	Title: YALE OFFICE OF FACILITIES PROCEDURE MANUAL Chapter: 01 - Yale Design Standard Division: 12 00 00 Furnishings	Section: 12 30 00 Requirements for Casework
		Date: July 15, 2019
		Author: Office of University Planning

## PART 1 - INTRODUCTION

### 1.1 PURPOSE

This section contains general design criteria for laboratory casework, countertops, sinks and service fixtures.

## PART 2 - GENERAL DESIGN REQUIREMENTS

### 2.1 MANUFACTURER

Casework must be manufactured, delivered, and installed under the direct supervision of a single manufacturer to ensure a single source of responsibility. Subject to compliance with the design requirements, provide products by FisherHamilton or Kewaunee.

### 2.2 MATERIALS

Depending on lab use, select lab casework material on a case-by-case basis. Use the following general requirements for laboratory casework materials.

#### A. Steel

1. ASTM A366, mild steel, cold-rolled, pickled, double annealed patent leveled
2. Free from rust, scales, scratches, buckles and other defects
3. Steel sheets must be metallic furniture stock
4. Electro-statically applied urethane powder coat finish

#### B. Stainless Steel

1. ASTM A240, Type 304 stainless steel for tops, sinks, shelves, and casework
2. #4 satin finish

#### C. Epoxy Resin Bench Tops

1. Molded, modified epoxy resin sheets
2. Uniform mixture throughout
3. Not depending on a surface coating that can be readily removed by chemical abuse

#### D. Glass

1. 1/4" thick clear, laminated, safety glass for framed and unframed cabinet doors

#### E. Solid Surface Countertops


1. Corian by DuPont or an approved equivalent

#### F. Plastic Laminate and Chemically-Resistant Plastic Laminate

1. Nevamar, Formica, or an approved equivalent

#### G. Specialized Casework

1. The top, bottom, sides and doors of flammable liquid storage cabinets must be not less than 18-

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gauge, double-walled steel construction, with 1-1/2" between the walls. Cabinet doors must be equipped with a three-point latch system. Provide a liquidtight pan that can hold 2" of liquid. Cabinets must be ventilated, with flame arrestors provided on all vents. Cabinet fronts must be clearly labeled "FLAMMABLE– KEEP FIRE AWAY" with 1" high letters.

2. Corrosive chemical storage cabinets must be constructed from a complete corrosion-resistant liner. Cabinets must be ventilated. Provide a liquid-tight pan that can hold 2" of liquid. Cabinet fronts must be clearly labeled "ACID STORAGE" with 1" high letters.

### 2.3 SUBMITTALS

Contractors must submit the following design and construction documents to Yale University.

#### A. Product Data

Provide product data for appliances and equipment, cabinet hardware, sinks, and tailpieces.

#### B. Shop Drawings

Indicate component dimensions, configurations, elevations, construction details, joint details, and attachments.

#### C. Samples

1. Submit samples of casework finish designating the finish and color.
2. Submit samples of countertop materials.

#### D. Test Reports

Submit product test data. The following product performance tests must be performed and certified by an independent testing agency.

1. Base cabinet construction—racking test
2. Wall cabinet construction—racking test
3. Wall cabinet construction—static load test
4. Drawer corner or joinery strength test • Drawer construction—static load test
5. Cabinet adjustable shelf and support devices—static load test
6. Cabinet interior, exterior, and edging materials—acid resistance tests


#### E. Warranty

Provide a five-year manufacturer's warranty covering all casework furnished.

## PART 3 - MINIMUM PRODUCT REQUIREMENTS

### 3.1 PIVOT MECHANISM

Manufacturer's standard geared rotating mechanism providing full synchronous 180 deg. rotation for each louver blade. Cord linkages are not acceptable as rotating mechanism.

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3.2 LOUVER BLADES  
 Manufacturer's standard louver blades. Width: 3 ½"

Date	Description of Change	Pages / Sections Modified	ID
05/13/19	Format	Entire section	CJ385
07/13/19	Format	Entire section	CJ385