

Specifications for Blanton & Moore Athena Style Library Furniture

- I. INTENT: The purpose of these specifications is to establish minimum requirements for library furniture in order to provide the owner with a durable and functional installation of quality library furniture. Firms desiring to submit bids on this project shall obtain prior approval from owner. Catalog numbers of Athena style as manufactured by Blanton & Moore, Co., Barium Springs, N.C., are used to establish the quality and design required for this project.
- II. QUALIFICATIONS: Supplier for library furniture shall meet the following requirements and shall furnish certification of same to owner upon request:
 - A. Experienced and established manufacturer of quality library furniture.
 - B. Qualified engineering department for preparing layouts and shop drawings for approval prior to fabrication.
 - C. Adequate physical plant and personnel for manufacturing projects of this type and size.
- III. SAMPLES: Samples may be required from prospective bidders to determine the quality of workmanship and compliance with the design and material requirements of these specifications.
 - A. Corner section of tables showing end panel, and counter-top construction, and means of attachment.
 - B. Samples of available plastic laminate surfacing.
 - C. Samples of available wood finishes.
- IV. WARRANTY: Bidder will guarantee to replace or repair at his expense all items of his manufacture found to be defective within one year, due to defective materials or workmanship.
- V. GENERAL SPECIFICATIONS:
 - A. MATERIALS
 1. SOLID WOODS used for exposed construction of all items, shall be of selected northern-grown Appalachian Red Oak. Woods used in unexposed construction shall be of suitable hardwoods. (Other species available upon request.)
 2. PLYWOOD shall be balanced cross-banded construction. Exposed panels shall have face veneers of select-grade plain-sliced bookmatched red oak free of narrows and quarters. Unexposed faces to be of suitable hardwood. (Other species available upon request.)
 3. PLASTIC SURFACES shall be a high-pressure plastic laminate meeting N.E.M.A. specifications for horizontal surfacing. The plastic surfaces shall be as selected by owner from available wood grains, leathers, or solid colors.
 - B. CONSTRUCTION
 1. All tables, casework, and seating must utilize the best woodworking and casework practices of construction. All major structural joints shall be mortised and tenoned, securely glued, blocked, and screwed; the glue for these purposes being of best quality adhesives. Exposed surfaces shall be entirely free of machine marks.
- VI. UNIT SPECIFICATIONS
 - A. TABLES: Athena tables shall be available in the following configurations and types.

- Rectangular with panel ends
- Rectangular with trestle base
- Square with "Hercu-grasp" attached rectangular legs
- Square with pedestal base
- Round with "Hercu-grasp" attached rectangular legs
- Round with pedestal base

The styling of each of the above shall be fully coordinated featuring amiable shapes and profiles incorporating radiused corners and semi-bullnose (elliptical) profiled edges throughout.

1. Panel End Athena Tables:

- a. The rectangular top for the Athena panel end table shall be 1-1/4" thick with a 1/2" x 1-5/8" red oak built-up edgeband on the two exposed edges. The edgebanding shall be attached to the core prior to applying the top surfacing. The 3/8" drop of the edgebanding below the underside of the top core shall be filled in with 1-5/8" wide hardwood trim having a 3/16" ease machined along its inward edge. The core material of the top shall be minimum 45 lb. industrial-grade particle board with a suitable backing applied to the underside to prevent warping. The top surface shall be of high-pressure plastic laminate meeting or exceeding N.E.M.A. standards for use as horizontal surfacing. The oak edges shall be machined to a semi-bullnose profile, sanded, and finished to match the understructure of the table. Brass threaded inserts shall be inserted into the bottom of the top for 5/16" bolt attachment to the understructure.
- b. The panel ends on the Athena panel end table shall be 1-1/4" thick particle board core plywood with select red oak faces and 5/8" thick solid red oak banding on all edges. The edgebanding shall be rounded to a 1/2" radius at the four corners of the panel and machined to a semi-bullnose profile. Brass threaded inserts shall be installed in the inward faces of the panels to receive 5/16" bolts attaching the bolting cleats and table top to the end panels. Two leveling glides shall be installed in the bottom end of each end panel. Glides shall be 1-3/8" dia. nylon encased in plated steel with 5/16" threaded stems into recessed t-nuts to provide leveling over uneven floors.
- c. The bolting cleats used to attach the end panels to the table top shall be 1-1/2" square select dense hardwood having countersunk holes for 5/16" bolts with washers to be used to securely engage the threaded inserts in the table top and end panels. The bolting cleats shall be notched at center to position and interface with the ends of the keel assembly. The ends of the bolting cleats shall be cut on a bevel, sanded, and finished smooth.
- d. The stabilizer keel assemblies shall be made of 1" x 8" red oak plywood and located under and along the center of the table top. Keel ends shall be notched to interface with notches cut in the end panel bolting cleats. The keel shall be attached to the end panels and underside of the top by screws through continuous hardwood cleats which are screwed and glued on both sides of the keel panel at the top edge and both ends.

2. Trestle Base Athena Tables:

- a. The rectangular top for the Athena trestle base table shall be 1-1/4" thick with a 1/2" x 1-5/8" red oak built-up edgeband on all four edges. The edgebanding shall be attached to the core prior to applying the top surfacing. The 3/8" drop of the edgebanding below the underside of the top core shall be filled in with a flush 1-5/8" wide hardwood trim having a 3/16" ease machined along its inward edge. The core material of the top shall be minimum 45 lb. industrial-

grade particle board with a suitable backing applied to the underside to prevent warping. The top surface shall be of high-pressure plastic laminate meeting or exceeding N.E.M.A. standards for use as horizontal surfacing. The four corners of the top shall be rounded to a 5/8" radius and the entire perimeter machined to a semi-bullnose profile. The oak edgebanding shall be sanded and finished to match the understructure of the table.

- b. The end frames of the Athena trestle base table shall be made up of solid red oak members 1-5/8" thick by 4" wide utilizing mortise and tenon joinery. The two forward inside corners of the top and bottom rails shall be rounded to a 1/2" radius, and a semi-bullnose profile machined to the forward edges of the twin stanchions and on the ends and inward edges of both horizontal rails. Two leveling glides shall be installed into the bottom of each end frame. Glides shall be 1-3/8" dia. nylon encased in plated steel having 5/16" threaded stems into recessed t-nuts for leveling over uneven floors. Select hardwood screw cleats shall provide screw attachment of the table top. These cleats shall have beveled ends and be notched to position the twin keel assemblies. The cleats shall be factory-attached to the end frames with screws and glue. Holes shall be drilled in the stanchions for through bolt attachment of (2) stretcher rails.
 - c. The twin keel assemblies of the Athena trestle base table shall be made of 1" thick by 6" wide red oak plywood and positioned at the center of the end frame stanchions. The ends of the keel panels shall be notched to mate with the positioning notches made in the top screw cleats mounted onto the end frames. Hardwood screw cleats shall be factory-installed with screws and glue along the top edge and ends of the keel panels and which provides fastening to the table top and ends.
 - d. The twin stretcher rails shall be of solid red oak machined 1-5/8" thick x 3 1/2" wide. The leading edge of the rails shall be machined to a semi-bullnose profile. A 3/16" ease shall be machined along the inward edges of the rails. The stretcher rails shall be installed using two 5/16" bronze plated low profile bolts inserted through each end frame stanchion and engaging rod nuts inserted into the bottom of the stretcher rails.
3. Leg Base Athena Tables: (square and round)
- a. The tops for square and round Athena leg type tables shall be 1-1/4" thick with its perimeter edgebanded in 1/2" x 1-5/8" red oak. The edgebanding shall be attached to the core prior to applying the top surfacing. The core material of the top shall be minimum 45 lb. industrial-grade particle board with a suitable backing applied to the underside to prevent warping. The top surface shall be of high-pressure plastic laminate meeting or exceeding N.E.M.A. standards for use as horizontal surfacing. The four corners of square table tops shall be rounded to a 5/8" radius. The edgebanding shall be machined to a semi-bullnose profile, sanded, and finished to match the legs of the table. Flanged fasteners shall have been implanted through the top side of the top core to accommodate "Hercu-grasp" through-bolt attachment of the steel plates atop the table legs.
 - b. The four rectangular legs of the square and round Athena tables shall be of solid red oak, 1-5/8" thick x 5" wide. Both bottom corners of the leg shall be rounded to a 1/2" radius and the edges of the leg machined to a semi-bullnose profile. Each leg shall have a 1-3/8" dia. nylon glide encased in plated steel with a 5/16" threaded stem into a recessed t-nut for leveling table over uneven floors. The top end of each leg shall have a steel mounting plate attached to the leg by two 5/16" x 2-1/2" bolts engaging a 5/8" dia. x 3" long rod nut inserted into the inward edge of the leg. The steel leg plate in turn

shall be bolted to the flanged fasteners built into the core of the table top using 5/16" x 1" bolts. The steel mounting plate shall be hidden by the (3/8") drop edgebanding on the table top.

4. Pedestal Base Athena Tables: (square and round)
 - a. The tops for square and round Athena pedestal base tables shall be 1-1/4" thick with a 1/2" x 1-5/8" red oak edgeband. The edgebanding shall be attached to the core prior to applying the top surfacing. The core material of the top shall be minimum 45 lb. industrial-grade particle board with a suitable backing applied to the underside to prevent warping. The top surface shall be of high-pressure plastic laminate meeting or exceeding N.E.M.A. standards for use as horizontal surfacing. The four corners of square table tops shall be rounded to a 5/8" radius. The edgebanding shall be machined to a semi-bullnose profile, sanded, and finished to match the understructure of the table. Flanged fasteners shall have been implanted through the top side of the top core to accommodate "Hercu-grasp" through-bolt attachment of the steel plate atop the pedestal base.
 - b. The pedestal base assembly for square and round Athena tables shall be constructed of solid red oak in the configuration of a modified "X". The center post of the assembly shall be made up of four pieces of 1-5/8" x 5" red oak attached in pinwheel fashion with glue and countersunk screws concealed by red oak plugs: The four feet of the pedestal assembly shall be individually attached to the four stanchions of the center post by glued mortise and tenon connection. Each of the feet shall extend 20" outward from the center point of the assembly. The upward corners of the feet shall be rounded to a 1/2" radius, and a semi-bullnose profile machined on the ends and top edges of the feet and on the outward edge of the stanchions. One leveling glide shall be installed into the bottom of each foot member. Glides shall be 1-3/8" dia. nylon encased in plated steel having 5/16" threaded stems into recessed t-nuts for leveling purposes. Atop the pedestal, a 1/4" x 10" x 10" steel plate shall be mounted using four 5/16" x 2-1/2" bolts through the plate and into 5/8" dia. rod nuts implanted into the edge of each stanchion. The steel plate shall have four 5/16" x 1" bolts into the special fasteners built into the table top.

B. CIRCULATION DESK UNITS shall consist of flush design cabinet modules, engineered for ease of assembly permitting flexible arrangements. Standard height shall be 39". Tops shall be continuous 30" deep wood edged on all exposed edges. Cabinet modules shall be 29" deep, separated by 1" thick reveal trim with notches formed to receive 1" x 6" hardwood base. Reveal trim and base shall be painted black. One pair of 1-1/4" plywood finishing ends shall be required for each complete assembly.

1. Cabinet modules shall be of standard design and function indicated by catalog number or, when specified, custom modules designed to meet special requirements. Cabinets shall be constructed of 3-ply, 3/4" plywood with select plain-sliced red oak faces. The entire assembly shall have sequenced matched veneers on the front panels. The fronts shall have both vertical edges banded with solid red oak. Joinery shall be of highest casework quality utilizing tenoned, housed, splined, glued, screwed, and blocked connections to their fullest advantage.

Drawers in cabinet modules shall have minimum 1/2" thick solid red oak sides and backs. Fronts shall be selected 4/4" solid red oak stock, with French dovetail connection with the sides. Bottoms shall be 1/4" hardwood plywood. Bottoms

shall be housed in grooves on four sides and locked with coated fasteners. Standard drawers shall operate on 50 lb. rated extension drawer slides. File drawers shall be equipped with file hanger bars and operate on 100 lb. full extension slides.

Footrests covered in ribbed brown vinyl matting, and reinforced by a perpendicular strut, shall bridge the open space of kneespace cabinet modules. Footrests shall be minimum 5-1/2" wide, installed on a 22° incline, and rigidly cleated at the ends.

2. Tops shall be continuous, having as few joints as practical. Joints shall be drawn tight with joint bolts and surface aligned by splines; preparation for both being made in the factory. Tops shall have a work surface of high-pressure laminate in a low-glare finish. Laminate shall meet or exceed N.E.M.A. standards for horizontal surfaces. Top cores shall be 45 lb. density particleboard, backed with a minimum .020" backing. Top cores shall be banded on all exposed edges including edges at wells with 1/2" solid red oak. Front and rear edges shall be shaped, after application of top surface, to a bullnose profile. Well cut-outs have square edges, with top edges bevel trimmed to a 1/8" - 45° angle.
 3. Panel ends shall be constructed of 3-ply, 1-1/4" thick plywood having selected faces of select-grade, plain-sliced red oak veneers. All four edges shall be banded with 5/8" solid red oak, radiused 1/2" on corners, then shaped to a bullnose profile. Panel ends shall be attached with concealed screws through the support frames.
 4. Gates, when required, shall be of same construction and profiling as panel ends complete with hardware and solid red oak hanging stiles. Gates shall be single or double swing as specified. Hinges shall be sagless type.
- C. STUDY CARRELS/COMPUTER WORK CARRELS shall be of modular panel end design, utilizing a system of demonstrable components allowing disassembly for making modifications of rearrangements. Standard top height shall be 29" at study carrels and adjustable to 27", 32", and 39" at computer work carrels.
1. Panel ends and intermediates on Athena carrels shall be 1-1/4" thick, 3-ply red oak plywood, having select-grade plain-sliced face veneers on particle board core. All four edges shall be banded with 5/8" solid red oak, radiused 1/2" on all four corners, then shaped to a continuous modified bullnose profile. Back panels shall be minimum 1" thick of similar construction, edgebanded on ends, and equipped with three spring steel keyhole plates routed into each vertical edge. End and intermediate panels shall have two nylon guides, encased in plated steel, having 5/16" threaded stems with t-nuts providing adjustment of uneven floors.
 2. Work tops shall be 1-1/4" thick, 3-ply construction having a top surface of high-pressure laminate in low-glare finish. Laminate shall meet or exceed N.E.M.A. specifications for horizontal work surfaces. Top cores shall be 45 lb. density particleboard, backed with a minimum .020" backing. Top cores shall be banded on exposed edges with 1/2" solid red oak and shaped to a modified bullnose profile. Tops shall be machined to accommodate power accessory items when specified. Computer work carrels shall be provided with a cord slot at rear of top.
 3. Shelves shall be minimum 1" thick wood construction. Shelves shall be installed

along the end and rear edges with screws and glue. Cleats shall have eased edges and neatly beveled ends.

4. Available carrel accessory items shall include the following:
 - Fluorescent light with switch and grounded power cord.
 - Power outlet strips with surge suppression and circuit breakers.
 - Vertical corner power columns of 20 ga. galvanized steel with black powder coat finish. Available with one, two, or three circuits, one being a dedicated computer circuit. Isolated voice-data section is provided on all columns. Interconnectable power cables provided as required. Unless specified to be hardwired, single-circuit columns will be supplied with a 24" "S" type 12/3 power cord with UL-required, molded-on 20-amp plug.
 - Sleeve grommets in vertical intermediate panels to accommodate wire and cable passage through multiple station layouts.
 - Grommets in tops for equipment cables on study carrels.
 - Wire management channels.
 - "IWS" Interconnectable Wiring System which includes wire management channels, grommets, junction boxes, 7-wire connecting cables, circuit-coded plug-in receptacles, etc. accommodating three 7-wire circuits; one being an isolated circuit for computer equipment.

D. DISPLAY UNITS, ATLAS STANDS, DICTIONARY STANDS, and similar items shall be of matching Athena Panel End design.

1. Panel ends shall be 1-1/4" thick, 3-ply red oak plywood, having select-grade plain-sliced face veneers and particle board cores. All four edges shall be banded with 5/8" solid red oak, radiused 1/2" on all four corners, then shaped to a continuous profile.
2. Plastic laminate tops on atlas stands, dictionary stands, and similar items shall be 1-1/4" thick, 3-ply with red oak edges as previously specified. All exposed corners shall be machined to a 1/2" radius.
3. Cabinetry shall be constructed on minimum 3/4" thick 3-ply red oak plywood. Joinery shall be of highest casework quality utilizing tenoned, housed, splined, glued, and blocked connections to their fullest advantage.

VIII. **FINISH:** All exposed oak surfaces shall be thoroughly inspected and hand-sanded to assure that any machine marks or blemishes are removed prior to finishing. Finishing shall include necessary toner required to achieve a clear, sharp, uniform color matching the selected finish. After proper drying all surfaces shall receive a coat of high solids vinyl sealer. Following proper drying and hand-sanding, all exposed surfaces shall be coated with highly-resistant catalyzed nitrocellous lacquer dried to a medium-low sheen. Finish shall be uniformly and smoothly applied consistent with the best practices achieving an undistorted enhancement of the natural beauty of the wood.