

## SECTION 06410

## COUNTERS AND CASEWORK

02/98

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

## AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM E 84 (1996a) Surface Burning Characteristics of Building Materials

## ARCHITECTURAL WOODWORK INSTITUTE (AWI)

AWI-02 (1994) Architectural Woodwork Quality Standards, Guide Specifications, and Quality Certification Program

## BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA)

BHMA A156.5 (1992) Auxiliary Locks & Associated Products

BHMA A156.9 (1994) Cabinet Hardware

BHMA A156.11 (1994) Cabinet Locks

## NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA LD 3 (1991) High-Pressure Decorative Laminates

## NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 (1996) National Electrical Code

## UNDERWRITERS LABORATORIES (UL)

UL 1286 (1993; Apr 1993) Office Furnishings

## WOODWORK INSTITUTE OF CALIFORNIA (WIC)

(1995) Manual of Millwork

## 1.2 General

Work includes special fabricated cabinet units, countertops, prefinished surfaces, and preparation of site finishing. Casework shall conform to AWI and WIC quality standards. The Contractor shall coordinate the work of this section with that to be performed under other sections. This specification may include requirements that are not supplied by the casework manufacturer; any such requirements shall be furnished by the

Contractor under this section.

### 1.3 Standards

All millwork shall be manufactured in accordance with the standards in the latest edition of the Manual of Millwork of the [Woodwork Institute of California] [and] [Architectural Woodwork Institute] in the grade or grades hereinafter specified or shown on the drawings.

### 1.4 Certification

Before delivery to the jobsite, the millwork supplier shall issue a [WIC Certified] [and] [AWI Certified] Compliance Certificate indicating the millwork products he will furnish for this job and certifying that they will fully meet all the requirements of the grade or grades specified. The shop drawings for the casework shall bear [WIC Certified] [and] [AWI Certified] Compliance Grade Stamp indicating the grade or grades specified.

Each unit of casework shall bear the [WIC Certified] [and] [AWI Certified] Compliance Guide Stamp indicating the grade specified. Each plastic laminate countertop shall bear the WIC Certified Grade Stamp indicating the grade specified.

### 1.5 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01300 SUBMITTAL DESCRIPTIONS:

#### SD-04 Drawings

Cabinets; GA.

Shop drawings shall be submitted for approval in accordance with the requirements of shop drawings in the SPECIAL CLAUSES. Drawings shall show each cabinet work and related items and shall clearly indicate the complete layout of the cabinets and accessories.

Casework, including plastic laminate and solid surface benches shall include the following:

- A. Indication of materials AWI and WIC grades.
- B. Scale plan or plan section of each item, showing location.
- C. Scale Elevations
- D. Scale and/or full size sections to clarify special conditions, means of attachment, etc. Cabinet sectional details illustrated in this Manual need not be drawn on the shop drawings if referenced to the manual by Detail number and page.
- E. Fixed dimensions, with provision for insertion of field dimensions in metric units.
- F. The following items, when a part of the millwork contract shall be shown and/or described:
  1. Hardware, showing location and schedule.

2. Metal Work, with details and locations.
3. Glass, showing installation.
4. Finishing or plastic overlays.
5. Erection methods and fastenings.

#### SD-14 Samples; GA

Two sets of the following samples. The Government reserves the right to reject any samples that do not satisfy the construction or color requirements. In lieu of individual samples, complete minimum size casework may be furnished as samples. Mock-up units are not acceptable. Samples shall be of sufficient size to show color, pattern, and method of assembly. The Contractor shall submit additional samples as required to obtain final approval. No work shall proceed without sample approval in writing from the Contracting Officer.

- a. Counter top and backsplash - One section, containing both.
- b. Door and drawer front - One of each, with hardware mounted.
- c. Melamine plastic color samples approximately 50 by 75 mm (2 by 3 inch) size.
- d. Stain/color samples shall be approximately 50 by 75 mm (2 by 3 inch) size.

#### 1.6 Care and Storage of Casework

All casework shall receive the following care, storage and attention prior to installation by the contractor.

##### 1.6.1 Delivery

Casework shall be delivered to the jobsite wrapped in a protective covering, but shall not be delivered until all drywall and concrete work is dry and the building is closed to the elements.

##### 1.6.2 Storage

Casework shall be stored in a clean, well ventilated area that is free of dust, water, or other contaminants, stacked neatly, protected from direct sunlight, and excessive heat. Relative humidity should be at approximately 50% to 55% at 70 degrees C. Storage shall be in a manner to permit access for inspection and handling.

##### 1.6.2.1 Casework Handling

Casework shall be handled carefully and set or stored on a level floor. Care shall be taken to protect the exposed finished portions from bumping, scratching, etc. Casework shall not be used for "work benches" or convenient places to store other materials.

##### 1.6.2.2 Plastic Laminate Surfaces

Plastic laminate tops shall be stacked flat if possible, at least 100 mm

off the floor, with a protective covering under the bottom unit, and covered on top to protect surfaces from scratching. Strips of wood or other suitable materials shall be placed between tops. If tops are fully-formed or have splashes attached, extreme care shall be taken to prevent breaking. Never stand or stack plastic laminate tops on one end against a wall where they can be broken or damaged by falling.

## PART 2 PRODUCTS

### 2.1 General Requirements for Casework

Casework shall be factory fabricated as scheduled on the architectural drawings, conforming to AWI and WIC quality standards, and the additional requirements specified herein. The Contractor shall furnish products which optimize design by reducing the amount of wood used (engineered wood), or recycled wood products, and preservatives without arsenic or chromium when the products and methods are competitive in price or directed by the contracting officer.

#### 2.1.1 Casework: Natural Wood Finish

Casework shall be provided with a factory-applied durable finish of a type standard with the manufacturer. Natural finish wood doors, drawer fronts, cabinet fronts and exposed cabinet sides shall be fabricated of wood which will be free of extreme color variations within each panel or between adjacent panels. Exposed exterior surfaces shall be [custom] [premium] hardwood or hardwood veneer with natural stain and sprayed on polyurethane factory applied finish. Color shall be as indicated on the Finish Schedule in the architectural drawings.

#### 2.1.2 Casework: Laminated Plastic Covered

Exposed surfaces of custom grade tempered hardboard, other than countertops, shall be faced with decorative high-pressure laminated plastic sheets a minimum of 0.71 mm in thickness. Door and drawer construction shall be [exposed face frame] [flush overlay] [reveal overlay].

### 2.2 Countertops and Backsplashes

#### 2.2.1 General

Countertops shall have [ ] [self edge] [or] [no drip bullnose] edge as shown on the drawings. Back splash shall be cove back splash. Top shall be fully-formed, height as shown. Color shall be as indicated on the Finish Schedule in the architectural drawings. Laminated thermosetting decorative sheets shall conform to NEMA LD 3.

#### 2.2.2 Sink Rims

Sink rims shall be provided when required for the type sink specified in SECTION: Plumbing, General Purpose. Rims shall be the standard product of a manufacturer regularly producing sink rims, and shall be fabricated from corrosion-resistant steel.

#### 2.2.3 Laminated Plastic Tops

Continuous sheets of longest lengths practical shall be provided. Joints in surface sheeting shall be tight and flush and held to a practical

minimum. When countertop and backsplash are one unit, PF42 plastic laminate shall be used. Plastic laminate shall conform to the requirements of NEMA LD 3 and plastic laminate adhesive shall be contact type applied to both surfaces. For fully formed and cove type countertops, the post-forming plastic laminate shall not be bent to a radius smaller than the limit recommended by the plastic laminate manufacturer. Design, color and finish shall be as specified on the Finish Schedule in the architectural drawings.

### 2.3 Casework Hardware

All cabinet hardware shall be furnished and installed by the casework manufacturer. Hardware shall include all miscellaneous hardware for a complete installation.

#### 2.3.1 Hardware Finish

All hardware, including but not limited to hinges and pulls shall be provided with a [ ] finish.

#### 2.3.2 Casework Hardware

Casework hardware of the following types shall conform to BHMA A156.11, Cabinet Locks and BHMA A156.9, Cabinet Hardware as applicable.

##### 2.2.2.1 Drawer Slides

Drawer slides shall be BHMA A156.9, [Type B05051] [ ].

##### 2.2.2.2 Shelf Standards and Brackets

. Shelf standards shall be BHMA A156.9, Type B04061 provided for shelves where indicated, with shelf rest BHMA A156.9, Type B04081. [ Shelf standards shall be BHMA A156.9, Type B04112 with shelf brackets BHMA A156.9, Type B40112.]

##### 2.2.2.3 Hinges

BHMA A156.9, [Type B81602], concealed [ ] self-closing.

##### 2.2.2.4 Catches

BHMA A156.9, [Type B43171], magnetic [ ].

##### 2.2.2.5 Pulls

BHMA A156.9, [Similar to Type B52011, contemporary style wire pull].

### 2.3 LOCKS AND KEYING

[At least one drawer in the counter shall have a keyed lock. Field changeable lock cylinders shall be provided. Two keys shall be provided.]

## PART 3 EXECUTION

### 3.1 INSTALLATION

Casework shall be located as indicated on the architectural drawings. The

installation of the casework shall not damage the work of the other trades.

All items shall be installed as required for proper operation in accordance with the manufacturer's directions. Prior to final acceptance, doors shall be aligned, hardware adjusted, and casework left in a clean neat condition.

### 3.1.1 Counters

Construct as indicated on the architectural drawings, plans and elevations.

Height of countertops shall be as indicated. Units shall be secured with screws through backs to cleats that have been anchored to the building structure with toggle bolts. Conceal fastenings where practicable, fit the counter neatly, install in a rigid and substantial manner, and scribe to adjoining surfaces. Provide counter sections in the longest lengths practicable; keep joints in tops to a minimum; and where joints are necessary, provide tight hairline joints drawing up with concealed type heavy pull-up bolts. Glue joints with water resistant glue and, in addition, make rigid and substantial with screws, bolts, or other approved fastenings. [Where required, toe space at front of counters shall be provided by installing front face of counters 3 inches 75 mm (3 inches) in front of the base. Where toe space is not required face of base and counter shall be flush. Base shall have height of approximately 100 mm (4 inches)]. Make cut-outs for fixtures to templates supplied by fixture manufacturer. Carefully locate cut-outs for pipes so that edges of holes will be covered by escutcheons. The inner edge of sink cut-outs in laminated plastic tops shall be painted with a coat of semigloss enamel paint and sink flanges shall be set in a bed of sealant. Closer and filler strips and finish moldings shall be provided as required.

### 3.1.2 Cabinets

Wall hung cabinets shall be installed to support the weight of the cabinets plus the normally expected weight of the contents of the cabinets. Install level, plumb and tight against adjacent walls, secure cabinets to walls with concealed toggle bolts. Fasteners shall be spaced 300 mm (12 inches) on center using at least three bolts in each 900 mm (3 foot) or 1200 mm (4 foot) unit width.

## 3.2 CLEANING

Upon completion of installation, all products shall be cleaned and polished and the area shall be left in a clean and neat condition. Any defects in material and installation shall be repaired, and damaged products that cannot be satisfactorily repaired shall be replaced.

## 3.3 CONSTRUCTION QUALITY CONTROL

Attention is directed to Section 01440 CONSTRUCTION QUALITY CONTROL which requires the Contractor to perform quality control inspection, testing, and reporting.

-- End of Section --