possibility of damage and soiling during remainder of construction period.
- B. Schedule installation of specified rotary storage unit(s) after finishing operations including painting have been completed.
- C. Delivery, Storage, and Handling: Comply with all instructions and recommendations made by manufacturer or manufacturer's representative for delivery, storage, and handling requirements.
- D. Pre-installation Conference: Schedule and conduct conference on project site to review methods, procedures, and logistic details for installing rotary storage units.

Recommend attendees:

1. Owner's Representative
2. Prime Contractor or representative
3. Architect, Engineer, or person responsible for the design
4. Manufacturer's representative
5. Subcontractors or installers whose work may affect, or be affected by the installation of the specified rotary storage unit(s).

1.11 WARRANTY

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- A. Provide a written warranty, executed by Contractor, Installer, and Manufacturer, agreeing to repair or replace any rotary unit which fails in materials or workmanship within the established warranty period. This warranty shall be in addition to, and not a limitation of, other rights the owner may have under general conditions provisions of the contract documents.
- B. Limited Lifetime warranty: Subject to the terms in the written warranty, warrant the original purchaser exclusively that the empty rotary unit manufactured by it will be free from defects in materials and workmanship for the lifetime of the rotary unit. For the balance of the equipment components, a warranty of seven (7) years shall apply.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. General: Products are based upon Times-2™ Rotary Storage Cabinets and/or Times-2™ Speed Files™ manufactured by Aurora Storage Products, Inc.

2.2 BASIC MATERIALS

- A. General: Provide materials and quality of workmanship, which meet or exceed established industry standards for products specified. Use furniture grade sheet metal, wood trim (if applicable), hardware, and fasteners for component fabrication unless indicated otherwise. Material selection, dimension, and gauge are manufacturer's option unless indicated otherwise.

2.3 MANUFACTURED COMPONENTS

- A. Rotary Unit Base:
 - 1. Base and rotor bottom assembly will be constructed of 12 GA or greater drawing quality cold rolled steel.
 - 2. Base and rotor bottom are to be connected with a minimum 2 inch (51 mm) diameter carriage bolt. A locknut shall secure assembly and an oil impregnated bronze bushing will provide permanent lubrication to carriage bolt rotation.
 - 3. Press-formed raceways in both base and rotor bottom will be designed to capture ball bearings and protect rotating components from excessive or unusual wear, etching of any sort, and/or fatigue. All ball bearings shall be a minimum of 5/8 inch (16 mm) diameter, fabricated from high carbon steel and maintained at equal spacing with a flanged ball cage. Letter-size units shall use a minimum of 22 ball bearings; Legal/EDP/A4-size shall require a minimum of 44 ball bearings. Raceways and ball bearings shall be dynamically and permanently lubricated. Diameter of raceways shall be minimum 22 inches (559 mm) for letter-size and 28 inches (711 mm) for Legal/EDP/A4-size units. Smaller diameter raceways shall not be acceptable due to their inability to provide stability of unit during unbalanced loading and/or rotation. No heat (welds) shall ever or in any way be applied to rotation surfaces of the base and rotor bottom.
 - 4. Springs included in base design shall be capable of stopping a fully loaded unit without requiring tension adjustment at any time. Operator assistance shall not be required to initiate a position stop of the rotating cabinet. Upon free-wheeling lock-

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out mode, operator shall be able to free spin the interior rotating cabinet without encumbrance of detents or other mechanically generated resistance.

5. Rotor bottom shall have functional storage shelf integrated into its design.
6. Four independently adjustable leveler glides shall be provided to allow for proper leveling of units. Any anchoring required by state, local and national codes shall be accomplished by securing cabinets to the floor with manufacturer provided anchoring system. Wall anchoring shall not be acceptable.
7. Separate bases shall be available for Starter, Add-on, and Extended add-on units and such bases shall be secured to each other to eliminate racking of units during rotation.
8. When indicated initially, special starter base units will be supplied to accommodate the future addition of units on either the right or left side. This provides growth flexibility as needs evolve.

B. Positive Position Control (Foot Pedal):

1. A positive position control system shall be utilized with each cabinet, delivering complete operator control of a spring loaded automatic self-centering mechanism. A simple detent positioning system shall not be acceptable.
2. Foot pedal shall be spring loaded and automatically return to its proper position.
3. Dual foot pedal option shall be available to allow access to the cabinet from both sides. Foot pedal shall be one-piece cast aluminum designed to prevent pedal failure as well as slippage of operator's foot during operation. Rubber or vinyl coverings are unacceptable as they can wear or become loose over time.
4. An optional hand control shall be available which is used in place of the foot control pedal. The hand control shall be positioned within ADA reach guidelines and provide for complete operator control of the spring loaded automatic self-centering rotary mechanism.

C. Doors, Center Panel and Rotor Top:

1. Doors, center panel and rotor top shall connect and lock together to form one monolithic, structurally sound cabinet.
 - a) Door assembly shall consist of an outer surface free of projections, handles, bevels, or obstructions of any sort, allowing for the addition of wood cladding, laminate facings, fabric coverings, or magnetic overlays. Manufacturer shall have access to these and be able to provide them as an additional cost option upon request. Inner door shall be slotted (louvered) in 1-3/4 inch (44 mm) increments to allow for flexibility in shelf placement and for the acceptance of accessories required to house a wide array of media. Outer and inner door panels shall be welded together.
 - b) Center panel shall be triple-flanged to connect to the inner doors and rotor bottom. The door to center panel connection shall be made with dedicated fasteners at the inner door and rotor bottom. Length of fastener shall be

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engineered as such to not contact outer door during installation. Center panel to door fasteners shall be spaced no more than 12 inches (305 mm) on center.

- c) Rotor top shall snap and lock into place with no visible fasteners. Rotor top shall include an oil-impregnated bronze bushing allowing permanent stabilization and lubrication of cabinet.
- 2. An option for pass through shelves shall be available when specified to accommodate rolled drawings, maps, or other oversize media. The pass through opening may be up to 12 louvers or 21 inches (533 mm) in height.

D. Reverse Beveled Posts, Vinyl Door Strips and Locks:

- 1. Reverse beveled posts, vinyl door strips and locks shall complement the appearance of the unit and be integrated into the unit.
 - a) Vinyl door strips shall integrate into the posts without the use of fasteners and be available in matching and/or complementary colors.
 - b) Posts shall function for either starter or add-on units.
 - c) Locks shall be included as standard equipment on all starters and adders, and available for multiple unit installations as either keyed alike or different. Locks operation may be upgradeable (at additional cost to be determined per project) to a security application suited to meet a predefined specific purpose. These shall be available and quoted by the manufacture on per job/per need basis.
- 2. Lock mechanism must interface with foot pedal to enable and maintain a free spin of base and rotor bottom in consideration for ADA Compliance.

E. End Panels:

- 1. End panels shall attach to either starter or add-on unit as may be required by configuration of units.
- 2. Each starter unit will be complete with two end panels, four posts, and four vinyl door strips.
- 3. Each adder unit will be complete with two posts and four vinyl door strips.
- 4. Each full adder will be complete with four posts and four vinyl door strips.
- 5. The design of the post will include a reverse bevel for clearance during rotation.
- 6. The vinyl door strips will be available in a variety of colors to match the most popular standard colors.
- 7. The vinyl door strip will snap-fit into the post for a smooth and flush appearance.
- 8. End panels and posts will connect to each other without the need of fasteners of any type. The end panel/post sub-assembly will connect to both the base and the canopy tops with minimum of 5/16 inch (8mm) bolts.
- 9. Locks will be installed on the post immediately above the primary foot pedal.

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10. An identification ring will be placed around the lock to identify the servicing contractor.

F. Canopy Top:

1. Canopy top shall fasten securely to posts with bolt and/or engineered fastener.
2. For multiple connecting units, canopy tops must fasten to each other using appropriate supplied fasteners.
3. Fasteners shall be designed to eliminate movement of post during rotation of cabinet.

G. Accessories:

1. [(Optional) Wall Closure Strips: Provide manufacturer's standard.]
2. [(Optional) Extended Canopy Top: Provide manufacturer's standard.]
3. [(Optional) Lock options: Provide manufacturer's standard.]
4. [(Optional) Rollout Hanging Folder Frames: Provide manufacturer's standard.]
5. [(Optional) File Dividers: Provide manufacturer's standard.]
6. [(Optional) Rollout Reference Shelves: Provide manufacturer's standard.]
7. [(Optional) Rollout Drawers: Provide manufacturer's standard.]
8. [(Optional) Specialty Racks for rifles, handguns, and ammunition: Provide manufacturer's standard.]
9. [(Optional) Conversion Kits: Provide manufacturer's standard.]

2.4 FABRICATION

- A. General: Coordinate fabrication and delivery to ensure no delay in progress of work.

2.5 FINISHES

- B. Colors: [Select from manufacturer's standard available colors] [Select custom color]

Paint Finish: Provide factory applied electrostatic powder coat paint. Meet or exceed specifications of the American Library Association.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. With installer present, examine floor surfaces where rotary storage units will be located for compliance with manufacturer's requirements.

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- B. With installer present, examine rotary units for proper sizing, examine layout for proper placement of starters and adders, and that intended locations do not block walkways, doorways, windows, electrical panels, etc.
- C. For all installations it shall be the installer's responsibility to know and to execute all phases of the installation in compliance with local building codes.

3.2 INSTALLATION

- A. General: Follow manufacturer's documented instructions and procedures.

3.3 FIELD QUALITY CONTROL

- A. Verify all units are plumb, square, and that doors and gaskets align. Note that all components and accessories are plumb and level. Correct if necessary.
- B. Replace components that are scratched, dented, or damaged in any manner with new items from the manufacturer. Surface scratches may be touched up but repair must be complete and undistinguishable.

3.4 ADJUSTING

- A. Adjust all components and accessories to provide smooth operation and proper alignment.

3.5 CLEANING

- A. Upon completion of installation, clean all components and surfaces. Remove all packaging material, rubbish and debris resulting from installation immediately upon completion of work and leave area(s) of installation in neat, clean condition.

3.6 DEMONSTRATION AND TRAINING

- A. Schedule and conduct demonstration of proper operation by manufacturer or dealer authorized representative. Review features, shelf height adjustment, and proper operation of accessory items with owner's personnel.
- B. Schedule and conduct maintenance training with owner's maintenance personnel. Training session should include demonstration of normal maintenance procedures including adjustments and proper surface cleaning and preservation procedures that end user personnel would normally perform.

3.7 PROTECTION

- A. Protect all material against damage during remainder of construction period. Inform owner of additional protection needed to ensure that system will be without damage for remainder of work within the area.

END OF SECTION