

SECTION 12 36 00**COUNTERTOPS****PART 1 - GENERAL****1.1 DESCRIPTION**

- A. This section specifies plastic laminate countertops and splashes.

1.2 RELATED WORK

- A. Color, finishes and patterns of plastic laminate: SECTION 09 06 00, SCHEDULE FOR FINISHES.
- B. Plumbing requirements: DIVISION 22, PLUMBING.
- C. Electrical requirements: DIVISION 26, ELECTRICAL.
- D. Equipment Reference Manual for SECTION 12 36 00, COUNTERTOPS.

1.3 SUBMITTALS

- A. Submit in accordance with SECTION 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Product Data:
 - 1. Manufacturer's literature and other data showing compliance with the specification.
- C. Shop Drawings:
 - 1. Show dimensions of section and method of assembly.
 - 2. Details including cut outs, holes, scribes and splashes.
 - 3. Installation Procedures: Show dimensions, clearances required, methods of assembly, anchorage, installation and conditions related to adjoining work.
 - 4. Show details of construction at 1/2 scale.
- D. Samples:
 - 1. 150 mm (6 inch) square samples each top.
 - 2. Front edge, back splash, end splash and core with surface material and booking.

1.4 QUALITY ASSURANCE

- A. Approval by Contracting Officer is required of manufacturer and installer based upon certification of qualifications specified.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle to prevent damage and deterioration until final acceptance of project.
- B. Deliver and store materials in manufacturer's original, labeled containers after building is enclosed and wet work is complete and dry.
- C. Store materials in a secure, locked area.
- D. Repair or replace damaged items due to storage or handling.

1.6 APPLICABLE PUBLICATIONS

- A. Publications listed below form a part of this specification to the extent referenced. Publications are referenced in the text by the basic designation only.
- B. American Hardboard Association (AHA):
 - 1. A135.4-04 Basic Hardboard
- C. Composite Panel Association (CPA):
 - 1. A208.1-99 Particleboard
- D. American Society of Mechanical Engineers (ASME):
 - 1. A112.18.1-05 Plumbing Fixture Fittings
 - 2. A112.1.2-04 Air Gaps in Plumbing System
 - 3. A112.19.3-00(R2004) Stainless Steel Plumbing Fixtures (Designed for Residential Use)
- E. American Society for Testing and Materials (ASTM):
 - 1. A167-99 (R2004) Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip
 - 2. A1008-07 Steel, Sheet, Cold-Rolled, Carbon, Structural, High Strength, Low Alloy
 - 3. D256-06 Pendulum Impact Resistance of Plastic
 - 4. D570-98(R2005) Water Absorption of Plastics
 - 5. D638-03 Tensile Properties of Plastics
 - 6. D785-03 Rockwell Hardness of Plastics and Electrical Insulating Materials
 - 7. D790-07 Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
 - 8. D4690-99(2005) Urea-Formaldehyde Resin Adhesives
 - 9. G21-96 (R2002) Determining Resistance of Synthetic Polymeric Materials to Fungi
- F. Federal Specifications (FS):

1. A-A-1936 Adhesive, Contact, Neoprene Rubber
- G. U.S. Department of Commerce, Product Standards (PS):
1. PS 1-95 Construction and Industrial Plywood
- H. National Electrical Manufacturers Association (NEMA):
1. LD 3-05 High Pressure Decorative Laminates
2. LD 3.1-95 Performance, Application, Fabrication, and
 Installation of High Pressure Decorative Laminates

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Plastic Laminate: NEMA LD 3.
 - 1. Concealed backing sheet: Type BKL.
 - 2. Decorative surfaces:
 - a. Flat components: Type GP-HGL.
- B. Particleboard: CPA A208.1, Grade 2-M-2.
- C. Plywood: PS 1, Exterior type, veneer grade AC not less than five ply construction.
- D. Adhesive:
 - 1. For plastic laminate: FS A-A-1936.
- E. Fasteners:
 - 1. Use studs, bolts, spaces, threaded rods with nuts or screws suitable for materials being joined with metal splice plates, channels or other supporting shape.

2.2 SINKS

- A. Stainless Steel:
1. ANSI/ASME A112.19.3, Type 304, 18 gage.
 2. Self rim for plastic laminate or similar tops with concealed fasteners.
 3. Ledge back or ledge sides with holes to receive required fixtures when mounted on countertop.
 4. Apply fire resistant sound deadening material to underside.

2.3 TRAPS AND FITTINGS

- A. Material as specified in DIVISION 22, PLUMBING.

2.4 WATER FAUCETS

- A. ASME A112.18.1: Specified in DIVISION 22, PLUMBING.
 - 1. Cast or forged brass, compression type with replaceable seat and stem assembly or replaceable cartridge.
 - 2. Gooseneck minimum clearance above countertop of 190 mm (7-1/2 inches), bent 180 degrees for vertical discharge.
 - 3. Swing spouts elevated to clear handles.

2.5 COUNTERTOPS

- A. Fabricate in largest sections practicable.
- B. Fabricate with joints flush on top surface.
- C. Fabricate countertops to overhang front of cabinets and end of assemblies 25 mm (one inch) except where against to walls or cabinets.
- D. Provide 1 mm (0.039 inch) thick metal plate connectors or fastening devices (except epoxy resin tops).
- E. Fabricate with end splashes where against walls or cabinets.
- F. Splash Backs and End Splashes:
 - 1. Not less than 19 mm (3/4 inch) thick.
 - 2. Height 100 mm (4 inches) unless noted otherwise.
- G. Drill or cutout for sinks, and penetrations.
 - 1. Accurately cut for size of opening or penetration.
- H. Plastic Laminate Countertops:
 - 1. Fabricate plastic laminate on five-ply plywood or particleboard core 19 mm (3/4 inch) thick with plastic laminate backing sheet.
 - 2. Front edge over cabinets not less than 38 mm (1-1/2 inches) thick.
 - 3. Finish all exposed edges of countertops with plastic laminate to match top.

PART 3 - EXECUTION**3.1 INSTALLATION**

- A. Before installing countertops verify that wall surfaces have been finished as specified and that mechanical and electrical service locations are as required.
- B. Secure countertops to supporting rails of cabinets with metal fastening devices, or screws through pierced slots in rails.
 - 1. Where type, size or spacing of fastenings is not shown or specified,

submit shop drawings showing proposed fastenings and method of installation.

2. Use round head bolts or screws.
3. Use wood or sheet metal screws for wood or plastic laminate tops; minimum penetration into top 16 mm (5/8 inch), screw size No 8, or 10.

C. Sinks

1. Install self-rimming stainless steel sink in plastic laminate tops with silicone sealant to form watertight seal under shelf rim.
 - a. Install faucets and fittings on sink ledges with watertight seals where shown.
 - b. Install drain and traps to sink.

D. Faucets and Fixtures:

1. Seal opening between fixture and top.
2. Secure to top with manufacturers standard fittings.

3.2 PROTECTION AND CLEANING

- A. Tightly cover and protect against dirt, water, and chemical or mechanical injury.
- B. Clean at completion of work.

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