

SECTION 08 83 00

MIRRORS

PART 1 – GENERAL

1.1 PURPOSE

- A. This guideline is intended to provide useful information to the Professional Service Provider (PSP) to establish a basis of design. PSP is to apply the principles of this section such that the University of Texas at Arlington (UTA) may achieve a level of quality and consistency in the design and construction of their facilities. Deviations from these guidelines must be approved by UTA and may require justification through Life Cycle Cost (LCC) analysis and submitted to UTA for approval.

1.2 LESSONS LEARNED AND DESIGN CONSIDERATIONS

- A. X

1.3 SECTION INCLUDES

- A. Glass mirrors.

1.4 REFERENCE STANDARDS

- A. ASTM C1036 - Standard Specification for Flat Glass; current edition.
- B. ASTM C1193 - Standard Guide for Use of Joint Sealants; current edition.
- C. ASTM C1503 - Standard Specification for Silvered Flat Glass Mirror; current edition.
- D. GANA (TIPS) - Mirrors: Handle with Extreme Care (Tips for the Professional on the Care and Handling of Mirrors); current edition.

1.5 SUBMITTALS

- A. Comply with requirements of Division 01 for submittal procedures.
- B. Product Data on Mirror Types: Submit structural, physical and environmental characteristics, size limitations, special handling and installation requirements.
- C. Product Data on Glazing Compounds: Submit chemical, functional, and environmental characteristics, limitations, special application requirements, and identify available colors.
- D. Samples: Submit two samples, 12 x 12 inch in size, illustrating mirrors edging, coloration, and clarity.
- E. Manufacturer's Certificate: Certify that mirrors, meets or exceeds specified requirements.
- F. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.6 QUALITY ASSURANCE

- A. Perform Work in accordance with GANA Glazing Manual for glazing installation methods.
- B. Fabricate, store, transport, receive, install, and clean mirrors in accordance with recommendations of GANA (TIPS).

1.7 FIELD CONDITIONS

- A. Do not install mirrors when ambient temperature is less than 50 degrees F.
- B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.8 WARRANTY

- A. See Division 01 for additional warranty requirements.
- B. Provide five year manufacturer warranty for reflective coating on mirrors and replacement of same.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Basis Mirror Design Criteria: Select materials and/or provide supports as required to limit mirror material deflection to 1/200, or to the flexure limit of glass, with full recovery of glazing materials, whichever is less.
- B. Mirror Glass: ASTM C1036, Type 1 - Transparent Flat, Class 1 - Ultra Clear, Low Iron - Q1 (high-quality mirrors); silvering, protective coating, and quality requirements in compliance with ASTM C1503.

GUIDE SPECIFICATIONS FOR DESIGN AND CONSTRUCTION DOCUMENTS

1. Thickness: 1/4 inch.
2. Edge: Arrised.
3. Size: As noted on drawings.
- C. Framed Mirror; No. 1 quality, select float glass; silvering, electrolytically copper-related by the galvanic process.
 1. Thickness: 1/4 inch.
 2. Edge: Type-430 stainless steel channel.
 3. Size: 24 inch x 36 inch.
 4. Basis of Design: Bobrick, B-165 2436.

2.2 ACCESSORIES

- A. Setting Blocks: Neoprene, 80 to 90 Shore A durometer hardness.
- B. Spacer Shims: Neoprene, 50 to 60 Shore A durometer hardness.
- C. Mirror Adhesive: Chemically compatible with mirror coating and wall substrate.

PART 3 – EXECUTION

3.1 PREPARATION

- A. Clean contact surfaces with solvent and wipe dry.
- B. Seal porous mirror frames or recesses with substrate compatible primer or sealer. Prime surfaces scheduled to receive sealant.
- C. Prepare installation in accordance with ASTM C1193 for solvent release sealants, and install sealant in accordance with manufacturer's instructions.

3.2 INSTALLATION

- A. Install mirrors in accordance with GANA (TIPS) and manufacturers recommendations.
- B. Set mirrors plumb and level, and free of optical distortion.
- C. Set mirrors with edge clearance free of surrounding construction including countertops or backsplashes.
- D. Frameless Mirrors: Set mirrors in proper place with adhesive, applied in accordance with adhesive manufacturer's instructions.

3.3 CLEANING

- A. Remove labels after work is complete.
- B. Clean mirrors and adjacent surfaces.

3.4 PROTECTION

- A. After installation, mark pane with an 'X' by using removable plastic tape or paste.

PART 4 APPENDIX

4.1 PRODUCT DATA / CUT SHEETS

- A. Bobrick, B-165 Series

END OF SECTION

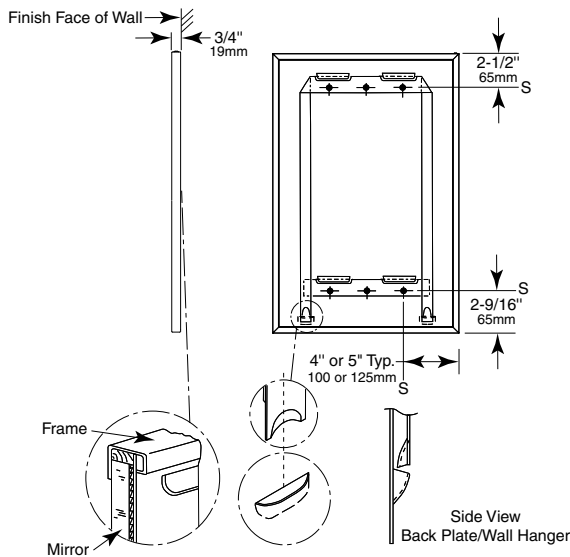


Designer's Notes:

1. Special-order sizes available on request.
2. Maximum size mirror available, 96" x 72" (244 x 183cm); minimum size, 12" x 12" (30 x 30cm).
3. All Bobrick framed mirrors are manufactured to overall width and height dimensions. EXAMPLE: A 24" x 36" (61 x 91cm) mirror will be furnished 24" x 36" (61 x 91cm) outside-of-frame to outside-of-frame.
4. To specify special sizes use Series Number followed by width then height in inches. EXAMPLE: B-165 2024.
5. Bobrick framed mirrors are manufactured to a tolerance 1/8" (3.2mm).
6. For sufficient space to lift mirror onto wall hanger(s), provide 1" (25mm) minimum clearance above top of mirror frame.
7. Provide 1" (25mm) minimum clearance at bottom of mirror for unlocking mirror from wall and 1/2" (12.7mm) minimum clearance on each side.

**Snap Locking Design
(Rear View)**

Figure: 1

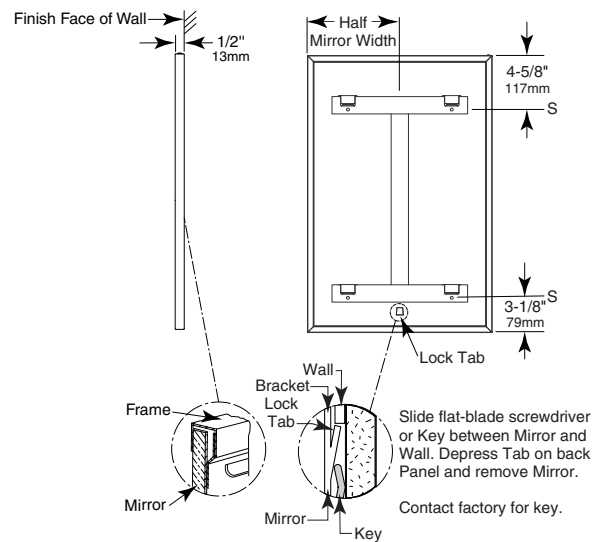


STANDARD B-165 SERIES MIRRORS

MODEL NO.	OVERALL SIZE	
	W	H
B-165 1824	18" (46cm)	24" (61cm)
B-165 1830	18" (46cm)	30" (76cm)
B-165 1836	18" (46cm)	36" (91cm)
B-165 2436	24" (61cm)	36" (91cm)
B-165 2448	24" (61cm)	48" (122cm)
B-165 2460	24" (61cm)	60" (152cm)

**Lock Tab Design
(Rear View)**

Figure: 2



STANDARD B-165 SERIES MIRRORS

MODEL NO.	OVERALL SIZE	
	W	H
B-165 4836	48" (122cm)	36" (91cm)

All Other Size Mirrors

Note: Mirrors greater than 30" in width will have multiple hanger brackets with a typical 8" off each edge.

Width	Hangers
Up to 30" (Up to 76cm)	1
31" to 41" (78 to 104cm)	2
42" to 72" (106 to 183cm)	3
73" to 91" (185 to 231cm)	4
92" to 96" (233 to 243cm)	5

continued . . .

MATERIALS:

Frame — Type-430 stainless steel, 1/2" x 1/2" x 3/8" (13 x 13 x 9.5mm) channel with 1/4" (6mm) return at rear for Snap Locking Design; 1/2" x 1/2" x 1/2" (13 x 13 x 13mm) channel for Lock Tab Design, with bright polished finish. One piece frame with 90 degree mitered corners. Galvanized steel back has integral horizontal hanging brackets near the top for hanging the mirror and near the bottom to prevent the bottom of the mirror from pulling away from the wall. Locking devices secure mirror to concealed wall hanger.

Mirror — No. 1 quality, 1/4" (6mm) select float glass: selected for silvering, electrolytically copper-plated by the galvanic process, and guaranteed for 15 years against silver spoilage. Back is protected by full-size, shock-absorbing, water-resistant, nonabrasive, polyethylene padding.

Concealed Wall Hanger — Galvanized steel construction. Incorporates upper and lower support members, which engage backplate louvers to keep mirror against wall.

INSTALLATION:

Mount wall hanger on wall with screws (not furnished) at points indicated by an S. For plaster or dry wall construction, provide backing to comply with local building codes, then secure wall hanger with screws (not furnished). When providing a concealed backing, allow backing to cover minimum range of mounting hole locations shown on drawing. For other wall surfaces, provide fiber plugs or expansion shields for use with screws (not furnished), or provide 1/8" (3mm) toggle bolts or expansion bolts. Hang mirror on wall hanger with all four backplate louvers engaged behind horizontal wall hanger members. To do this, mirror must be centered in front of the wall hanger horizontally, pressed flat against the wall approximately 1" (25mm) above final position and then lowered into final position.

Snap Locking Design — Locking devices automatically secure mirror to concealed wall hanger when it is lowered into final position (see figure 3). Locking devices may be unlocked by inserting two flat blade screwdrivers behind each side of mirror near the bottom or under the bottom of the mirror and pulling mirror bottom forward and then up.

Lock Tab Design — Locking devices automatically secure mirror to concealed wall hanger when it is lowered into final position (see figure 4). Locking device may be unlocked by sliding a flat-blade screwdriver or Key between mirror and wall at center of mirror and depressing tab on back panel. If key is required, please contact the factory.

**Snap Locking Design
(Front View)**

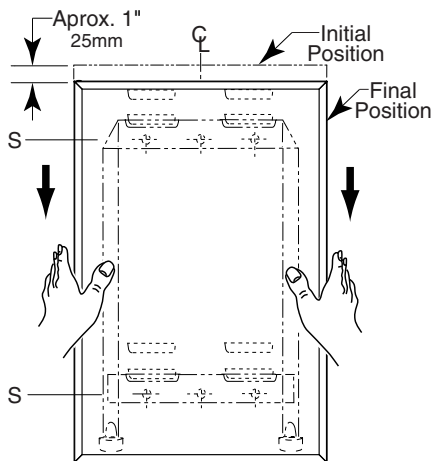


Figure: 3

**Lock Tab Design
(Front View)**

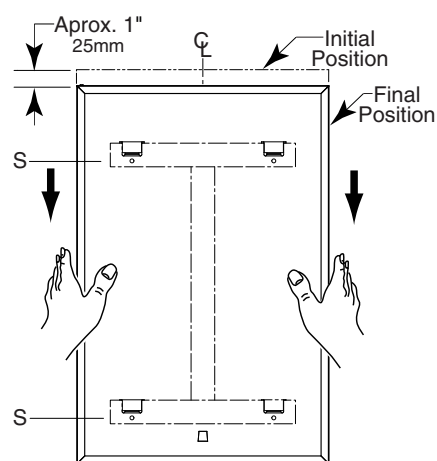


Figure: 4

SPECIFICATION:

Mirror shall have a one-piece type-430 stainless steel channel frame, with 90° mitered corners; all exposed surfaces shall have bright polished finish. Select float glass mirror shall be guaranteed for 15 years against silver spoilage. The back shall be protected by full-size, shock-absorbing, water-resistant, nonabrasive, polyethylene padding. Galvanized steel back shall have integral horizontal hanging brackets located at top and bottom for mounting on concealed wall hanger to prevent the mirror from pulling away from the wall. Locking devices secure mirror to concealed wall hanger. Mirror shall be removable from the wall.

Framed Mirror shall be Model B-165 _____ (insert width and height) of Bobrick Washroom Equipment, Inc., Clifton Park, New York; Jackson, Tennessee; Los Angeles, California; Bobrick Washroom Equipment Company, Scarborough, Ontario; Bobrick Washroom Equipment Pty. Ltd., Australia; and Bobrick Washroom Equipment Limited, United Kingdom.