

## 1.0 **GENERAL**

### 1.1 **Related Work and UBC Guidelines**

1. Section 08 14 00 Wood Doors
2. Section 09 00 Finishes – General Requirements
3. Section 12 30 00 Fabricated Casework
4. Section 12 35 53 Laboratory Casework
5. UBC LEED Implementation Guidelines
6. UBC Protection of Contents Guideline – for seismic restraint of casework.

### 1.2 **Related External Documents**

- .1 Latest edition of the North American Architectural Woodwork Standards (NAAWS).

### 1.3 **Description**

- .1 *Section includes custom millwork.*

### 1.4 **Coordination**

- .1 In instances where conflicts are found between the UBC Technical Guidelines and provincial regulations or codes, please notify the UBCV Technical Review Team Architect or UBCO Facilities Management.
- .2 These guidelines are intended to be read by design consultants and their content integrated into construction drawings and specifications. Construction documents are not to reference the technical guidelines directly.
- .3 The Coordinating Registered Professional is required to coordinate these requirements with other disciplines.
- .4 Confirm with the UBCV Technical Review Team Architect on a project by project basis if hardware related to this section will be reviewed by the UBC Locksmith Shop.

### 1.5 **Submittals**

1. Design phase:
  - .1 Submit required documents to consultants in accordance with Section 013300 Submittal Procedures
  - .2 For Construction Office projects only, provide a list of all proposed materials for review and color samples for selection plus final approval.
2. Handover – O&M submittals:
  - .1 Final reviewed shop drawings.
  - .2 Confirmation of AWMAC warranty.
  - .3 Maintenance data complete with each finish type, colour and related hardware.

### 1.6 **Quality Control and Assurance**

1. Work to be in accordance with grades specified in the North American Architectural Woodwork Standards (NAAWS), current edition at time of tender.
2. Guarantee and Inspection Service:
  - .1 Architectural woodwork shall be manufactured [and/or] installed to NAAWS current edition at time of tender and shall be subject to an inspection at the factory and/or site by an appointed AWMAC Certified Inspector. Inspection costs shall be included in the tender price for the project.
  - .2 Shop drawings submitted to the AWMAC Chapter office for review before work commences. Work that does not meet the NAAWS as specified, shall be replaced,

- reworked and/or refinished by the architectural woodwork contractor, to the approval of AWMAC, at no additional cost to UBC.
- .3 If the woodwork contractor is an AWMAC manufacturer member in good standing, a two (2) year AWMAC Guarantee Certificate will be issued. *Issuance date should match the date of Substantial Performance of the project.* The AWMAC Guarantee shall cover replacing, reworking and/or refinishing deficient architectural woodwork due to faulty workmanship or defective materials supplied [and/or] installed by the woodwork contractor, which may appear during two (2) year period following the date of issuance.
  - .4 If the woodwork contractor is not an AWMAC Manufacturer member they shall provide the owner with a two (2) year maintenance bond, in lieu of the AWMAC Guarantee Certificate, to the full value of architectural woodwork contract.
3. Woodwork Manufacturer Qualifications:
- .1 Member in Good Standing of AWMAC.
  - .2 Minimum 5 years of production experience similar to this project, and qualifications that indicate ability to comply with requirements of this Section.
  - .3 Minimum one project in the past 5 years where the value of woodwork is within 20% of cost of woodwork for a project.

## 2.0 **DESIGN AND PERFORMANCE REQUIREMENTS**

### 2.1 **Design Requirements**

- .1 Casework Grade – Custom. Economy Grade is not be used. Casework Style - Flush Overlay. This casework style prevents doors and drawers from being pried open.
- .2 Typical veneer when using wood veneer ply
  - .1 Rotary White Birch.
- .3 Endangered wood species in millwork, casework and furniture products must not be used.
- .4 Local manufacturers are preferred.
- .5 Adhesives, preservatives, hardeners, synthesizing agents and finish coatings shall be low-VOC compliant. Coordinate with the UBC LEED Implementation Guidelines.
- .6 MDF to be CARB2 compliant, no added formaldehyde and recycle certified.
- .7 Plywood shall be Exterior Grade (i.e. manufactured with no added formaldehyde).
- .8 Tables and custom millwork in Learning Spaces shall not have sharp edges and corners.

### 2.2 **Performance Requirements**

- .1 Laboratories
  - .1 [Wood casework is not allowed in wet laboratories. This includes wood trims and doors and door frames. If some wood finishes are desired in a low-risk lab environment, a variance request will need to be provided for approval.](#)
- .2 Seismic restraint is required on all cabinets and shelving over 1200 mm high or where units are likely to be a hazard from overturning. Coordinate with the requirements of the UBC Protection of Contents Guideline.

## 3.0 **MATERIALS**

### 3.1 **Product Selection**

- .1 Components
  - .1 MDF shall be typical core material for door and drawer fronts.
  - .2 Veneer core plywood to be used at the following locations:
    - .1 Core for countertops with plumbing cut-outs.
    - .2 High humidity areas.

- .3 All food service areas.
- .3 When plastic laminate or melamine surfacing is used, provide same finish (backer sheet when concealed) on *both* surfaces of the core.
- .4 Drawer sides, backs and bottoms to be constructed of minimum 12 mm (1/2") Baltic Birch plywood or Apple plywood.
- .5 Typical edge banding for wood cabinets shall be a minimum solid 3 mm (1/8") birch or same species as veneer when hardwood veneer is used. Other options for edge banding are minimum 3mm PVC or ABS edge banding. Each of the options listed here should be carefully reviewed for use depending on the work environment in which it will be installed.
- .6 On all shelving designed for use as chemical storage, a 50 mm clear acrylic plastic lip must be installed on the shelf edge.
- .7 Cabinets
  - .1 Preferred product is No- added-Formaldehyde (NAF) Medite.
  - .2 Maximize recycled content use.
  - .3 Standard cabinet construction to be 3/4" thick
- .8 Cabinet Hardware Requirements
  - .1 Ensure local suppliers are used for availability of products for maintenance and replacement.
  - .2 Locks to be per UBC Grand Master System - hardware to be reviewed by UBC Access Services Locksmith Shop during the design phase.
- .9 Cabinet Hardware Preferences
  - .1 Hinges shall be European Style concealed type Blum, GRASS, Salice, Hettich or approved equal, 110 degree opening, 170 degree opening when noted.
  - .2 Pulls shall be Gallery Style 302B stainless steel or equal.
  - .3 Drawer slides shall be Accuride 3832 (or equal) min. 100 lbs (45.5 kg.) duty; full extension.
  - .4 File drawer slides to be Accuride 4034 or equal, min. 150 lbs (68kg); full extension.
  - .5 Cabinet locks -supplied by Owner for installation by this Section.
  - .6 Stainless steel hardware is required in laboratories.
- .2 Finishes
  - .1 Factory finishing is to be AWMAC custom grade unless directed otherwise.
    - .1 Clear finish is to be AWMAC conversion varnish System 5.
    - .2 Opaque finish is to be AWMAC conversion varnish System 5.

\*\*\*END OF SECTION\*\*\*