

SECTION 122413 - ROLLER WINDOW SHADES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Manually operated roller shades with single rollers.

B. Related Requirements:

- 1. Section 061000 "Rough Carpentry" for wood blocking and grounds for mounting roller shades and accessories.
- 2. Section 079200 "Joint Sealants" for sealing the perimeters of installation accessories for light-blocking shades with a sealant.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

- 1. Include construction details, material descriptions, dimensions of individual components and profiles, features, finishes, and operating instructions for roller shades.

B. Shop Drawings: Show fabrication and installation details for roller shades, including shadeband materials, their orientation to rollers, and their seam and batten locations.

C. Samples:

- 1. Include color samples of shadeband material and shade fascia material.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For roller shades to include in maintenance manuals.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Roller Shades: Full-size units equal to 5 percent of quantity installed for each size, color, and shadeband material indicated, but no fewer than two units.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roller shades in factory packages, marked with manufacturer, product name, and location of installation using same designations indicated on Drawings.

1.7 FIELD CONDITIONS

- A. Environmental Limitations: Do not install roller shades until construction and finish work in spaces, including painting, is complete and dry and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Field Measurements: Where roller shades are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operating hardware of operable glazed units through entire operating range. Notify Architect of installation conditions that vary from Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain roller shades from single source from single manufacturer.

2.2 MANUALLY OPERATED SHADES WITH SINGLE ROLLERS

- A. Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following, or approved equal:
 - 1. MechoShade Systems Inc.; Mecho/5 (Basis of Design)
 - 2. Draper Inc.
 - 3. Lutron Electronics Co.
- B. Chain-and-Clutch Operating Mechanisms: With continuous-loop bead chain and clutch that stops shade movement when bead chain is released; permanently adjusted and lubricated.

1. Bead Chains: Manufacturer's standard stainless steel chains.
 - a. Loop Length: Full length of roller shade.
 - b. Limit Stops: Provide upper and lower ball stops.
 - c. Chain-Retainer Type: Chain tensioner, jamb mounted.
 2. Spring Lift-Assist Mechanisms: Manufacturer's standard for balancing roller shade weight and for lifting heavy roller shades.
 - a. Provide for shadebands that weigh more than 10 lb or for shades as recommended by manufacturer, whichever criterion is more stringent.
- C. Rollers: Corrosion-resistant steel or extruded-aluminum tubes of diameters and wall thicknesses required to accommodate operating mechanisms and weights and widths of shadebands indicated without deflection. Provide with permanently lubricated drive-end assemblies and idle-end assemblies designed to facilitate removal of shadebands for service.
1. Roller Drive-End Location:
 - a. Single Shade Unit: Right side of interior face of shade.
 - b. Multiple Shade Units: Locate at nearest storefront jamb.
 2. Direction of Shadeband Roll: Regular, from back (exterior face) of roller.
 3. Shadeband-to-Roller Attachment: Manufacturer's standard method.
- D. Mounting Hardware: Brackets or endcaps, corrosion resistant and compatible with roller assembly, operating mechanism, installation accessories, and mounting location and conditions indicated.
- E. Roller-Coupling Assemblies: Coordinated with operating mechanism and designed to join up to three inline rollers into a multiband shade that is operated by one roller drive-end assembly.
- F. Shadebands:
1. Shadeband Material: Light-filtering fabric
 2. Shadeband Bottom (Hem) Bar: Steel or extruded aluminum.
 - a. Type: Enclosed in sealed pocket of shadeband material
- G. Installation Accessories:
1. Front Fascia: Aluminum extrusion that conceals front and underside of roller and operating mechanism and attaches to roller endcaps without exposed fasteners.
 - a. Shape: L-shaped.
 - b. Height: Manufacturer's standard height required to conceal roller and shadeband assembly when shade is fully open, but not less than 3-3/4 inches.
 2. Exposed Headbox: Rectangular, extruded-aluminum enclosure including front fascia, top and back covers, endcaps, and removable bottom closure.

- a. Height: Manufacturer's standard height required to enclose roller and shadeband assembly when shade is fully open, but not less than 3-3/4 inches.
3. Endcap Covers: To cover exposed endcaps.
4. Installation Accessories Color and Finish: As selected from manufacturer's full range.

2.3 SHADEBAND MATERIALS

- A. Shadeband Material Flame-Resistance Rating: Comply with NFPA 701. Testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
- B. Light-Filtering Fabric: Woven fabric, stain and fade resistant.
 1. Source: Roller shade manufacturer.
 2. Product: MechoShade Systems Inc.; Soho Collection
 3. Type: Woven PVC-coated polyester. (76% PVC and 24% Polyester)
 4. Weave: Basketweave.
 5. Weight: .95 lbs per square yard.
 6. Thickness: .030-inches thick
 7. Roll Width: 96 inches Maximum. Size varies, refer to drawings.
 8. Orientation on Shadeband: Up the bolt.
 9. Openness Factor: 3 percent.
 10. Color: Soho Collection 1600 Series – 1603 Broome (Basis of Design)

2.4 ROLLER SHADE FABRICATION

- A. Product Safety Standard: Fabricate roller shades to comply with WCMA A 100.1, including requirements for flexible, chain-loop devices; lead content of components; and warning labels.
- B. Unit Sizes: Fabricate units in sizes to fill window and other openings as follows, measured at 74 deg F:
 1. Outside of Jamb Installation: Width and length as indicated, with terminations between shades of end-to-end installations at centerlines of mullion or other defined vertical separations between openings.
- C. Shadeband Fabrication: Fabricate shadebands without battens or seams to extent possible, except as follows:
 1. Vertical Shades: Where width-to-length ratio of shadeband is equal to or greater than 1:4, provide battens and seams at uniform spacings along shadeband length to ensure shadeband tracking and alignment through its full range of movement without distortion of the material.
 2. Skylight Shades: Provide battens and seams at uniform spacings along shadeband as required to ensure shadeband tracking and alignment through its full range of movement without distortion or sag of material.

3. Railroaded Materials: Railroad material where material roll width is less than the required width of shadeband and where indicated. Provide battens and seams as required by railroaded material to produce shadebands with full roll-width panel(s) plus, if required, one partial roll-width panel located at top of shadeband.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 ROLLER SHADE INSTALLATION

- A. Install roller shades level, plumb, and aligned with adjacent units according to manufacturer's written instructions.
 1. Opaque Shadebands: Located so shadeband is not closer than 2 inches to interior face of glass. Allow clearances for window operation hardware.
- B. Electrical Connections: Connect motor-operated roller shades to building electrical system.
- C. Roller Shade Locations: At all exterior aluminum storefront assemblies, unless otherwise noted on drawings.

3.3 ADJUSTING

- A. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

3.4 CLEANING AND PROTECTION

- A. Clean roller shade surfaces, after installation, according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that roller shades are without damage or deterioration at time of Substantial Completion.
- C. Replace damaged roller shades that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.

3.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain motor-operated roller shades.

END OF SECTION 122413

SECTION 123216 - MANUFACTURED PLASTIC-LAMINATE-CLAD CASEWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Plastic-laminate-clad casework.
 - 2. Casework hardware and accessories.
- B. Related Requirements:
 - 1. Section 061000 "Rough Carpentry" for wood blocking for anchoring casework.
 - 2. Section 092216 "Non-Structural Metal Framing" for reinforcements in metal-framed partitions for anchoring casework.
 - 3. Section 096513 "Resilient Base and Accessories" for resilient base applied to plastic-laminate-clad casework.
 - 4. Section 123661 "Solid Surfacing Countertops" for solid surface countertops installed on plastic-laminate-clad casework
 - 5. Division 22 for Plumbing requirements
 - 6. Division 26 for Electrical Requirements

1.3 DEFINITIONS

- A. Definitions in the AWI/AWMAC/WI's "Architectural Woodwork Standards" apply to the Work of this Section.

1.4 PREINSTALLATION MEETINGS

- A. Keying Conference: Conduct conference at Project site. Incorporate keying conference decisions into final keying requirements.

1.5 COORDINATION

- A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to ensure that casework can be supported and installed as indicated.

1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For plastic-laminate-clad casework.
 - 1. Include plans, elevations, sections, and attachments to other work including blocking and reinforcements required for installation.
 - 2. Indicate types and sizes of casework.
 - 3. Indicate manufacturer's catalog numbers for casework.
 - 4. Show fabrication details, including types and locations of hardware.
 - 5. Indicate locations of and clearances from adjacent walls, doors, windows, other building components, and equipment.
- C. Keying Schedule: Include schematic keying diagram, and index each key set to unique designations that are coordinated with the Contract Documents.
- D. Samples: For casework and hardware finishes.

1.7 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Quality Standard Compliance Certificates: AWI Quality Certification Program
- C. Sample Warranty: For special warranty.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Protect finished surfaces during handling and installation with protective covering of polyethylene film or other suitable material.

1.9 FIELD CONDITIONS

- A. Environmental Limitations: Do not deliver or install casework until building is enclosed, wet-work is complete, and HVAC system is operating and maintaining temperature and relative humidity at levels planned for building occupants during remainder of construction period. Maintain temperature and relative humidity during remainder of construction period in range recommended for Project location by the AWI/AWMAC/WI's "Architectural Woodwork Standards."
- B. Established Dimensions: Where casework is indicated to fit to other construction, establish dimensions for areas where casework is to fit. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.

- C. Field Measurements: Where casework is indicated to fit to existing construction, verify dimensions of existing construction by field measurements before fabrication and indicate measurements on Shop Drawings. Provide fillers and scribes to allow for trimming and fitting.
- D. Locate concealed framing, blocking, and reinforcements that support casework by field measurements before enclosing them, and indicate measurements on Shop Drawings.

1.10 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of casework that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Delamination of components or other failures of glue bond.
 - b. Warping of components.
 - c. Failure of operating hardware.
 - 2. Warranty Period: Five (5) years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following, or approved equal:
 - 1. TMI Systems Inc. (Basis of Design)
 - 2. Stevens Industries
 - 3. Case Systems
- B. Source Limitations: Obtain from single source from single manufacturer.

2.2 GENERAL REQUIREMENTS FOR CASEWORK

- A. Quality Standard: Unless otherwise indicated, comply with the AWI/AWMAC/WT's "Architectural Woodwork Standards" for grades of casework indicated for construction, finishes, installation, and other requirements.
 - 1. Grade: Premium.
 - 2. Provide inspections of casework fabrication and installation together with labels and certificates from AWI certification program indicating that casework complies with requirements of grades specified.

- B. Product Designations: Drawings indicate sizes, configurations, and finish materials of manufactured plastic-laminate-clad casework by referencing designated manufacturer's catalog numbers. Other manufacturers' casework of similar sizes and door and drawer configurations, of same finish materials, and complying with the Specifications may be considered.

2.3 PLASTIC-LAMINATE-CLAD CASEWORK

- A. Design: Frameless cabinet construction with the following door and drawer-front style:
 - 1. Reveal overlay.
- B. Grain Direction for Wood-Grain Plastic Laminate:
 - 1. Doors: Vertical with continuous vertical matching.
 - 2. Drawer Fronts: Vertical with continuous vertical matching.
 - 3. Face Frame Members: Lengthwise.
 - 4. End Panels: Vertical.
 - 5. Bottoms and Tops of Units: Side to side.
 - 6. Knee Space Panels: Vertical.
 - 7. Aprons: Horizontal.
- C. Exposed Materials:
 - 1. Plastic-Laminate Grade: VGS.
 - a. Colors and Patterns: As selected by Architect from manufacturer's full range.
 - 2. Edgebanding: PVC.
 - a. PVC Edgebanding Color: As selected by Architect from casework manufacturer's full range to match exposed plastic laminate color.
- D. Semiexposed Materials:
 - 1. Thermoset Decorative Panels: Provide thermoset decorative panels for semiexposed surfaces unless otherwise indicated.
 - a. Colors and Patterns: As selected by Architect from manufacturer's full range.
 - b. Provide plastic laminate of same grade as exposed surfaces for interior faces of doors and drawer fronts and other locations where opposite side of component is exposed.

2.4 CABINET HARDWARE AND ACCESSORIES

- A. Hardware, General: Unless otherwise indicated, provide manufacturer's standard satin-finish, commercial-quality, heavy-duty hardware.

1. Use threaded metal inserts with machine screws for fastening to particleboard except where hardware is through-bolted from back side.
- B. Frameless Concealed Hinges (European Type): BHMA A156.9, Type B01602, self-closing.
1. Doors up to 34 inches in height have 2 hinges per door.
 2. Doors 35 inches to 62 inches in height have 3 hinges per door.
 3. Doors 63 inches to 80 inches in height have 4 hinges per door.
 4. All doors have rubber bumpers.
 5. Degrees of Opening: 120 degrees.
- C. Bar Pulls: Solid stainless steel bar pulls, fastened from back with two screws.
1. Provide two pulls for drawers more than 36 inches wide.
- D. Door Catches: Powder-coated, dual, self-aligning, permanent magnet catch. Provide two catches on doors more than 36 inches high.
- E. Door and Drawer Bumpers: Self-adhering, clear silicone rubber.
1. Doors: Provide one bumper at top and bottom of closing edge of each swinging door.
 2. Drawers: Provide one bumper on back side of drawer front at each corner.
- F. Drawer Slides: BHMA A156.9, Type B05091.
1. Heavy Duty Grade 1HD-100 and Grade 1HD-200: Side mounted; full extension type; zinc-plated, steel ball-bearing slides.
 2. Box Drawer Slides: Grade 1HD-100, for drawers not more than 6 inches high and 24 inches wide.
 3. File Drawer Slides: Grade 1HD-200, for drawers more than 6 inches high or 24 inches wide.
 4. Pencil Drawer Slides: Grade 1, for drawers not more than 3 inches high and 24 inches wide.
- G. Drawer and Hinged-Door Locks: Removable Core, Cylindrical (cam) type with strike, five-pin tumbler, brass with chrome-plated finish, and complying with BHMA A156.11, Grade 1.
1. Provide a minimum of two keys per lock and six master keys.
 2. Provide locks where indicated.
 - a. Masterkey for up to 500 key changes.
- H. Sliding-Door Hardware Sets: Manufacturer's standard, to suit type and size of sliding-door unit.
- I. Adjustable Shelf Supports: Injection molded transparent polycarbonate friction fit into cabinet end panels and vertical dividers, adjustable on 32mm centers. Each shelf support has 2 integral support pins, 5mm diameter, to interface pre-drilled holes, and to prevent accidental rotation of support. Structural load to 1200 pounds (300 pounds per support) without failure.

2.5 MATERIALS

- A. Exterior Grade Plywood: At unit bases only.
- B. MDF: Medium-density fiberboard, ANSI A208.2, Grade 130.
- C. Hardboard: ANSI A135.4, Class 1 tempered.
- D. Plastic Laminate: High-pressure decorative laminate complying with NEMA LD 3.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following, or approved equal:
 - a. Wilsonart (Basis of Design)
 - b. Or approved equal.
 - 2. Source Limitations: Obtain from single source from single manufacturer.
- E. PVC Edgebanding for Plastic Laminate: Rigid PVC extrusions, through color with satin finish, 0.12 inch (3 mm) thick.
- F. Thermoset Decorative Panels: Particleboard or MDF finished with thermally fused, melamine-impregnated decorative paper and complying with requirements of NEMA LD 3, Grade VGL, for Test Methods 3.3, 3.4, 3.6, 3.8, and 3.10.
 - 1. Edgebanding for Thermoset Decorative Panels: PVC or polyester edgebanding matching thermoset decorative panels.

2.6 FABRICATION

- A. Plastic-Laminate-Clad Cabinet Construction: As required by referenced quality standard, but not less than the following:
 - 1. Bottoms and Ends of Cabinets, and Tops of Wall Cabinets and Tall Cabinets: 3/4-inch thick MDF.
 - 2. Shelves: 3/4-inch thick MDF.
 - 3. Backs of Casework: 1/4-inch- thick MDF.
 - 4. Drawer Fronts: 3/4-inch (19-mm) thick MDF.
 - 5. Drawer Sides and Backs: 1/2-inch thick MDF with glued and multiple-dowel joints.
 - 6. Drawer Bottoms: 1/2-inch- thick MDF screwed into front, back, and sides of drawers.
 - 7. Doors: 3/4 inch thick MDF.
- B. Filler Strips: Provide as needed to close spaces between casework and walls, ceilings, and equipment. Fabricate from same material and with same finish as casework.
- C. Ledge Tops for Wall Units, and Tall Units:

1. All nominal 3/4" thick laminate clad ledge tops shown on drawings (on top of tall and wall units without built-in soffits) shall be constructed with 3/4" particleboard core laminated top face with GP50 (.050) high pressure decorative laminate, with BK20 backer underside. Provide tight joint fasteners where needed. All exposed edges shall have 3 mm PVC banding, machine applied with waterproof hot melt adhesive. Exposed edges and corners shall be machine profiled to 1/8" radius for safety. Edging shall match ledge top color or in contrasting color as selected by Architect.
 2. Ledge Top support, shall be provided by the cabinet body construction. Furnish shims as needed between cabinet body construction and underside of ledge tops to provide full support.
- D. Undercounter Support Frame: Welded steel undercounter support frames, legs and miscellaneous metal parts shall be furniture steel, welded, degreased, cleaned and epoxy powder coated. Frames shall be available in 3" increments to clear span 24" to 60" width. Frames shall readily accept pencil drawers, keyboard drawers or trays, wire management troughs, etc. and shall be designed to interface undercounter support brackets. Available in light color beige, gray or white to match basic cabinet body or in contracting slate grey or black color as selected by the Architect.
- E. Countertops:
1. Refer to Section 123661 "Solid Surfacing Countertops"
 2. Countertop support brackets, undercounter support frames, legs and miscellaneous metal parts shall be furniture steel, welded, degreased, cleaned, treated and epoxy powder painted to match basic cabinet body color, or in a contrasting color as selected by Architect.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances, location of framing and reinforcements, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION OF PLASTIC-LAMINATE-CLAD CASEWORK

- A. Grade: Install casework to comply with same quality standard grade as item to be installed.
- B. Install casework level, plumb, and true in line; shim as required using concealed shims. Where casework abuts other finished work, apply filler strips and scribe for accurate fit, with fasteners concealed where practical.

- C. Base Cabinets: Set cabinets straight, level, and plumb. Adjust subtops within 1/16 inch of a single plane. Align similar adjoining doors and drawers to a tolerance of 1/16 inch. Bolt adjacent cabinets together with joints flush, tight, and uniform.
- D. Wall Cabinets: Hang cabinets straight, level, and plumb. Adjust fronts and bottoms within 1/16 inch of a single plane. Fasten cabinets to hanging strips, masonry, framing, wood blocking, or reinforcements in walls and partitions. Align similar adjoining doors to a tolerance of 1/16 inch.
- E. Fasten casework to adjacent units and to masonry, framing, wood blocking, or reinforcements in walls and partitions to comply with the AWI/AWMAC/WI's "Architectural Woodwork Standards."
- F. Install hardware uniformly and precisely. Set hinges snug and flat in mortises unless otherwise indicated. Adjust and align hardware so moving parts operate freely and contact points meet accurately. Allow for final adjustment after installation.
- G. Adjust operating hardware so doors and drawers operate smoothly without warp or bind. Lubricate operating hardware as recommended by manufacturer.

3.3 CLEANING

- A. Repair or remove and replace defective work as directed on completion of installation.
- B. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish, as approved by Architect.

END OF SECTION 123216

SECTION 123661 - SOLID SURFACING COUNTERTOPS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

- 1. Solid surface material countertops.
- 2. Solid surface material backsplashes.
- 3. Solid surface material end splashes.
- 4. Solid surface material apron fronts.
- 5. Solid surface window stools.

- B. Related Requirements:

- 1. Section 123216 "Manufactured Plastic-Laminate-Clad Casework"
- 2. Section 084113 "Aluminum Framed Entrances And Storefront"
- 3. Division 22 for Plumbing Requirements
- 4. Division 26 for Electrical Requirements.

1.3 ACTION SUBMITTALS

- A. Product Data: For countertop materials.

- B. Shop Drawings: For countertops. Show materials, finishes, edge and backsplash profiles, methods of joining, and cutouts for plumbing fixtures.

- 1. Show locations and details of joints.
- 2. Show direction of directional pattern, if any.

- C. Samples: For the following products:

- 1. Countertop material, 6 inches square.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For fabricator.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For solid surface material countertops to include in maintenance manuals. Include Product Data for care products used or recommended by Installer and names, addresses, and telephone numbers of local sources for products.

1.6 QUALITY ASSURANCE

- A. Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate countertops similar to that required for this Project, and whose products have a record of successful in-service performance.
- B. Installer Qualifications: Fabricator of countertops.

1.7 FIELD CONDITIONS

- A. Field Measurements: Verify dimensions of countertops by field measurements after base cabinets are installed but before countertop fabrication is complete.

1.8 COORDINATION

- A. Coordinate locations of utilities that will penetrate countertops or backsplashes.

PART 2 - PRODUCTS

2.1 SOLID SURFACE COUNTERTOP MATERIALS

- A. Solid Surface Material: Homogeneous-filled plastic resin complying with ICPA SS-1.
- B. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following, or approved equal:
 - 1. DuPont USA; Corian (Basis of Design for Countertops, Backsplashes and Endsplashes)
 - 2. Inpro Corp.; Bioprisim (Basis of Design for window stools).
 - 3. Wilsonart LLC.
- C. Products:
 - 1. Type: Provide Standard type or Veneer type made from material complying with requirements for Standard type, as indicated unless Special Purpose type is indicated.
 - 2. Colors and Patterns: As selected by Architect from manufacturer's full range.
- D. Particleboard: ANSI A208.2, Grade M-2.

2.2 COUNTERTOP FABRICATION

- A. Fabricate countertops according to solid surface material manufacturer's written instructions and to the AWI/AWMAC/WI's "Architectural Woodwork Standards."
 - 1. Grade: Premium
- B. Configuration:
 - 1. Front: Straight, slightly eased at top and bottom.
 - 2. Backsplash: Straight, slightly eased at corner
 - 3. End Splash: Matching backsplash.
- C. Countertops: 1/2-inch thick, solid surface material laminated to 3/4-inch-thick MDF with exposed edges built up with 3/4-inch-thick, solid surface material. Front face to be 1-1/4-inches.
- D. Backsplashes: 1/2-inch thick, solid surface material with 1/2-inch wide scribe.
- E. Window Stools: 1/2" thick solid surfacing material
- F. Fabricate tops with shop-applied edges and backsplashes unless otherwise indicated. Comply with solid surface material manufacturer's written instructions for adhesives, sealers, fabrication, and finishing.
 - 1. Fabricate with loose backsplashes for field assembly.
 - 2. Install integral sink bowls in countertops in the shop.
- G. Joints: Fabricate countertops in sections for joining in field.
 - 1. Joint Locations: Not within 18 inches of a sink or cooktop and not where a countertop section less than 36 inches long would result, unless unavoidable.
 - 2. Splined Joints: Accurately cut kerfs in edges at joints for insertion of metal splines to maintain alignment of surfaces at joints. Make width of cuts slightly more than thickness of splines to provide snug fit. Provide at least three splines in each joint.
- H. Cutouts and Holes:
 - 1. Undercounter Plumbing Fixtures: Make cutouts for fixtures in shop using template or pattern furnished by fixture manufacturer. Form cutouts to smooth, even curves.
 - a. Provide vertical edges, slightly eased at juncture of cutout edges with top and bottom surfaces of countertop and projecting 3/16 inch into fixture opening.
 - 2. Counter-Mounted Plumbing Fixtures: Prepare countertops in shop for field cutting openings for counter-mounted fixtures. Mark tops for cutouts and drill holes at corners of cutout locations. Make corner holes of largest radius practical.
 - 3. Fittings: Drill countertops in shop for plumbing fittings, undercounter soap dispensers, and similar items.

2.3 INSTALLATION MATERIALS

- A. Adhesive: Product recommended by solid surface material manufacturer.
- B. Sealant for Countertops: Comply with applicable requirements in Section 079200 "Joint Sealants."

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates to receive solid surface material countertops and conditions under which countertops will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of countertops.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install countertops level to a tolerance of 1/8 inch in 8 feet, 1/4 inch maximum. Do not exceed 1/64-inch difference between planes of adjacent units.
- B. Fasten countertops by screwing through corner blocks of base units into underside of countertop. Predrill holes for screws as recommended by manufacturer. Align adjacent surfaces and, using adhesive in color to match countertop, form seams to comply with manufacturer's written instructions. Carefully dress joints smooth, remove surface scratches, and clean entire surface.
- C. Fasten subtops to cabinets by screwing through subtops into cornerblocks of base cabinets. Shim as needed to align subtops in a level plane.
- D. Secure countertops to subtops with adhesive according to solid surface material manufacturer's written instructions. Align adjacent surfaces and, using adhesive in color to match countertop, form seams to comply with manufacturer's written instructions. Carefully dress joints smooth, remove surface scratches, and clean entire surface.
- E. Bond joints with adhesive and draw tight as countertops are set. Mask areas of countertops adjacent to joints to prevent adhesive smears.
 - 1. Install metal splines in kerfs in countertop edges at joints. Fill kerfs with adhesive before inserting splines and remove excess immediately after adjoining units are drawn into position.
 - 2. Clamp units to temporary bracing, supports, or each other to ensure that countertops are properly aligned and joints are of specified width.
- F. Install backsplashes and end splashes by adhering to wall and countertops with adhesive. Mask areas of countertops and splashes adjacent to joints to prevent adhesive smears.

- G. Install aprons to backing and countertops with adhesive. Mask areas of countertops and splashes adjacent to joints to prevent adhesive smears. Fasten by screwing through backing. Pre-drill holes for screws as recommended by manufacturer.
- H. Complete cutouts not finished in shop. Mask areas of countertops adjacent to cutouts to prevent damage while cutting. Make cutouts to accurately fit items to be installed, and at right angles to finished surfaces unless beveling is required for clearance. Ease edges slightly to prevent snipping.
 - 1. Seal edges of cutouts in particleboard subtops by saturating with varnish.
- I. Apply sealant to gaps at walls; comply with Section 079200 "Joint Sealants."

END OF SECTION 123661

SECTION 126900 - ENTRANCE MATS AND FRAMES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 DESCRIPTION OF WORK

- A. Provide all labor, material, accessories, equipment and incidentals required to complete recessed mat and frame work indicated.

1.3 QUALITY ASSURANCE

- A. Manufacturer: Unless otherwise acceptable to the Architect, furnish entrance mats and accessories by one manufacturer for the entire project.
- B. In addition to the requirements of these specifications, comply with manufacturer's instructions and recommendations for preparation of substrate, installation of frames and anchors, and application of entrance mats.
- C. Provide colors of materials for entrance mats as shown on the drawings or, if not shown, as selected by the Architect from manufacturer's standard colors and patterns.
- D. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication, where possible, to ensure proper fitting of the work. However, do not delay job progress. Allow for trimming and fitting wherever the taking of field measurements before fabrication might delay the work.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's specifications and installation instructions for each type of entrance mat. Include methods of installation for each type of substrate to receive frames.
- B. Samples: Submit samples for each type and color of entrance mat, frames and accessories required. Provide 12" square samples of mat materials and 12" lengths of frame members.

1.5 JOB CONDITIONS

- A. Coordinate recessed mat frame installation with concrete work specified in Division 3 to ensure that mat frame or recess for frame, if to be installed after concrete placement, is at proper elevation and location indicated or required to fit properly to adjoining related work and that

anchorage devices for frame are or can be securely embedded. Furnish setting drawings, templates and instructions for installation of frame and anchorage devices. Coordinate delivery with other work to avoid delay.

- B. Protect mat frame from damage of any kind during construction period by providing temporary cover of suitable material.

PART 2 - PRODUCTS

2.1 SURFACE MOUNTED ENTRANCE MATS AND FRAMES

- A. Manufacturers: Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to, the following:
 - 1. Construction Specialties Group Inc.; M2 Pedimat AA (Basis of Design)
 - 2. Or approved equal
- B. Mats: 6063-T6 aluminum continuously hinge connected to permit rollback for easy cleaning. Overall depth without frame is 7/16" (11.1 mm).
 - 1. Finish: Anodized Aluminum
- C. Surface Mounted Tapered Aluminum Frame: shall be a 1 5/8"(38.1mm) wide 6105-T5 aluminum alloy and permanently positions mat for surface mounted applications.
 - 1. Finish: Anodized Aluminum
- D. Carpet Inserts: Shall meet CRI standard for good indoor air quality. Fibers shall include a minimum of 100, 12 mil monofilament fibers per square inch. Each carpet fiber and monofilament shall be fusion-bonded to a rigid two-ply backing to prevent fraying and supplied in continuous splice-free lengths. Anti-static carpet fibers shall contain antimicrobial additive and be treated with Scotchgard to reduce soiling. Carpet weight shall be 33-oz./yd².
 - 1. Basis of Design is MonoTuft HD Carpet by Construction Specialties Group
 - 2. Color: As selected by Architect from manufacturer's full range.

2.2 FABRICATION

- A. Fabricate mat frames to sizes indicated, verified by field measurements and coordinated with related, adjoining work. Miter frame corners to produce tight fitting hairline joints.
- B. Fabricate mats in one piece, unless otherwise indicated, to closely fit mat frames; or where mat areas exceed maximum sizes manufactured, in equal-sized sections of sizes indicated, or if not indicated, as recommended by manufacturer for ease of handling.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install recessed frames and entrance mats to comply with manufacturer's instructions, at locations indicated and with top of frames and mats in proper relationship to one another and to adjoining finished flooring. Set mat tops at proper height for most effective cleaning action; coordinate top of mat surfaces with doors that swing across mats to provide adequate underdoor clearance. Set mats so that ribs run parallel to entrance doors.
- B. Coordinate top of mat surface with bottom of doors that swing across to provide ample clearance between door and mat.

END OF SECTION 126900.