Section 11050
Russwood Library Furniture General Specifications

Part 1 – General

1.01 Related Documents

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this section.

1.02 Summary

A. This section includes the following
   1. Wood Shelving
   2. Reading Tables
   3. Circulation Desk
   4. Technical Furniture

B. Related Sections include the following
   1. Division 6 Rough Carpentry for wood blocking and anchoring furniture as necessary.
   2. Division 9 Gypsum Board Assemblies for reinforcements in metal-framed gypsum board partitions for anchoring furniture as necessary.

1.03 Submittals

A. Product Data for each type of product indicated.

B. Shop Drawings for wood media center furniture. Include plans, elevations, sections, details and attachments to other work.
   1. Indicate locations of locking and reinforcements required for installing furniture.
   2. Indicate locations of and clearances from adjacent walls, doors, windows, other building components, and other manufactured wood equipment.

1.04 Quality Assurance

A. Source limitations. Obtain media center furniture including tops and accessories through one source from a single manufacturer.

B. Product Designations. Drawings indicate sizes and configurations of furniture by referencing designated manufacturer's catalog numbers. Other manufacturer's furniture of similar sizes, door and drawer

configurations, and complying with the specifications. Refer to Division 1 Section Product Requirements.

C. Product Standard. All tables shall meet or exceed BIFMA standards.

D. Preinstallation Meeting. Conduct meeting at project site to comply with requirements in Division 1 Sections Project Management and Coordination.

1.05 Delivery, Storage, and Handling

A. Protect finished surfaces during handling and installation with protective covering of polyethylene film or other suitable material.

1.06 Project Conditions

A. Environmental Limitations. Do not deliver or install furniture until building is enclosed, set work and utility rough-ins are complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.

1.07 Coordination

A. Coordinate layout and installation of framing and reinforcements for support of furniture as necessary.

Part 2 – Products

2.01 Manufacturers

A. Manufacturers are subject to the compliance with requirements. Specifications are based on Russwood Furniture. Other acceptable manufacturers are as follows:
1. Blanton & Moore
2. Brodart
3. Worden

2.02 Materials

A. All work, material and equipment shall be of the highest quality. All woodwork shall be designed and finished to blend uniformly.

B. In keeping with the highest standards of quality control and technical library furniture construction, careful detail shall be given to the

close matching of finish, veneers and all component parts.

C. All exposed wood parts will be made of select oak, maple, birch, cherry or walnut, and of the same species as the veneer or the wood grain pattern of plastic laminate surfaces. This applies to all wood or veneer exterior construction.

D. All wood used will be selected from Northern grown, structurally sound stock, free from defects such as visible splits, knots, checks or decay. The wood shall be properly kiln dried and conditioned to a moisture content of 5-7%. Exposed solid wood will be selected at the same time for uniformity of grain and color. Unexposed solid wood parts may be of suitable hardwoods. All glued-up panels will be made up of random widths no less than 1" and no more than 4".

E. The wood veneer species will be select plain sliced veneers, carefully selected for uniformity of grain and color so as to eliminate wild grain patterns and gross figures. Wide variations of patterns between companion pieces will not be allowed. The finished appearance of all exposed veneer surfaces shall be free from any detectable telesgraphing or substrate, sand through or adhesive bleed through. Unexposed wood veneers will be of suitable species of hardwood.

F. Plywood will be of cross-banded construction using odd numbers of plies for added stability assembled with a moisture-resistant resin adhesive. Internal plies will be sound and free from structural defect. Face veneers will be selected and compared for uniformity of grain and color on either one or both sides, as standard or custom design requires.

G. 5-ply or 7-ply lumber cores will be of good grade core stock in random widths of 1" to 4". Wood strips will be free of knots and other defects, run the full length of the panel with no butt-end joints. Veneer cores will be made of hardwood and bonded with a moisture-resistant adhesive to achieve a minimum of 45 lbs/cu.ft.

H. Laminate used for all work surfaces and shelving tops will be .050" high-pressure plastic laminate and will comply with the requirements of NEMA LD3 grade GP-50. Balancing sheet will be the same thickness and quality. Wood-grained laminates will be matched against wood parts for uniformity of grain and color.

I. Trim hardware will be of such a design and quality to meet and/or exceed the requirements of institutional furniture and equipment. Trim hardware finish will coordinate with the décor of the furniture and equipment. Metal parts will be stainless steel, chrome plated, or coated with epoxy or acrylic enamel as required.

J. Construction hardware (i.e. fasteners, hinges, glides, casters, drawer pulls, locks and drawer stops) will meet and/or exceed the operational requirements for the institutional furniture. Two keys shall be furnished with each lock.

K. Floor-protection glides will be adjustable and fashioned to prevent the floor material from being marred, stained, or discolored. Therefore, all glide surfaces contacting the floor will be manufactured from a non-rusting material.

L. All exposed surfaces are inspected and hand-sanded to remove machine marks, excess glue, scratches, and/or other imperfections prior to the finishing process. Each part then goes through a six-step finishing process, beginning with application of color and ending with two applications of pre-catalyzed lacquer. The top coat will be highly resistant to abrasion, scuffing, sunlight, boiling water, alcohol, nail polish remover, mustard, ketchup, tea, ink, soft drinks and juices. The components of assembled items will have a matching finish where exposed. Finish color shall be a manufacturer's standard color unless otherwise specified.

M. Manufacturer shall employ only the highest quality materials, construction methods and finishing techniques to produce a furniture line that is a leader in the industry. Products shall be guaranteed free from defects due to material or craftsmanship for a period of five years and shall be replaced or repaired at the manufacturer's expense. Any alteration, addition, or modification to the manufacturer's product shall nullify this warranty. Warranty shall begin on the date of acceptance by the product receiving party.

2.03 Wood Shelving

A. Shelving shall be sectional type construction using the starter adder concept. Adder sections will be designed to fit between the uprights of the starter section. Heights and depths will be as specified by catalog numbers and drawings. All sections will be of standard width to assure shelving interchange between separate units.

B. All vertical uprights of shelving will be 1" thick and shelves will be ¾" thick. All shelves will be northern grown kiln-dried solid oak or maple, glued up in strips o no less than 1" and no more than 4", and free from imperfections. End panels will be 1" thick veneer core plywood "A" grade, plain sliced bookmatched oak. Intermediate panels will be 1" thick veneer core plain sliced red oak. Optional end and intermediate panels also available in solid oak or maple.

C. The starter section will have two vertical uprights of flush panel design and be 37” in total width. Holes will be bored on 1-1/4” centers on one side of the end panel. These holes will be approximately 5/16” in diameter and 7/16” in depth. The adder section shall have one vertical upright and shall be 36” in total width. Holes shall be bored on 1-1/4” centers on both sides of the intermediate panel with the same configuration as end panels. Threaded shelf pins 5/16” in diameter and 1” in length shall fit into these holes without screwing. The underside of shelves shall be machined to a sufficient length to fit over the shelf pins while also preventing them from accidentally dislodging.

D. Top and bottom frames shall be 35” wide by the depth of shelving specified. Canopy cornice tops shall be constructed of oak or maple plywood with ¾” x 2-3/8” x 35” northern grown solid maple or oak. The top board shall be ¾” x 4” x 35” and attached to the bottom frame using tongue-and-groove method. Top and bottom frames shall be attached to the end panels with 5/16”-18 x 2-3/4” hex head machine bolts, screwed into internally-externally threaded inserts in the end panel. Intermediate uprights shall be joined using 5/16”-18 x 6” hex head machine bolts, washers and 5/16”-18 nuts.

E. Continuous tops for shelving units will be plastic laminate faced, wood edged 13/16” thick, 3-ply construction with high density particleboard core and brown backer sheet. These tops will be internally banded using ¼” thick matching solid hardwood. Tops will be fabricated in as long lengths as possible, and all joints will be splined and tight-join fastened. These tops will be placed on top of canopy tops, consisting of ¾” particleboard or veneer with attached cornice board of ¾” x 2-1/4” x 35” northern grown solid oak or maple.

F. Additional tops for 82” and 60” high shelving units will be constructed using 1-1/8” particleboard, banded according to project requirements. These tops will also employ a laminate face and backer sheet for balance, and attach the same as the standard continuous tops described above.

G. When specified, backs will be matching plywood panels ¼” thick. Panels of single faced shelving will be finished on one side, and panels of double faced shelving will be finished on both sides.

2.04 Reading Tables

A. Table tops shall be constructed of cores of 1-1/8” thick 45 pound density particleboard or 11 ply lumber core including laminate and phenolic backer, as per project requirements. Table faces will be covered with .050” thick laminate and table backs will be covered with .050” thick

backer. Tops will be banded with 1-3/4" wide solid oak with ¾" thickness, and profile as selected by owner/architect, or per project requirements. The edgeband will be of sufficient width to provide a ½" drop edge beneath the table core to hide mounting plates. Table edges will be finished to exactly match table legs and/or end panels

B. Tops that span a length of 60" or more will receive a 14 gauge V-shaped steel keel that will be 5-1/2" shorter than the overall table length. Tops that are 90" in length will receive a fifth leg at the center of the table with two v-shaped keels along the length. Tops wider than 36" will receive two v-shaped keels along the length.

C. Table legs are 2-1/4" square solid hardwood. Each leg is comprised of three pieces of wood to form an add-ply effect, yielding greater durability. Legs will be ¼" radiused along each long edge. Each leg will have a 1-3/4" diameter chrome swivel leveling glide threaded into a recessed T-nut. Legs will be attached to the table top using a 5" x 5" x ½" steel plate. A threaded steel barrel nut will be inserted on the inner corner of the leg approximately 2" from the top. A 5/16"-18 x 3" machine bolt and lock washer will pass through the ½" thick steel plate down through the top of the leg and into the barrel nut, firmly securing the two pieces together. A 10" x 1-1/4" flat-head wood screw is then set into the plate and leg to prevent the two pieces from turning. This assembly is then attached to the table top using three 15/16" – 18 x 1" hex head machine bolts screwed into three T-nuts which are inserted from the top side. An optional 7/8" x 2" solid hardwood apron can be screw-attached around the underside of the top. The screw will be #10 x 2" and countersink on the underside of the apron.

2.05 Circulation Desks

A. Circulation desk grouping is designed to provide the flexibility of modern cabinetry with the benefits of continuous worksurface design. Since each component is module, any desired desk arrangement is possible, with the desk top being custom made to fit the original arrangement.

B. Each desk unit will be constructed from ¾" thick, 7-ply veneer core plywood, with plain-sliced face veneers. Front panels will be matched for color and grain characteristics to give the appearance of a continuous front across the entire desk arrangement. All visible panels will be banded with ¼" thick eased matching hardwood. To further enhance the continuous look, each unit is constructed with a 4" high x 3" deep, ebonized toe space.

C. All desk units and finished end panels are separated by a ¼" black reveal panel, inset ¾" from each desk face. Desk units will be connected using

four 5/16” – 18 connector bolt assemblies, which pass through each unit end panel and reveal to fasten each unit together.

D. Each terminating end of a given desk arrangement is supplied with a finished end panel which will be connected to the desk with hidden inserts and connector bolts. Finished end panels will also receive an ebonized toe kick to anchor the continuous appeal.

E. All doors, adjustable shelves and drawer fronts will be constructed from ¾” thick, 7-ply veneer core plywood with plain sliced veneers. Shelves will be on 2” centers supported by ¼” threaded shelf pins. All edges will be banded with ¼” thick eased matched hardwood. Each drawer box will be of English dovetail design and will be constructed using ½” thick solid northern grown red oak with a ¼” thick veneer core plywood bottom.

F. Each continuous top is custom made to fit the desired desk arrangement. All tops will be fabricated in the longest lengths possible to eliminate unnecessary seams in the completed top. Tops will be joined at all seams with splines and tight-joint fasteners, then screw attached to the desk from the underside. Continuous tops will be 1-1/4” thick and will constructed from 1-1/8” thick particleboard with .050” high pressure laminate on the face with .050” backer sheet on the underside of the top. The staff side of the top will be internally banded with ¼” thick solid oak edgeband, and will overhang the face of the end panel a total of 1-1/8”. The patron side of the top will be banded per project requirements, and will overhang the face of the front panel 1-1/8”.

G. All drawers will be constructed to an overall depth of 18” and will be mounted on 18” full extension ball bearing glides with a load rating of 100 pounds per pair. Each box drawer will be provided with a lock, with each lock on a given desk being keyed alike. File drawers will be supplied with installed file racks for both letter and legal files.

H. All doors will be hung with 110 degree opening, self closing hinges. All door units will be provided with locks. Pulls for both doors and drawers will be satin chrome 5/16” diameter wire pulls as standard.

I. All units are supplied with 3” diameter end panel grommets and J-channel wire manager to facility concealed wire passage between units in a range. Units with dropped worksurfaces will be supplied with 3” grommets through the worksurface on specified units.

2.06 Technical Furniture

A. Legs shall be 2-1/4” square solid hardwood. Each leg is comprised of three pieces of wood to form an odd-ply effect, creating greater stability.

Legs will be ¼" radiused along each long edge. Each leg will have a 1-3/4" diameter chrome, swivel leveling glide threaded into a recessed T-nut. Legs will be attached to the top using a 5" x 5" x 1/4" steel plate. A threaded steel barrel nut will be inserted on the inner corner of the leg approximately 2" from the top. A 5/16" – 18 x 3" machine bolt and lock washer will pass through the ½" thick steel plate down through the top of the leg and into the barrel nut, firmly securing the two pieces together. A #10 x 1-1/4" flat-head wood screw is then set into the plate and leg to prevent the two pieces from turning. This assembly is then attached to the top using three 15/16" – 18 x 1" hex head machine bolts screwed into three T-nuts which are inserted from the top side. A 1-7/16" x ¾" solid hardwood accent strip will be fitted between the legs and behind the extended top edgeband.

B. Dictionary Stand shall be 29-3/8" wide x 18" deep. Each dictionary stand unit shall have 2 adjustable shelves on ½" centers and 1 fixed base shelf. Unit shall be equipped with a flush edgeband per project requirements

G. Atlas Case shall be 29-3/8" wide x 27-1/16" deep. Each atlas stand unit will have pull out full extension shelves on ball bearing glides. Shelves will be 25-3/4" wide x 23-7/8" deep and will have stops to prevent accidental removal. Adult unit will have five shelves with 3" between shelves. Elementary unit will have four shelves with 2-1/2" between shelves.

Part 3 – Execution

3.01 Examination

A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of library furniture. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 Installation

A. Comply with manufacturer's printed instructions for installation.

B. Install library furniture plumb and level. Align with adjacent casework.

End of Section