

**SECTION 12 36 00
COUNTERTOPS**

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies architectural woodwork (millwork) countertops.
- B. Items Specified include:
 - 1. Countertops with and without backsplashes.
 - 2. Window sills.
 - 3. Manufacturer's preformed coved back splash.
 - 4. Extended concealed brackets (at walls).
 - 5. Concealed brackets (at counters with no wall above).
 - 6. Grommets.

1.2 RELATED WORK

- A. Color and patterns of solid surface material, concealed brackets and grommets: SECTION 09 06 00, SCHEDULE FOR FINISHES.
- B. DIVISION 22, PLUMBING.
- D. Equipment Reference Manual for SECTION 12 36 00, COUNTERTOPS.
- E. Section 06 20 00, FINISH CARPENTRY (ARCHITECTURAL WOODWORK).

1.3 SUBMITTALS

- A. Submit in accordance with SECTION 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Shop Drawings
 - 1. Show dimensions of section and method of assembly.
 - 2. Show details of construction at a scale of 1/4" for elevations and plans.
- C. Samples:
 - 1. 150 mm (6 inch) square samples each top.

1.4 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):
A135.4-95.....Basic Hardboard
- C. Composite Panel Association (CPA):
A208.1-09.....Particleboard
- D. American Society of Mechanical Engineers (ASME):

- A112.18.1-12.....Plumbing Supply Fittings
- A112.1.2-12.....Air Gaps in Plumbing System
- A112.19.3-08(R2004).....Stainless Steel Plumbing Fixtures (Designed for Residential Use)
- E. American Society for Testing and Materials (ASTM):
 - A167-99 (R2009).....Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip
 - A1008-10.....Steel, Sheet, Cold-Rolled, Carbon, Structural, High Strength, Low Alloy
 - D256-10.....Pendulum Impact Resistance of Plastic
 - D570-98(R2005).....Water Absorption of Plastics
 - D638-10.....Tensile Properties of Plastics
 - D785-08.....Rockwell Hardness of Plastics and Electrical Insulating Materials
 - D790-10.....Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
 - D4690-99(2005).....Urea-Formaldehyde Resin Adhesives
- F. Federal Specifications (FS):
 - A-A-1936.....Adhesive, Contact, Neoprene Rubber
- G. U.S. Department of Commerce, Product Standards (PS):
 - PS 1-95.....Construction and Industrial Plywood

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Solid Surface Material.
 - 1. Homogeneous solid sheets of filled plastic resin.
 - 2. Thickness: 1/2 inch
 - 3. Edge Treatment: As shown on drawings.
 - 4. Flame Spread: Class A / Class 1
 - 5. Wear and Stain Resistance: ANSI Z124.3 AND Z124.6.
- B. Stainless Steel: ASTM A167, Type 304.
- C. Sheet Steel: ASTM A1008, cold rolled, Class 1 finish, stretcher leveled.
- D. Particleboard: CPA A208.1, Grade 2-M-2.
- E. Plywood: PS 1, Exterior type, veneer grade AC not less than five ply construction.

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F. Hardboard: ANSI/AHA A135.4, Type I, tempered, fire retardant treated, smooth surface one side.

G. Adhesive and Sealant

1. For Solid Surface Material: manufacturer's standard or type approved by manufacturer in writing.
2. For wood products: ASTM D4690, un-extended urea resin or un-extended melamine resin, phenol resin, or resorcinol resin.

H. Fasteners:

1. Metals used for welding same metal as materials joined.
2. Use studs, bolts, spaces, threaded rods with nuts or screws suitable for materials being joined with metal splice plates, channels or other supporting shape.

I. Concealed Brackets and Grommets: Refer to 09 06 00, SCHEDULE FOR FINISHES, for finish, color, and types.

2.2 SINKS

A. Stainless Steel:

1. Stainless steel sink as specified in DIVISION 22, PLUMBING.

2.3 WATER FAUCETS, TRAPS AND FITTINGS

A. Material as specified in DIVISION 22, PLUMBING.

2.4 COUNTERTOPS

A. Fabrication: AWI Premium Grade.

B. Fabricate tops in one piece unless otherwise indicated. Comply with solid surface material manufacturer's written recommendation for adhesive, sealer, fabrication and finishing.

C. Fabricate countertops to overhang front of cabinets and end of assemblies 1 inch (25mm) except where against walls or cabinets unless specified otherwise on drawings.

D. Fabricate with solid surface manufacturer's preformed back and end splashes where against walls or cabinets.

E. Splash Backs and End Splashes:

1. Not less than 1/2 inch thick.
2. Height 4 inches (100 mm) unless noted otherwise.

F. Extended Concealed and Concealed Brackets for Countertops: Steel construction, 2" height and length required for countertop depth.

G. Grommets: Refer to Section 09 06 00, SCHEDULE FOR FINISHES.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Before installing countertops and window stools verify that wall surfaces have been finished as specified.
- B. Countertops: Securely anchor to base cabinets or other supports.
 - 1. Align adjacent countertops to vertical panels (work of Section 06 20 00) and form seams to comply with manufacturer's written recommendations using adhesive in color to match countertop.
 - 2. Install countertops and window sills with no more than 1/8 inch (3 mm) sag, bow, or other variation from a straight line.
 - 3. Secure backsplashes to countertops and to walls using manufacturer's standard color-matched silicone sealant.
 - 4. Install window sills to comply with manufacturer's written instructions.
- C. Faucets, Fixtures, and Outlets:
 - 1. Seal opening between fixture and top.
 - 2. Secure to top with manufacturers standard fittings.
- D. Install concealed brackets following manufacturer's written instructions.

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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