

SECTION 12 35 53
DesignLine® Cabinets
(Solid Phenolic Laboratory Casework)

Part 1-General

Specifier Note: This product guide specification must be reviewed and edited to meet the project requirements, building codes, and to select product options. This section includes DesignLine® Cabinets as manufactured by Spec-Rite Designs, LLC.

1.01 Summary

Specifier Note: DesignLine® Cabinets are fabricated from solid phenolic flat panels based on resin saturated cellulose fibers manufactured under high pressure and temperature. The decorative surface is applied to the core during the panel manufacturing process. Therefore, the panel differs from HPL products because it is monolithic (the core and surface are homogeneous) and not glued to a core. Solid phenolic composite material resists moisture, graffiti, and chemicals.

A. Section includes:

1. DesignLine® Cabinets

Specifier Note: The following section refers to products that match DesignLine's aesthetic and performance characteristics and are typically required for similar applications and environments.

B. Related Sections:

1. Specialties: Division 10 Toilet Compartment Section. DesignRite® Partitions 102113.
2. Specialties: Division 10 Locker Section. Design-Tec® Lockers 105100.
3. Laboratory Countertops: Division 12. 123650.

1.02 References:

1. Scientific Equipment and Furniture Association (SEFA):
SEFA 8 – 1999, Recommended Practices
2. Woodworking Institute (WI):
Section 15

3. Architectural Woodwork Institute(AWI):
Section 400

1.03 Submittals

- A. General:** Submit listed submittals in accordance Conditions of the Contract and Division 1 Submittal Procedure Section.
- B. Shop Drawings:** Submit shop drawings indicating room sizes, layout, cabinet dimensions, material thickness, trim, hardware, finishes, locks, base, doors, accessories, and installation details.
- C. Product Data:** Submit manufacturer's technical data for materials, fabrication, finishing, fastenings, hardware, and installation details.
- D. Samples:** Submit samples of edge details, colors, patterns, finishes, and textures.
- E. Closeout Documents:** Submit the following:
1. Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with division 1 Closeout Submittals (Maintenance Data and Operation Data) Section.
 2. Warranty: Warranty documents specified herein.

1.04 Quality Assurance

A. Qualifications:

1. Fabricator shall have 10 years or more experience in fabrication of solid phenolic materials and shall be experienced in performing work of similar size and scope.
2. Fabricator shall be capable of providing field service representation.
3. Installer shall be approved by the manufacturer and be experienced in performing work of similar size and scope.

- B. Pre-installation Meeting:** Conduct pre-installation meeting [2] [_____] weeks prior to installation to verify project requirements and conditions.

1.04 Delivery, Storage and Handling

- A. General:** Comply with Division 1 Product Requirements Sections.
- B. Ordering:** Comply with supplier's ordering and lead-time guidelines to avoid delays.
- C. Delivery:** Deliver materials in the manufacturer's original protective packaging.
- D. Storage and Handling:** Store materials in an enclosed shelter providing protection from damage, humidity, and exposure to the elements.

1.06 Coordination and Project Conditions

- A. Field Measurements:** Before material fabrication, verify actual field measurements and show actual measurements on shop drawings.
- B. Coordination:** Coordinate field measurements with fabrication schedule construction progress to avoid construction delays.

1.07 Warranty

- A.** Submit executed copy of Spec-Rite Designs, LLC 10-year warranty against defects in material and 2 years against workmanship signed by an authorized representative of Spec-Rite Designs, LLC.

Part 2 - Products

2.01 Solid Phenolic Cabinets:

- A. Basis of Design:** Drawings and specifications are based on DesignLine[®] Cabinets.

- B. Manufacturer and Fabricator:**

Spec-Rite Designs, LLC
1054 Central Industrial Drive
St. Louis, MO 63110
Phone: 314-633-4978
Fax: (314) 771-4597
Email: info@specritedesigns.com

- C. Model:** DesignLine Cabinets fabricated from solid phenolic composite material.

2.02 Materials

A. Panel Material:

1. Decorative papers impregnated with melamine resin on faces with a clear protective overcoat and integrally compression molded within a core consisting of solid phenolic impregnated kraft papers.

Specifier Note: Panel Material is available in Class B or Class A fire rating (ASTM E84). Select from either option. Class A is available made to order at extended lead-time.

2. Panel Material shall meet fire resistance per ASTM E84 [Class B] [Class A].
3. Colors:
 - a. Core: Black
 - b. Interior: White

Specifier Note: Doors and ancillary panels are available in a wide range of colors at extended lead-time. A standard stocking range is available in shorter lead-time. Consult with manufacturer to avoid construction delays.

- c. Doors and Ancillary Panels: [Manufacturer's quick ship color collection color range] [Manufacturer's full color range – extended lead-time color collection].

B. Doors:

1. **Material:** 1/2" (13mm) thick solid phenolic composite material.
2. **Corners:** Rounded
3. **Edges:** Crescent profile; machine polished and free from tooling imperfections.

C. Cabinet Bodies:

1. Exposed edges: Straight profile; eased edges to remove sharpness; machine polished and free from tooling imperfections.
2. Component Thickness Schedule:
 - a. Cabinet sides and bottoms: 0.5" (12.7mm)
 - b. Door and drawer heads: 0.5" (12.7mm)
 - c. Horizontal rail supports: 0.5" (25.4mm)
 - d. Cabinet backs: 0.25" (3.18mm)
 - e. Wall cabinet backs: 0.5" (12.7mm)
 - f. Cabinet shelves: 0.75" (19mm)
 - g. Middle Stretchers: 0.5" (12.7mm)
 - h. Security Panels: 0.5" (12.7mm)

- i. Drawer Box 0.375" (10mm)
- j. Top Stretcher 0.75" (19mm)

Specifier Note: Cabinet bodies are modular and can stand alone as a single unit. Cabinet body side panels have exposed fasteners. Applied finished end panels conceal fasteners when side is visible from the layout conditions. Fillers panels enclose exposed fasteners when side meets a corner or wall. Finished end panels and/or filler panels are required for a finished installation.

D. Ancillary Panels: Finished end panels and closures shall be 1/2" (13mm) thick solid phenolic composite material.

2.03 Construction

- A. Construction and design to develop maximum strength and rigidity in each sectional unit. Each cabinet shall be a complete, modular, and rigid unit to permit relocation at any subsequent time.
- B. The cabinet shall incorporate full overlay and European style design. The door and drawer heads shall create a 0.125" horizontal and vertical reveal.
- C. Each cabinet's vertical and horizontal members shall be mechanically fastened. Exposed edges on cabinet components, doors and drawer heads to be machined polished black core.
- D. Underside of toe space shall be enclosed.

E. Drawer and cupboard units:

1. Each base cabinet shall consist of drawers or cupboard doors or a combination hereof as shown in drawings.
2. All base cabinets, unless specified in drawings otherwise, shall have removable back panels from the inside of the cabinet for access to the pipe spaces to the rear of the cabinet as available in the cabinet design.
3. Cupboard units to be provided with an adjustable shelf. Shelf clips to be 1/4" nickel plated, angular with riveted pin to engage shelf in such a way as to avoid slippage and horizontal movement of shelf.
4. Sectional units shall have 4" (101.6mm) high by 3" (76.2mm) deep toe space members unless otherwise noted on drawings.

5. Drawers shall have full box construction, fabricated of 3/8" thick solid composite phenolic resin material and have a epoxy coated, 3/4" extension bottom mounted 100 lbs. epoxy drawer guides. Drawers greater than 24" in width receive full extension 150 lbs. epoxy coated drawer guides as standard. Drawer bottoms shall be matching 1/4" material.

- F. Wall and floor storage cabinets and cases shall match in design and construction (per sectional units as specified previously).
- G. Glass for glazed doors: nominal 1/4" (6.35mm) thick tempered clear laminated safety glass with visible safety logo unless otherwise specified.
- H. Framed glazed doors: Identical in construction, hardware and installations to solid panel doors. Frame glazed doors to be removable for glass replacement utilizing a clear retainer clip.
- I. **Base:**

Specifier Note: Edit this paragraph to indicate curb type(s) and indicate on plans.

- 1. Base not furnished by fabricator: [Curb mounted] [_____]
- 2. Base furnished by fabricator: Adjustable leg mounted: 4" adjustable to 5 1/2", ABS plastic mounting-leveling leg; clip on phenolic toe kick enclosure.

2.04 Hardware

- A. Hinges shall be heavy duty epoxy coated steel. five-knuckle, fixed pin, and all edges eased. Each hinge to have a minimum of four screw attachment holes. Hinges to accommodate 1/2" door thickness. Hinge shall meet ANSI/BHMA A156.9-2003 load and cycle tests.
- B. Hinge Quantity: One pair per door to 48" height; one and one half pair per door 48" through 72" height; two pair per door over 72" height. Hinge to allow for no door protrusion at 140 degrees of opening. Hinge shall have integral stay-close feature.
- C. Pulls to be 316 stainless steel satin 4" wire pull.
- D. Pull Quantity: Drawers less than 24" in width to receive one pull. Drawers over 24" in width to receive two pulls. All doors to receive one pull.
- E. Adjustable shelf supports: Shelf clips to be nickel-plated 1/4" angular with riveted pin to engage shelf in such a way as to avoid slippage and movement of shelf.

Specifier Note: Select from the following options.

- F. [Optional Locks: Lock feature for drawers or doors to be specified by architect. Drawer: one lock per drawer. Individual door: one lock per door. Pair of doors: locks to be on right door with white polyamide elbow catch on left door.]
- G. [Optional Security Panels: Drawer cabinets that have keyed locks shall receive security panels located between drawers as an option.]

2.05. Size(s):

Specifier Note: Indicate cabinet size(s). Consult manufacturer for standard and custom sizes.

- A. **Size Schedule:** [_____], [_____],

Part 3 - Execution

3.01 Examination:

- A. Examine site conditions before cabinet installation. Notify architect of unacceptable areas. Do not install until unacceptable conditions have been corrected.

3.02 Installation:

- A. Install cabinets in locations as shown on shop drawings per manufacturer's instructions.
- B. Install cabinets plumb, level, square, rigid, and flush.
- C. Install all required trim, fillers, end panels, and closures per manufacturer's instructions.
- D. Use hardware supplied or recommended by the manufacturer.
- E. Correct and/or replace damaged components as directed by architect.

3.03 Adjustment

- A. Adjust doors, drawers, and locks for smooth operation without binding.
- B. Lubricate door hinges and locks per manufacturer's instructions.

3.04 Cleaning

- A. Clean all surfaces in accordance with manufacturer's instructions.
- B. Do not use abrasive cleaners.

3.05 Protection

- A. After installation, the Contractor shall protect the casework from damage. They shall be

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kept free from paint, plaster, cement, scratches, or any other destructive forces.

End of Section