

# DESIGN AND CONSTRUCTION GUIDELINES AND STANDARDS

DIVISION 6 • WOODS & PLASTICS

## 06 64 00 • PLASTIC TUB & SHOWER PANELS

### SECTION INCLUDES

Solid Surface Tub & Shower Surrounds  
Glass-Fiber-Reinforced Plastic Tub Surrounds  
Shower Pans  
(Composite countertops are in section 12 35 00 Casework)

### RELATED SECTIONS

06 10 00 Rough Carpentry  
07 20 00 Building Insulation and Moisture Protection  
09 30 00 Tile  
09 90 00 Painting  
22 00 00 Plumbing

### SOLID-SURFACE PLASTIC TUB SURROUNDS

### TECHNICAL STANDARDS

ASTM E-84 – Surface Burning Characteristics  
ANSI Z-124.2- Plastic Shower Receptors and Stalls  
IAMPO/ANSI Z124.1.2(2005)-Plastic Bathtubs and Shower Units  
ANSI A-117.1- Standard for Accessible and Useable Buildings and Facilities

### DESIGN

Specify solid surface ¼” thick products with a minimum 10 year manufacturer’s warranty.

Specify a matte finish for solid surface. Minimize joints.

PVC tub and shower surrounds are not acceptable alternatives to solid surface acrylic products.

PVC tub liners should not be specified; consider refinishing cast iron tubs if budget does not permit replacement. Cast-iron is the preferred tub.

For tile surrounds, see 09 30 00 Tile.

### DESIGN

When specifying solid surface-surrounds, include specific requirements for preparation of backer-board, such as priming and/or sealing based on the specific adhesive requirements of the panel manufacturer.

Do not install solid surface panels on loose or damaged tile, glossy tile, green board, drywall, or textured surfaces. If installed over sound matte finish tile and backer board, clean all tile and seal with a primer. Do not specify oil-based primers or sealers where solid surface panels are to be adhered.

Check the condition of the walls where panels are proposed. Verify that they are square and plumb and that any insulation or vapor barriers at exterior walls are in good condition. Add insulation behind surround where missing or deteriorated.

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Provide details for shimming backer board, if necessary. Tape all backerboard joints with compatible materials – not joint compound. Corner trim and sealant joints should not be used to accommodate variations out of square or plumb, greater than ¼” along any dimension of panel.

Design panels to extend a minimum of 72” above the tub lip or 84” minimum above the shower floor if a curbless shower is proposed. Panels should extend to the ceiling whenever possible.

Provide a waterproof membrane, counter-flashed onto the floor membrane, at the base of all showers and tubs.

Provide a 4” high wall cove, base tile or fluid applied base material at floors; Do not design solid surface panels extending down to floor.

### MATERIALS



Acceptable manufacturers include but are not limited to: Swanstone, Corian, Sterling Vikrell by Kohler, American Standard Ciencia. A number of these products are GreenGuard approved as having low chemical emissions or are considered greener products because the polymer is bonded to natural materials like quartz.

### INSTALLATION

Note that some solid surface panels require installation by manufacturer-certified installers and most require installation using the manufacturer’s proprietary adhesives to maintain warranty coverage.

Provide adequate ventilation for adhesives curing to prevent harmful build-up of vapors.

### FIBERGLASS- REINFORCED PLASTIC (FRP) TUB SURROUNDS

For family housing or other units where frequent cleaning or durability are concerns, fiberglass reinforced plastic tub surrounds are typically more difficult to clean, more prone to scratching and subsequent staining, and structurally less durable than solid surface and tile surrounds and are not acceptable

### STANDARDS

ASTM E-84 – Surface Burning Characteristics

ANSI Z-124.1- Plastic Shower Receptors and Stalls

### DESIGN

Specify a matte finish, rather than a polished. Specify products with minimum .080” panel thickness with reinforced edges and compression molded with color throughout.

Do not specify pressed fiberglass products or those laminated with a thin gelcoat or polyurethane finish.

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Use one-piece shower enclosures in bathroom retrofits where doorway clearance allows and for new construction.

Cast iron tubs are recommended. Do not specify one piece units with fiberglass tubs. Fiberglass tubs and shower pans should never be specified.

### MATERIALS

Acceptable manufacturers include:  
Swanstone, Mustee, Lasco, Maax

Acrylic fiberglass-backed tubs may be acceptable. Do not specify fiberglass gel coat units which are more prone to scratching and chipping; specify only compression-formed fiberglass. Emphasize to Housing Authorities that only non-abrasive cleaners may be used to avoid immediate yellowing. Specify a 10 year manufacturer's warranty.

### INSTALLATION

Provide a list of acceptable cleaners as well as those not recommended to the housing authority and as a self-adhered label affixed to the inside door of medicine cabinet or bathroom vanity.

### PRE-FABRICATED SHOWER PANS

### STANDARDS

ASTM D635 Flammability/E165.75 Fire Retardancy

ADA Federal Guidelines Section 608

Inhalation Toxicity Test

### MATERIALS

Acceptable materials include:

- Copper Shower Pans (with tile)
- Polyurethane Pans (with tile)
- Solid Surface/Marble Resin
- Composite Concrete Pan-- Composed of a 1 ½" Concrete base covered by a Waterproof Membrane and topped by a 1 ½" Concrete topping.
- Latex Mastic Flooring and Wall Base System

### DESIGN

Specify a non-skid finish, rather than a polished and verify that the product chosen has a minimum .6 coefficient of friction, (both wet and dry).

If the floor is a fire-rated assembly, verify that the pan meets fire-resistance, smoke developed and flame-spread requirements.

Waterproof floor membrane should be used with all pans. Flash membrane into the floor drain where possible. Durable wall membrane should always be used around showers. 4-6 mil. loose polyethylene is not a substitute for a durable adhered waterproof membrane.

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Verify compatibility of panel adhesives with the membrane chosen.

### INSTALLATION

Pans should be mud-set where possible.

At a minimum floor should be leveled with grout or waterproof leveling compound to permit full contact and structural support of pan. Many plastics become either more brittle or flexible with age and deflection stresses sealant joints between pans and adjacent materials.