



4120 Laminate Series
Specifications

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STEVENS ADVANTAGE LABORATORY 4120 LAMINATE SERIES

SECTION - 12400

PART 1 GENERAL

1.01 GENERAL PROVISIONS

- A. Applicable provisions of General Conditions, Special Conditions, and General Requirements shall apply to this section as if repeated in full herein. Reference other Sections and Divisions for work in connection with this section.

1.02 SCOPE OF WORK

- A. **Cabinets:** Furnish prefabricated cabinetry and related components as specified herein. Refer to plans and equipment lists for details and requirements. Cabinetry shall include all fillers, scribes, finished ends, finished backs, and materials for completed installation.
- B. **Countertops:** Provide prefabricated countertops in Laminate, Chemical Resistant Laminate, Epoxy Resin, Solid Surface (Polymer Resin), Stainless Steel, and Phenolic as specified in connection with cabinetry.
- C. **Locks:** Install locks in cabinetry where shown on casework drawings or as specified in equipment lists.
- D. **Sinks and Fixtures:** Provide sinks, fixtures, electrical outlets, and fittings specified as part of complete model numbered units and as specified as part of laboratory furnishings. Provide materials to appropriate trades for final hook ups and installation.

1.03 RELATED WORK NOT INCLUDED

- A. **Sinks and Fittings:** Sinks and fittings, connection, piping, traps, supplies, shut offs, and special plumbing applicable to codes. Electrical fittings, devices, conduit, wiring, fans, blowers, motors, ductwork, and special grills not specified as part of furnishings. (specified in electrical, plumbing, and heating/ventilation/air conditioning sections)
- B. **Blocking, Framing, and Reinforcements:** In walls, ceilings, and floors for cabinetry anchorage and mountings. (specified in carpentry section)
- C. **Locks:** Master keyed to room doors or specialty locking systems. (specified in lock section)
- D. **Vinyl Base Molding:** (specified in resilient flooring section)

1.04 QUALIFICATION

- A. **Casework Standards:** Casework shall be Stevens Advantage Laboratory 4120 Laminate Series, tested to Scientific Equipment and Furniture Association (SEFA) 8.0 standards. Catalog numbers and specification details shall be based on product offerings of Stevens Industries, Inc., Teutopolis, Illinois. Configuration, size, material options, offerings, and quality to be adhered to.
- B. **Approvals:**
1. Casework of other manufacturers will be considered for approval, providing written request is received and approved at least ten (10) days prior to announced bid date and approved by addendum. Bidder shall state in writing any deviations from requirements and specifications. The casework shall conform to the configuration, arrangement, design, material quality, joinery, panel thickness, and surfacing of that specified and shown on drawings.
 2. Manufacturers requesting approval shall submit samples with cut-aways showing cabinet



construction, joinery, drawer and door construction, hardware, and materials, along with catalogs and specification, in order that accurate evaluations can be made. Manufacturers shall show full sized working samples. Catalogs and specifications shall be submitted with written request, along with detailed list of compliance and deviations from these documents for approval. Samples may be impounded by owner and retained until completion of job for verification and compliance of specifications.

3. Manufacturer must be Architectural Woodwork Institute (AWI) Premium Certified.
4. Manufacturers requesting approvals shall have independently tested their products and be able to submit documentation of results meeting SEFA requirements. Testing under Cabinet Surfacing SEFA 8.0W Section 8 and Cabinet Structural SEFA 8.0 Sections 4, 5, 6, 7, 9 and Table Section 10 required.
5. Manufacturers must show evidence dedicated to environmentally responsible practices. Manufacturers must be licensed by the Composite Panel Association as an Environmentally Preferable Product (EPP) Downstream company.



1.05 SUBMITTALS

- A. **Shop Drawings:** Shall be submitted for approval after formal notification of award of contract. Drawings shall consist of floor plans indicating arrangement and relation to adjacent work and equipment and complete elevations of casework. Centerline of service requirements shall be noted for use by other trades. A schedule of all sinks, fittings, and accessories that are part of this contract shall be provided.
- B. **Color Samples:** Shall be submitted for selection and coordination at time of shop drawing submittals. Samples of actual materials and color shall be available as required.
- C. **Catalog Cuts:** Additional catalog cuts, details, and samples as requested by architect for evaluation and coordination.

1.06 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. **Protection:** Protect casework and related materials during transit, delivery, storage, and handling to prevent damage, soiling, and deterioration.
- B. **Storage:** Store casework and related materials at project site in installation and storage areas with similar ambient conditions as final installation. Storage areas must be kept dry, heated with low relative humidity, and away from construction work such as painting, wet work, grinding, and similar operations.
- C. **Site Conditions:** Shall be in accordance with AWI's *Quality Standards Illustrated* (current version) and Stevens Industries, Inc.'s *Site Conditions*.

1.07 WARRANTY

- A. Casework manufacturer shall warrant for a period of three (3) years that its manufactured product is free from defects in materials and workmanship when properly installed and under normal use and conditions.
- B. Accessory equipment (sinks, fittings, fixtures) shall be warranted to the limit of those specific manufacturers' guarantees.

PART 2 PRODUCTS

2.01 SURFACE MATERIAL

A. Cabinet:

1. Exposed finished ends, door and drawer fronts, modesty panels, and finished backs shall be faced with vertical grade PF-28 (.028") (.7mm) High Pressure Laminate (HPL), tested under National Electrical Manufacturers Association (NEMA) LD3-2005. Decorative laminate shall be thermoset to core using catalyzed Polyvinyl Acetate (PVA) glue with minimum 80 Pounds per Square Inch (PSI) pressure and average 180 degree F temperature. (Lower pressure and cold curing glues not acceptable.)
2. Panels with exterior PF-28 surfaces shall have Cabinet Liner Surface (CLS) (.020") (.5mm) interior cabinet liner.

B. **Interior:** Semi-exposed surfaces shall be Stevens Advantage TF (Thermofused) laminate two (2) sides. Laminate shall be homogenous, thermofused to core face, resulting in panel structure warranted against any delamination. Stevens Advantage TF laminate shall be tested under NEMA LD3-2005 vertical grade GP-28 standards. TF lamination shall use high pressure 350-400 PSI with thermosetting temperatures of 380-400 degrees F under precision controlled press cycle with textured surface finishes.

C. **Backs:** Semi-exposed backs behind doors shall be coated Maple Beige or Pearl White solid color finish coordinated to interior selection.

2.02 CORE MATERIALS

A. **Particleboard:** Shall be high performance industrial grade core. Particleboard shall be 45# - 48# density 3-ply type formation conforming to American National Standards Institute (ANSI) A208.1, American Society for Testing and Materials (ASTM) D1037-91A standards, and current applicable CARB (California Air Resources Board) standards.

B. **Medium Density Fiberboard (MDF):** Core shall be minimum 48# density conforming to ANSI A208.1 MD-130 standards and current applicable CARB standards.

2.03 EDGINGS

A. **Cabinet Edges:** Cabinet body sides, top, bottom, adjustable shelves, and other interior components shall be edged with (.020") flat edge extrusion. Selections shall match laminate based on Stevens standard offering and commercially available stock patterns. Automated hot melt adhesive application and trimming.

ADD COST OPTION:

Cabinet Edges with 3mm Radius Extrusion Banding: Cabinet body sides, top, and bottom shall have 3mm radius extrusion banding. Adjustable shelves and other interior horizontal and vertical components shall be edged with (.020") flat edge extrusion. Selections shall match laminate based on Stevens standard offering and commercially available stock patterns. Automated hot melt adhesive application and trimming.

B. **Door and Drawer Fronts:** Edges shall have 3mm radius extrusion banding. Selections shall match laminate based on Stevens standard offering and commercially available stock patterns. Fronts shall have radius edges and corners utilizing automated hot melt adhesive application and trimming.

2.04 SELECTIONS AND APPLICATIONS

A. **Exposed:** Cabinet finished ends, fronts, modesty panels, and finished backs HPL shall be selected from Wilsonart standard offering (standard price category).



ADD COST OPTION:

- Special Order – Formica, Pionite, Nevamar laminates:** Cabinet finished ends, fronts, modesty panels, and finished backs HPL shall be available from Wilsonart standard offering as well as Formica, Pionite, and Nevamar laminates.

- B. **Semi-exposed Interior Surfaces:** Shall be selected from Pearl White solid color or Maple woodgrain pattern.
- C. **Open and Glass Door Unit Interiors:** Shall be selected from Pearl White solid color or Maple woodgrain pattern.

ADD COST OPTION:

- Open and Glass Door Unit Interiors (Matching Exterior):** Shall have laminate matching exterior selection.
- D. **Drawers:** Shall be Pearl White solid color or Maple woodgrain pattern coordinated to match interior selected.
- E. **Backs:** Shall coordinate with interior selected: Pearl White solid color or Maple Beige solid color.
- F. **Countertop Supports, Table Legs, and Metal Table Frames:** Shall be available in powder coated Black or Pearl White.
- G. **Countertops Available:** (see Section 2.07 for applicable usage)
 1. **Standard Laminate Tops:** Horizontal grade laminate selected from Wilsonart standard offering.
 2. **Chemical Resistant Laminate Tops:** Horizontal grade Chemsurf selected from Stevens standard offering.
 3. **Epoxy Resin Tops:** Standard Black color. (See add cost options for 3/4" colors.)
 4. **Solid Surface (Polymer Resin) Tops:** Selected from Stevens standard offering.
 5. **Stainless Steel Tops:** 16-gauge Type 304 stainless steel with MB-4 finish.
 6. **Phenolic Tops:** Solid 3/4" phenolic top material with polished edges selected from Stevens standard offering.

2.05 HARDWARE

- A. **5-Knuckle Hinges:** Shall be heavy duty 5-knuckle 270 degree pivot reveal overlay style. Hinges shall have interlaying leaves 270 degree swing constructed of (.090") thickness steel. Hinges shall be Grade 1 with hospital ground tips and non-removable pin. Hinges shall be available in minimum four (4) standard finishes as detailed in Stevens Advantage Essentials Collection offering. Doors 48" or less shall have two (2) hinges per door. Doors exceeding 48" shall have three (3) hinges per door. Hinges shall have vertical adjustment and shall be mounted with two (2) 5mm thread-in screw bolts plus two (2) additional #8 screws in cabinet leaf. Door leaf shall have two (2) 5mm thread-in screw bolts plus three (3) #8 screws. Total nine (9) fasteners per hinge. (Mountings without 5mm thread-in screw bolt fasteners not acceptable.) Hinges shall be available in Satin Black, Satin Pearl, Grey Chrome, and Matte Nickel environmentally friendly powder coated finishes.

ADD COST OPTION:

- SA103SS Stainless Steel 5-Knuckle Hinges:** Shall be SA103SS stainless steel heavy duty 5-knuckle 270 degree pivot reveal overlay style. Hinges shall have interlaying leaves, 270 degree swing constructed of (.090") thickness stainless steel. Hinges shall be Grade 1 with hospital ground tips and non-removable pin. Doors 48" or less shall have two (2) hinges per door. Doors exceeding 48" shall have three (3) hinges per door. Hinges shall have vertical adjustment and

shall be mounted with two (2) 5mm thread-in screw bolts plus two (2) additional #8 screws in cabinet leaf. Door leaf shall have two (2) 5mm thread-in screw bolts plus three (3) #8 screws. Total nine (9) fasteners per hinge. (Mountings without 5mm thread-in screw bolt fasteners not acceptable.)

- B. **Door Catches:** Shall be heavy duty spring loaded, large diameter (17.5mm) roller catches mounted at door bottom. Catch strike plate shall be injection molded with integral molded engagement ridge and wide face bumper door stop. Full height tall cabinet doors shall have catches at both top and bottom.
- C. **Pulls:** Shall be offered in easy grip 128mm (5") size. Pulls shall be available as selected from Stevens Advantage Bentwire 128 and Contour 128 styles as shown in Stevens Advantage Essentials Collection offering. Bentwire 128 shall be 8mm diameter wire formed with four (4) environmentally friendly powder coated finishes (Satin Black, Satin Pearl, Grey Chrome, and Matte Nickel). (Plated finishes not acceptable.) Contour 128 styles shall be injection molded in high impact Acetyl Butyl Styrene (ABS) Black, Pearl, or Grey solid colors.

ADD COST OPTIONS:

- Artisan Collection Pulls:** Shall be offered in easy grip 128mm (5") size. Pulls shall be available as selected from Stevens Advantage Artisan Collection offering. Pull designs shall include stylings as Arch, Silhouette, Slimline, Classic, and Crest. Finishes shall include environmentally friendly powder coated Satin Black, Satin Pearl, Grey Chrome, and Matte Nickel. (Plated finishes not acceptable.)
- SA001SS Stainless Steel Bentwire Pulls:** Shall be SA001SS stainless steel bentwire pulls in easy grip 128mm (5") size. Pulls shall be constructed of 8mm diameter brushed finish stainless steel materials.

D. **Drawer Slides:**

1. Extension slides shall be bottom and side mounted epoxy powder coated steel slides. Lateral stability is achieved through a formed captive slide profile, and slides shall glide on nylon rollers. Slides shall have both in and out drawer stop with self close feature. Slides shall meet AWI 100# dynamic load rating, exceeding Grade 1 as tested SEFA 8.0 Section 6 and/or PL 6.5.1 drawer suspension systems under ANSI/BHMA (Builders Hardware Manufacturers Association) A156.9.

ADD COST OPTION:

- Full Extension Slides (All Drawers):** Full extension ball bearing slides shall be provided on all drawers. Slides shall be side mounted with profile to not reduce interior drawer space normally provided. Ball bearing slides shall be tested under The Business and Institutional Furniture Manufacturer's Association (BIFMA) X5.5 Section 7. Slides shall pass 50,000 cycle test with a 120# load rating.
2. File and paper storage drawers shall have full extension side mounted ball bearing slides. Ball bearing slides shall be tested under The Business and Institutional Furniture Manufacturer's Association (BIFMA) X5.5 Section 7. Slides shall pass 50,000 cycle test with a 120# load rating.

E. **Hanger Bars:** Shall be heavy chrome plated oval tubing mounted in adjustable end wall sockets.

F. **Trays and Bins:** High impact polystyrene or polyethylene formed trays and bins shall be provided where indicated by model numbers. Trays or bins shall be suspended on welded wire powder coated rack system. System includes side suspension rack uprights with top and bottom horizontal guideways to avoid inadvertent tip out.

G. **Shelf Supports:** Adjustable shelf supports shall be injection molded clear polycarbonate. Supports



shall incorporate integral molded lock tabs to retain shelf from tipping or inadvertent lift out. Supports shall have 5mm diameter double pin engagement into precision bored cabinet vertical hole patterns. Adjustment shall be 1 1/4" (32mm) spacings. Supports shall have a compression ridge effecting force against shelf edge to maintain positive pin engagement. Supports shall have molded-in screw attachment feature. Static test load shall exceed 200# per clip.

- H. **Locks:** High security SA402 6-tumbler dead bolt lock system shall be provided where noted by model number or indicated on drawings. Locks shall have diecast body with dead bolt engagement tang. (Cylinder locks with attached rotating cams not acceptable.) Locks shall have removable and interchangeable 6-tumbler core for field or customer re-keying options. Locks shall be master keyed and available key-alike or key-different. Each lock provided with a double bit key and face of lock stamped with key number.

ADD COST OPTION:

- Locks (All Drawers/Doors):** High security SA402 6-tumbler dead bolt lock system shall be provided on all drawers and door openings. Locks shall have diecast body with dead bolt engagement tang. (Cylinder locks with attached rotating cams not acceptable.) Locks shall have removable and interchangeable 6-tumbler core for field or customer re-keying options. Locks shall be master keyed and available key-alike or key-different. Each lock provided with a double bit key and face of lock stamped with key number.
- I. **Sliding Doors:** Solid 3/4" doors shall have double channel extrusion tracks both top and bottom. Glass sliding doors shall have aluminum top channel track and bottom track with fiber inserts. Glass doors above 36" tall include door bottom extrusion with track rollers.
- J. **Coat Hooks:** Under mount and wall mount hooks shall be selected from Stevens Advantage Gallery Collection designs. Hooks shall be formed cold roll steel with ball end tips and welded in stamped steel base. Gallery Collection includes three (3) under mount designs (double, triple, wardrobe) and three (3) wall mount designs (single, double, schoolhouse). Styles shall be design coordinated with powder coated Matte Nickel finish. (Cast hooks susceptible to breakage, non-matching finishes or designs not acceptable.)

ADD COST OPTION:

- Numbered Metal Tag Plates:** Shall be provided for each drawer and compartment with doors. Tags shall be 18-gauge aluminum plates with black enamel filled numbers. Tag plates shall be provided to job for field installation at direction of owner. Sets available in groups of 25, up to 100 sequential numbers.

2.06 COMPONENT DETAILS AND CONSTRUCTION

A. Fronts:

1. **Door and Drawer Fronts:** Shall be 3/4" thick and shall have faces as described 2.01.A. Edges shall have 3mm radius edge extrusion matching to face. Automated hot melt adhesive application and trimming.
2. **Glazed Framed Doors:** Shall be 3/4" thick, one (1) piece panel with cutout for insertion of tempered or laminated glass pane, held in place with extruded two (2) piece trim mounting with removable back bead.
3. **Glass Doors:** Sliding glass or hinged glass doors shall be tempered or laminated safety glass.

- B. **Wall Cabinets:** Components shall be 3/4" thick members throughout. Wall cabinet tops and bottoms shall include back groove and minimum four (4) dowel pins per joint for insertion into cabinet ends. Wall cabinet ends shall be 3/4" thick with back groove and precision Computer Numerical Control (CNC) drill pattern for accurate location of fixed members, hardware, and shelf

supports. Wall cabinets shall have two (2) integral (dowel into end) mounting frames. (Designs with simple spacer rails or rails without dowel pin engagement into ends are not acceptable.)

ADD COST OPTION:

- Wall Cabinet Tops and Bottoms 1" Thick:** Wall cabinet tops and bottoms shall be 1" thick and include back groove and minimum four (4) dowel pins per joint for insertion into cabinet ends. Wall cabinet ends and interior components shall be 3/4" thick with back grooves and precision Computer Numerical Control (CNC) drill pattern for accurate location of fixed members, hardware, and shelf supports. Wall cabinets shall have two (2) integral (dowel into end) mounting frames. (Designs with simple spacer rails or rails without dowel pin engagement into ends are not acceptable.)

ADD COST OPTION:

- Wall Cabinet Bottoms Matching Exterior:** Wall cabinet bottoms shall have laminate matching exterior.

- C. **Mounting Frames:** Incorporated in wall and tall units shall be 3/4" thick with minimum two (2) dowel pins per mounting frame end joint. Base units shall have 8 1/2" wide mounting frames with a minimum of three (3) dowel pins per mounting frame end joint.
- D. **Tall Cabinets:** Components shall be 3/4" thick members throughout. Tall cabinet tops and bottoms shall include back groove and up to eight (8) total dowels per end joint (based on cabinet depth). Tall cabinet ends shall be 3/4" thick with back groove and precision CNC drill pattern for accurate location of fixed members, hardware, and shelf supports. Tall cabinets shall have two (2) integral (dowel into end) mounting frames. (Designs with simple spacer rails or rails without dowel pin engagement into ends are not acceptable.)
- E. **Base Cabinets:** Components shall be 3/4" thick members throughout. Base unit bottoms shall incorporate back groove and up to eight (8) dowel pins per end joint (based on cabinet depth). Base units shall have a wide top and back frame feature. A frame (8 1/2" wide) in the flat horizontal plane at cabinet front with minimum three (3) dowels per end joint provides stable squaring of the top area. A second frame (8 1/2" wide) in the vertical plane behind back provides stable side-to-side rack resistance. Construction shall provide lateral and vertical stability. Open rear top area allows for easy wall mounting and ease of installation of mechanical services. (Sub tops without horizontal and vertical plane ridged frame members not acceptable.) Base cabinet ends shall be 3/4" thick with back groove and precision CNC drill pattern for accurate location of fixed members, hardware, and shelf supports.
- F. **Toe Kicks:** Base and tall cabinets shall be an integral base design. Construction of end panels, cabinet bottoms, and horizontal toe kick members is integrally joined together for greater structural strength. This design facilitates load transfer from upper loaded areas directly through cabinet end to floor, reducing lower joint stresses.

ADD COST OPTIONS:

- Toe Kicks with Isolation Supports:** Base and tall cabinets shall be an integral base design and shall include isolation supports. Construction of end panels, cabinet bottoms, and horizontal toe kick members is integrally joined together for greater structural strength. This design facilitates load transfer from upper loaded areas directly through cabinet end to floor, reducing lower joint stresses. Six (6) injection molded isolation supports shall be applied in toe base. Each isolation support shall be molded in chemical resistant polypropylene with large 1 3/8" x 3" footprint. Isolation supports shall space cabinet 10mm (3/8") from contact with floor, effectively preventing moisture or chemical penetration into cabinet body. Supports shall be internally mounted and allow use of continuous 4" vinyl toe base cover. (Wood spacers or plastic glides susceptible to



moisture, chemical penetration into cabinet base, or allowing corrosion with edge fasteners not acceptable.)

- Toe Kicks (Exterior Grade):** 3/4" exterior grade plywood ladder base material shall be provided for base and tall cabinet installation.
- Toe Kicks (Pressure Treated Exterior Grade):** 3/4" pressure treated exterior grade plywood ladder base material shall be provided for base and tall cabinet installation.
- G. **Cabinet Backs:** Shall be an integrated system of a 1/4" prefinished MDF back captured in side and horizontal grooves. Unit back shall be further integrated with attachment to 3/4" doweled-in mounting frames. Fixed backs are mechanically fastened into grooves and sealed with hot melt adhesive. Removable backs, where indicated, shall be set in bottom groove and attached to back frame with screws.
- H. **Adjustable Shelves:** Shall be 3/4" thick. Shelving shall have end 4-point support for spans 27" or less. Spans above 27" shall have 5-point support with backs drilled to receive additional mid-span shelf support, reducing deflection under heavier loads. Shelving above 36" in length shall be 1" thick. Specialty shelving requiring retaining ledge shall have powder coated metal angle.
- I. **Drawers:** Shall be finished entirely in Stevens Advantage TF laminate surface (See 2.01.B). A four (4) sided full box design with separate attached front shall be provided. Drawer members shall be 3/4" thick with dowel pin construction at all four (4) corners. Drawer bottoms shall be 1/4" MDF core trapped in groove four (4) edges as well as mechanically fastened. Drawer components shall be edged with (.020") flat edge extrusion. Automated hot melt adhesive application and trimming. (Drawers utilizing 1/2" members or with overlay applied bottoms, non-captured groove, or staple butt or lap joint construction not acceptable.)

ADD COST OPTION:

- Natural Birch Plywood Drawers:** Shall be clear coat natural birch plywood. A four (4) sided full box design with separate attached front shall be provided. Drawer members shall be 3/4" thick with dowel pin construction at all four (4) corners. Drawer bottoms shall be 1/4" MDF core with Maple woodgrain trapped in groove four (4) edges as well as mechanically fastened. Drawer components shall be edged with a flat veneer edgeband. (Drawers utilizing 1/2" members or with overlay applied bottoms, non-captured groove, or staple butt or lap joint construction not acceptable.)
- J. **File Drawers:** Shall be a four (4) sided box design with separate attached front. Particleboard drawer members shall be laminated and have dowel pin construction at all four (4) corners. Drawer bottoms shall be laminated 1/4" MDF core trapped in groove four (4) edges as well as mechanically fastened. File drawer sides shall include file hanging rails. Full extension ball bearing suspensions shall be BIFMA 120# load rated slides. File drawers shall be Pearl White.

ADD COST OPTION:

- Crossbar File Hangers:** Additional crossbar file hangers shall be provided for cross filing of legal and letter files.

2.07 COUNTERTOP SPECIFICATIONS

Countertops shall be provided based on drawings and specific applications. The following countertop types are used and shall be provided as indicated on this project.

Choose one or more countertop types:

- Laminate Tops:** Shall be 1 1/16" thick with solid core structures and laminated with backer sheet. Countertops shall be high pressure decorative plastic laminate, thermoset to core using catalyzed

PVA glue with minimum average pressure of 80 PSI and average 180 degree F temperature. Decorative laminate shall meet NEMA LD3-2005 PF-42 (.042") specification standards. Countertops shall be 3mm edged with 3mm edged backsplash. Laminate patterns chosen from Wilsonart standard offering. 3mm edging chosen from Stevens standard selections.

Design required (choose one or more):

- LS05C: CARB compliant composite 45# industrial particleboard core
 - LS05M: Moisture resistant composite core
 - LS05P: Multi-ply plywood core
 - LS05F: Fire rated composite core
 - LS05N: NAUF (Non Added Urea Formaldehyde) particleboard core
- Chemical Resistant Laminate Tops:** Shall be 1 1/16" thick with solid core structures and laminated with backer sheet. Countertops shall be high pressure Chemsurf decorative laminates, thermoset to core using catalyzed PVA glue with minimum average pressure of 80 PSI and average 180 degree F temperature. Countertops shall be 3mm edged with 3mm edged backsplash. Chemsurf patterns chosen from Stevens standard selections. 3mm edging chosen from Stevens standard selections.

Design required (choose one or more):

- LS25C: CARB compliant composite 45# industrial particleboard core
 - LS25M: Moisture resistant composite core
 - LS25P: Multi-ply plywood core
 - LS25F: Fire rated composite core
 - LS25N: NAUF (Non Added Urea Formaldehyde) particleboard core
- Epoxy Resin Tops:** High performance laboratory tops shall be available in basic Black and five (5) optional colors. Epoxy resin tops shall meet and/or exceed industry standards. Tops shall be factory fabricated and drilled, with exposed cutouts and edges dressed with factory finish. Leading edges shall have 3mm corner radius and include bottom drip grooving. Epoxy sinks shall be color matched to tops. Epoxy tops shall be installed with epoxy sealant at joints and sink applications.

Design required (choose one or more):

- ES00BL: 3/4" Black epoxy
 - ES01BL: 1" Black epoxy
 - ES00---: 3/4" Color epoxy – (PL) Platinum, (AW) Antique White, (GR) Grey, (SA) Sandstone, (DK) Dark Khaki
 - ES02BL: Black epoxy marine edge and integral cove
- Solid Surface (Polymer Resin) Tops:** Shall be fabricated from 1/2" thick acrylic cast sheets. Sheets shall be continuous cast thermoset acrylic resins in combination with Aluminum Trihydrate (ATH) and pigments. Solid surface countertops shall have 1/2" thick downturned leading edges with overall top thickness of 1 1/16". Faces shall be polished to a matte suede finish with 3mm radius edges and corners as standard. (Optional profiles available.) Countertops shall be additionally strengthened with adhesive-applied longitudinal composite wood rails for mounting to cabinets and supports. Spans shall not exceed 36" without intermediate supports. Applied backsplashes shall be 1/2" thick with 3mm radius edges provided along back wall endsplashes at end walls and tall cabinet ends. Acrylic sink bowls shall be factory installed, integral one (1) piece.



Design required (choose one or more profile designs):

- PS00 3R/3R: Standard profile - 3mm radius top and bottom edges
- PS00 6R/6R: 6mm radius top and bottom edges
- PS00 6R/3R: 6mm radius top edge, 3mm radius bottom edge
- PS00 12R/6R: 12mm radius top edge, 6mm radius bottom edge
- PS00 6B/6B: 6mm bevel top and bottom edges
- PS00 6B/3R: 6mm bevel top edge, 3mm radius bottom edge

- Stainless Steel Tops:** Stainless steel countertops and integral sinks shall be fabricated of 16-gauge U.S. Standard Type 304 Stainless Steel formed down and back, making 1 1/4" high face on exposed edges. (Type 304 18-gauge stainless steel option available.) Top, front flange, deck surface, backsplash, and endsplashes shall be formed of one (1) sheet of metal. The deck surface and front edge shall include reinforcing with 16-gauge full length hat channels. Horizontal and vertical corners where backsplashes and endsplashes intersect shall be covered radius. Seamless raised edges at front and ends shall be die formed. When required, field joints shall use a "lock joint" technique to eliminate vertical as well as horizontal seam movement. Field joints shall be pre-fitted and polished together at the factory for greater symmetrical appearance. Vertical and horizontal corners in sink bowls shall be rounded to sanitary radii with depth as detailed, with drain openings in center or possible rear positions. Sink bowls shall be seamless electrically welded to countertops. Tops, sink bowls, backsplashes, raised rims, as well as end curbs with exposed welds, shall be ground smooth and finely polished to an MB-4 finish. Underside of countertop and bowl shall be coated with sound deadening.

Design required (choose one or more):

- SS00S: Stainless steel square edge, 16-gauge Type 304
- SS00S: Stainless steel square edge, 18-gauge Type 304
- SS00L: Stainless steel lipped marine edge, 16-gauge Type 304
- SS00L: Stainless steel lipped marine edge, 18-gauge Type 304

- Phenolic Tops:** Shall be 3/4" thick, PL00 design with face pattern selected from Stevens standard offering. Tops shall be factory fabricated and drilled with exposed cutouts and edges dressed and polished. Leading edges shall have bevel corners. Sink cutouts provided for stainless steel sinks or premachined for drop-in Black epoxy sinks. Tops shall have chemical resistant face with Black edge. Applied backsplashes shall be 3/4" thick with bevel corners with dressed and polished edges.

2.08 TABLES

Select one or more table series:

- WELDED STEEL LEG TABLES – STEVENS ADVANTAGE 49700 SERIES**

- A. **49700 Series Tables:** Shall incorporate a one (1) piece all welded apron assembly. Apron frames shall be a cold roll steel formed 12-gauge section with offset channel bends providing heavy load capacity.
- B. **Frames:**
 1. Shall be 2 1/2" high, providing a low profile for maximum leg height and Americans with Disabilities Act (ADA) specifications.
 2. Shall include 12-gauge channel (welded in) diagonal corner struts on leg corners with a 1/4"

wedge bolt. Aprons shall also have 12-gauge outside 90 degree corner brackets welded to aprons, forming a rigid leg pocket.

C. Legs:

1. Shall be 2" x 2" cold roll 14-gauge tubing. Tube legs shall have effectively a 5-bolt attachment. Legs shall bolt into corner pocket with four (4) 1/4"-20 hex drive bolts and corner strut with 1/4" wedge bolt.
2. Shall include tube insert with threaded adjustable nylon glide. Stamped metal brackets shall be provided for attachment through leg levelers when a fixed installation is required by code in tables with electrical or service fixtures installed.

D. Frames and Legs: Shall be powder coated in Black or Pearl White.

E. Table Tops: Shall be available in Laminate, Chemical Resistant Laminate, Epoxy Resin, Solid Surface (Polymer Resin), Phenolic, and A-tech. (Tops specified through model number selection.)

F. Table Designs:

1. Shall be available with formed horizontal "C" channels to allow use of Bins or Trays as slide-under accessory drawers.
2. Shall be available with wire form student book boxes bolted into the apron frames. Wire form book boxes shall eliminate the solid enclosed areas susceptible to trash and hidden item accumulation. (Solid side book boxes or compartments not acceptable.)

APRON STEEL LEG TABLES – STEVENS ADVANTAGE 49800 SERIES

A. 49800 Series Tables: Shall be constructed with 4 1/2" wide apron rails. Aprons shall have double diagonal formed-steel corner gussets machined in and attached with #10 screws. 1" thick aprons shall have face to match casework selection.

B. Legs:

1. Shall be 2" x 2" cold roll 14-gauge steel with two (2) 5/16"-18 corner anchor bolts. Tube legs shall have retainer angles for clamping onto wood apron members.
2. Shall include insert with threaded adjustable nylon glide. Stamped metal brackets shall be provided for attachment through leg levelers when a fixed installation is required by code in tables with electrical or service fixtures installed.
3. Shall be powder coated in Black or Pearl White.

C. Table Tops: Shall be available in Laminate, Chemical Resistant Laminate, Epoxy Resin, Solid Surface (Polymer Resin), Phenolic, and A-tech. (Tops specified through model number selection.)

D. Table Designs: Shall be available with wire form student book boxes bolted into the apron frames. Wire form book boxes shall eliminate the solid enclosed areas susceptible to trash and hidden item accumulation. (Solid side book boxes or compartments not acceptable.)



PART 3 EXECUTION

3.01 INSTALLATION

- A. Installer shall examine the job site and the conditions under which the work in this section is to be performed and notify the contractor in writing of any unsatisfactory conditions. Do not proceed with work under this section until unsatisfactory conditions have been corrected in accordance with AWI's *Quality Standards Illustrated* (current version) and Stevens Industries, Inc.'s *Site Conditions*.
- B. Casework, countertops, and related materials shall be conditioned to average prevailing humidity condition in installation areas prior to start of work.
- C. Install casework and countertops with factory-trained supervision, authorized by manufacturer. Casework shall be installed plumb, level, true, and straight with no distortions (shim as required). Casework shall be securely attached to building structure with anchorage devices of appropriate type, size, and quantity to meet applicable codes, specifications, and safety conditions. Where casework and countertops abut other finished work, scribe and trim to accurate fit, and caulk as required.
- D. Adjust casework and hardware so that doors and drawers operate smoothly without warp or bind. Lubricate operating hardware.
- E. Repair, or remove and replace, defective work as directed upon completion of installation.
- F. Advise project site superintendent of problems and precautions for protection of casework and countertops from damage by other trades until acceptance of the work by the owner.
- G. Cover casework with 4-mil polyethylene film for protection against soiling and deterioration during remainder of construction period.

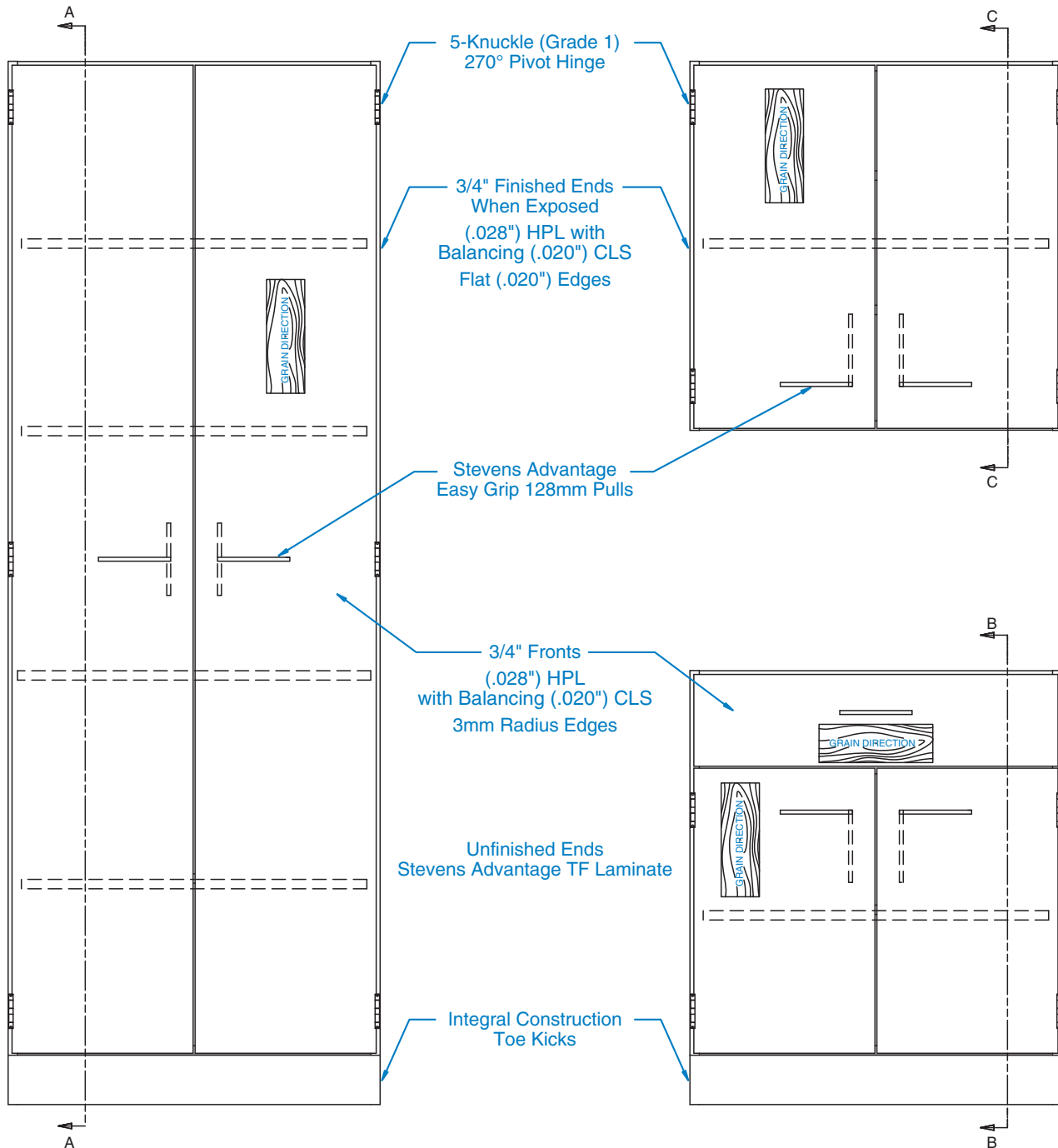
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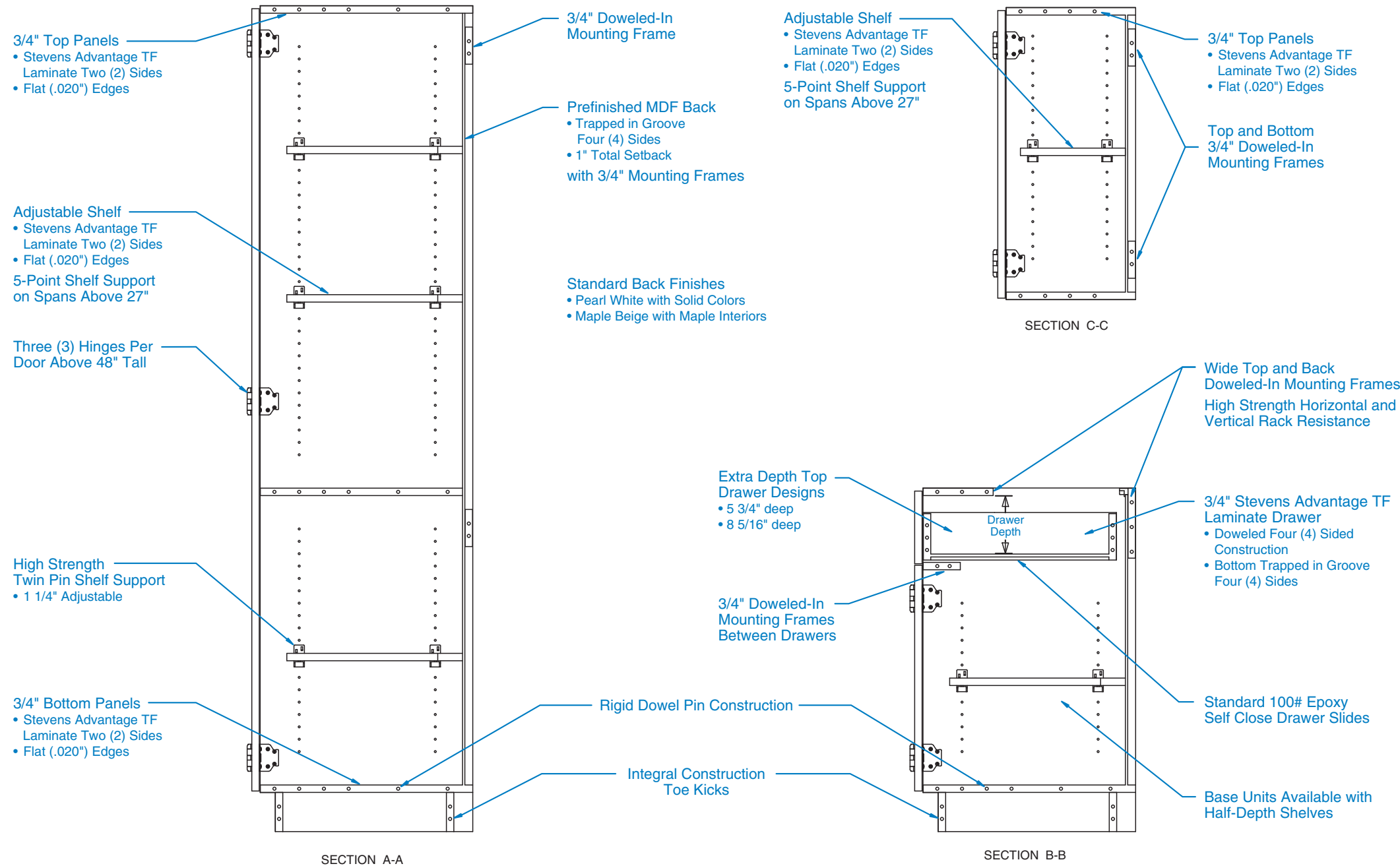
GLOSSARY OF ACRONYMS

ABS:	Acetyl Butyl Styrene
ADA:	Americans with Disabilities Act
ANSI:	American National Standards Institute
ASTM:	American Society for Testing and Materials
ATH:	Aluminum Trihydrate
AWI:	Architectural Woodwork Institute
BHMA:	Builders Hardware Manufacturers Association
BIFMA:	The Business and Institutional Furniture Manufacturer's Association
CARB:	California Air Resources Board
CLS:	Cabinet Liner Surface
CNC:	Computer Numerical Control
EPP:	Environmentally Preferable Product
HPL:	High Pressure Laminate
MDF:	Medium Density Fiberboard
NAUF:	Non Added Urea Formaldehyde
NEMA:	National Electrical Manufacturers Association
PSI:	Pounds per Square Inch
PVA:	Polyvinyl Acetate
SCS:	Scientific Certification Systems
SEFA:	Scientific Equipment and Furniture Association
TF:	Thermofused

4120 Laminate Series

Specifications





Standard Features:

- 3mm radius edge style overlay design fronts**
- HPL finished ends and fronts
- HPL laminates from Wilsonart standard offering
- Stevens Advantage TF laminate interiors in Pearl White or Maple woodgrain
- Flat (.020") extrusion cabinet edges, hot melt applied*
- Essentials Collection 128mm pulls
- SA101 5-knuckle, grade I, 270° pivot hinges
- SA402 6-tumbler high security dead bolt locks
- Tested to SEFA 8.0 standards

Countertops:

- LS05 laminate with 3mm edges
- LS25 chemical resistant laminate with 3mm edges
- ES— epoxy resin
- PS00 solid surface (polymer resin)
- SS00 stainless steel
- PL00 phenolic

Add Cost Options:

- 3mm radius cabinet edges**
- Special order – Formica, Pionite, Nevamar laminates
- Matching open interiors to exterior
- SA103SS stainless steel 5-knuckle hinges
- Artisan Collection 128mm pulls
- SA001SS stainless steel 128mm bentwire pulls
- Full extension 120# ball bearing slides, all drawers
- Wall tops and bottoms 1" thick
- Matching wall bottoms to exterior
- Polypropylene isolation supports
- Exterior grade plywood ladder base material
- Birch plywood drawers

* Flat PVC or ABS extrusion edges, based on commercially available stock patterns

** PVC or ABS 3mm edge extrusions from Stevens standard offering



