

DIVISION 12 - FURNISHINGS

Section 12345 - Laboratory Casework

Introduction

These Standards differentiate between Laboratory Casework and Architectural Woodwork / Custom Casework because of the specialized nature and use of the product. Architectural Woodwork / Custom Casework Shall be specified separately in **Division 6 Wood and Plastics**.

Because the University anticipates a longer than average building life and higher than average use and abuse, durable, high quality Laboratory Casework is essential to the long term success and serviceability of any project. Section 12000 - Laboratory Casework specifies current Standards of the American Woodworking Institute (AWI) but modifies the standard to omit the use of certain materials in certain conditions and in certain portions of the work. Although used extensively industry wide, in the experience of the University, these materials have proven unsatisfactory and must be specifically excluded from the specifications. Specific pre-approved fabricators and/or manufacturers are listed, who, in the experience of the University, provide the necessary quality of work. Other fabricators/ manufacturers may be used through the pre-approval process.

Part 1 - General

- Laboratory Casework shall be fabricated to current standards of the American Woodworking Institute (AWI) and within the guidelines of the Scientific Apparatus Manufacturers Association (SAMA). Specific project requirements will determine the need for acid and chemical resistant acrylic, chemical resistant solid phenolic plastic, acid resistant plastic laminate, or standard plastic laminate counter tops.
- Indicate requirements for utility provisions which must be coordinated by the fabricator.
- Reference appropriate sections for Laboratory Tops and Equipment. (See Tab C3 Laboratory Planning and Design Criteria.)

Part 2 - Products

- All Laboratory Casework shall be "Custom" grade according to the American Woodwork Institute (AWI) and subject to the following:
- No particle board or particle board core plywood may be used in any part of the work (including laminate tops) and shall be specifically excluded. Plywood shall be industrial quality.
- Casework shall be opaque or transparent finish rotary cut uniform color light birch hardwood (unless otherwise approved by the Project Manager). Architect shall specify finish and call for sample submittal for review and approval. Interior of millwork shall receive opaque or transparent finish to match exterior.
- Pre-approved fabricators and manufacturers of **Laboratory Casework** are:
 - Atkinson's Cabinet Shop, (520) 792-4775
 - ISEC, Inc., (602) 926-1667
 - Carreto Custom Cabinet, (520) 624-3733
 - Sierra Woodworks, (520) 881-0222
 - Showcase Custom Cabinetry, Inc.,
 - Turnkey Corporation, (520) 571-8819
 - Creative Cabinets, (520) 624-3202
 - Collegedale, (423) 238-8113
- The lists in this section are non-exclusionary and not intended to be a comprehensive list of qualified fabricators and manufacturers. These lists are intended to identify Fabricators and manufacturers that have met the design and specification standards that are identified in this Section. Other fabricators and

manufacturers that can meet the design and specification standards in this Section may be considered.

- The pre-approved manufacturer of solid phenolic plastic lab tops is: **Pionite**.
- Minimum grades for plastic laminates shall be as follows (NEMA / ISO / Inch Thickness). For horizontal surfaces use HW62/HCS/.062" or GP50/HGS/.050" and for vertical surfaces use BK50/BGS/.050". Do not specify post forming grades of Laminates.
- Approved manufacturers of plastic laminate are:
 - Wilson Art
 - Formica
 - Nevamar
 - Pionite
- Hardware shall be indicated in a schedule in this section or in Section 08710, Finish Hardware. If in Section 08710, reference to that section.
- Drawer glides shall be full extension Heavy duty rated.
- Hinges shall be concealed type full metal with no plastic parts, 180° degree opening capacity.
- Hardware for adjustable shelves in cabinet bodies shall be K-V adjustable track with metal shelf support.
- Hardware for adjustable shelves on walls shall be heavy duty type equal to the K-V standard and bracket system.
- Approved hardware manufacturers are:
 - McKinney
 - K&V
 - Blum
 - Stanley
 - Gras

Part 3 - Execution

- Fabricate case bodies with stop dadoes if transparent finish.
- All "Custom" grade Casework concealed surfaces shall be treated at the shop with spray or brush application of 50% Pentachlorophenol solution in a 1:10 mixture with deodorized spray base. In the field all concealed scribed and cut surfaces shall receive a brush application of the same material.
- Drawers shall be lock shouldered or multiple dovetailed and have applied fronts. Bodies shall be hardwood or 7 ply plywood. Bottoms shall be hardwood panel product or masonite hardboard full or stop dadoed. Exposed surfaces shall be hardwood. All drawers shall ride on full extension, full suspension drawer glides.
- Plastic laminate application shall be specified as follows:
 - Apply side edging first, then top surface, with top surface overlapping side edging.
- Installations shall be by skilled tradesmen. In the cases where fabricator and installer are not one and the same, product and project guarantee shall not be compromised.

End of Section 12345