SECTION 10 2880
FRAMELESS GLASS SHOWER DOOR HARDWARE

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. CRL Frameless Shower Enclosure
2. Glazing Channels and Glazing Materials
3. Sealants for Butt Glazed Systems
4. Metal Finish

B. Related Sections:

1. Section 08 8000 Glass and Glazing
2. Section 08 7000 Door and Metal Hardware

1.3 SUBMITTALS

A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

B. Shop Drawings: For frameless shower enclosure. Include plans, elevations, sections, details, and attachments to other work.

1. Elevations at 1/4-inch scale.
2. Detail sections of fittings.
3. Show locations of cutouts for hinges, pull handles, towel bars, clamps, etc…
4. Show header support or bracing locations (if applicable).

C. Samples for Initial Selection: Include samples of hardware finishes (As selected by Architect).

1.4 CLOSEOUT SUBMITTALS

A. Maintenance Data: For frameless shower enclosure to include in maintenance manuals.
1.5 QUALITY ASSURANCE

A. Reference specifications and standards. Comply with standards for glass and metal basic materials as follows.

1. Tempered Glass:
   b. American National Standards Institute (ANSI)—ANSI Z97.1

2. Metals:
   a. National Association of Architectural Metal Manufacturer's (NAAMM)
   b. Metal Finishing- Architectural Aluminum Manufacturer's Association (AAMA) Section 605.2-85

B. Components and Installation are to be in accordance with state and local building codes.

C. All components and fittings are furnished by the same manufacturer.

1.6 PROJECT CONDITIONS

A. Field Measurements: Verify actual locations of shower door, side lites, walls, ceiling, and other construction contiguous with Frameless Glass Shower Enclosure by field measurements before fabrication. Show recorded measurements on shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of the work and possible damage to the finished product.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Basis of design: Design is based on Frameless Glass Shower Door Hardware by: C.R. Laurence Co., Inc. (CRL) Tel: (800) 421-6144 Fax: (800) 458-7496 Email: showers@crlaurence.com www.crl-arch.com

2.2 MATERIALS –FRAMELESS GLASS SHOWER DOOR HARDWARE

A. Forged Brass or Stainless Steel Hinges *(Architect to Specify Series)*
1. Geneva (Forged Brass)
2. Pinnacle (Forged Brass)
3. Roman (Forged Brass)
4. Ultimate (316 Stainless Steel)
5. Elite (Forged Brass)
6. Vienna (Forged Brass)
7. Cologne (Forged Brass)
8. Concord (Forged Brass)
9. Estate (Forged Brass)
10. International (Forged Brass)
11. Cathedral (Forged Brass)
12. Classique (Forged Brass)
13. Grande (Forged Brass)
14. Zurich (316 Stainless Steel or Forged Brass)
15. Arctic (316 Stainless Steel)
16. Regal (Forged Brass)
17. Prima (Forged Brass)
18. Rondo (Forged Brass)
19. Shell (Forged Brass)
20. Cardiff (Forged Brass)
21. Madrid (Forged Brass)
22. Sydney (316 Stainless Steel)
23. Trianon (Forged Brass)
24. Petite (Forged Brass)
25. Monaco (Forged Brass)
26. Milano (Forged Brass)
27. Berlin (Forged Brass)

B. Glass Clamps *(Match with Hinge Style)*

C. Back-to-Back Pull Handles *(Architect to Specify)*

1. BM Series with Metal Washers 6 inch (152 mm) or 8 inch (203 mm).
2. BM Series without Metal Washers 6 inch (152 mm) or 8 inch (203 mm).
3. Victorian Style 6 inch (152 mm) or 8 inch (203 mm).
4. Crescent Style 6 inch (152 mm) or 8 inch (203 mm).
5. SQ Series Square Tubing 6 inch (152 mm) or 8 inch (203 mm).
6. MT Series Mitered Corner 6 inch (152 mm) or 8 inch (203 mm).
7. RM Series Flat Outside Surface/Round Tubing Inside 6 inch (152 mm) or 8 inch (203 mm).
8. Ladder Style 6 inch (152 mm), 8 inch (203 mm), 12 inch (305 mm), 24 inch (610 mm) or 36 inch (914 mm).
9. Colonial Style 6 inch (152 mm) or 8 inch (203 mm).
10. Circular Style 5-1/8 inch (130 mm).
11. Sculptured Style 6 inch (152 mm) or 10 inch (254 mm).

D. Back-to-Back Pull Knobs *(Optional- Architect to Specify)*

1. Traditional Style
2. Flush Ring Style
3. Contemporary Style
4. Protruding Ring Style
5. Junior Contemporary Style
6. Square Style
7. Ball Style
8. Ribbed Bow-Tie Style
9. Bow-Tie Style
10. Flair Style
11. Crescent Grip Style
12. Cylinder Style
13. Mini Bulb Style
14. Solid Glass Door Knob
15. Crystal Knob
16. Euro Style
17. Glass Knob
18. Knob Latch

E. Single Sided Towel Bars (Optional - Architect to Specify)

1. BM Series with Metal Washers 12 inch (305 mm), 18 inch (457 mm), 20 inch (508 mm), 22 inch (559 mm), 24 inch (610 mm), 26 inch (660 mm), 27 inch (686 mm), 28 inch (711 mm) or 30 inch (762 mm).
2. BM Series without Metal Washers 12 inch (305 mm), 18 inch (457 mm), 20 inch (508 mm), 22 inch (559 mm), 24 inch (610 mm), 26 inch (660 mm), 27 inch (686 mm), 28 inch (711 mm) or 30 inch (762 mm).
3. SD Series 12 inch (305 mm), 18 inch (457 mm) or 24 inch (610 mm).
4. Victorian Style 12 inch (305 mm), 18 inch (457 mm) or 24 inch (610 mm).
5. Colonial Style 18 inch (457 mm) or 24 inch (610 mm).
6. Crescent Style 18 inch (457 mm) or 24 inch (610 mm).
7. SQ Series Square Tubing Mitered Corner 18 inch (457 mm) or 24 inch (610 mm).
8. MT Series 18 inch (457 mm) or 24 inch (610 mm).

F. Back-to-Back Towel Bars (Optional - Architect to Specify)

1. BM Series with Metal Washers 12 inch (305 mm), 18 inch (457 mm), 24 inch (610 mm) or 30 inch (762 mm).
2. BM Series without Metal Washers 12 inch (305 mm), 18 inch (457 mm), 24 inch (610 mm) or 30 inch (762 mm).
3. SD Series 12 inch (305 mm), 18 inch (457 mm) or 24 inch (610 mm).
4. Victorian Style 12 inch (305 mm), 18 inch (457 mm) or 24 inch (610 mm).
5. Colonial Style 18 inch (457 mm) or 24 inch (610 mm).
6. Crescent Style 12 inch (305 mm) or 18 inch (457 mm).
7. SQ Series Square Tubing Mitered Corner 18 inch (457 mm) or 24 inch (610 mm).
8. MT Series 18 inch (457 mm) or 24 inch (610 mm).

G. Pull Handle/Towel Bar Combination (Optional - Architect to Specify)

1. SD Series 6 inch (152 mm) Pull/12 inch (305 mm) Towel Bar, 6 inch (152 mm) Pull/18 inch (457 mm) Towel Bar, 6 inch (152 mm) Pull/24 inch (610 mm) Towel Bar or 12 inch (305 mm) Pull/24 inch (610 mm) Towel Bar.
2. Colonial Style 6 inch (152 mm) Pull/18 inch (457 mm) Towel Bar or 6 inch (152 mm) Pull/24 inch (610 mm) Towel Bar.
3. Victorian Style 6 inch (152 mm) Pull/18 inch (457 mm) Towel Bar, 6 inch (152 mm) Pull/24 inch (610 mm) Towel Bar, 8 inch (203 mm) Pull/18 inch (457 mm) Towel Bar or 8 inch (203 mm) Pull/24 inch (610 mm) Towel Bar.
4. SQ Series Square Tubing Mitered Corner 6 inch (152 mm) Pull/18 inch (457 mm) Towel Bar, 6 inch (152 mm) Pull/24 inch (610 mm) Towel Bar, 8 inch (203 mm) Pull/18 inch (457 mm) Towel Bar or 8 inch (203 mm) Pull/24 inch (610 mm) Towel Bar.
5. MT Series 6 inch (152 mm) Pull/18 inch (457 mm) Towel Bar, 6 inch (152 mm) Pull/24 inch (610 mm) Towel Bar, 8 inch (203 mm) Pull/18 inch (457 mm) Towel Bar or 8 inch (203 mm) Pull/24 inch (610 mm) Towel Bar.

H. Tempered Glass *(Architect to Specify-Supplied By Others)*

1. 5/16 inch (8 mm) thick
2. 3/8 inch (10 mm) thick.
3. 1/2 inch (12 mm) thick.

I. U-Channels *(Match Finish of Hinge Hardware- Architect to Specify)*

1. Deep
2. Shallow

J. Finish *(Architect to Specify)*

1. Chrome
2. Satin Chrome
3. Brushed Satin Chrome
4. Brass
5. Satin Brass
6. Ultra Brass
7. Antique Brass
8. Brushed Nickel
9. Polished Nickel
10. Satin Nickel
11. Antique Brushed Nickel
12. Oil Rubbed Bronze
13. Brushed Bronze
14. Antique Bronze
15. Antique Brushed Copper
16. Brushed Copper
17. Polished Copper
18. Gold Plated
19. Gun Metal
20. White
21. Black
22. Red
23. Polished Stainless Steel
24. Brushed Stainless Steel
25. Chrome and Brass Combo
26. Brushed Nickel and Brass Combo
27. White and Chrome Combo

K. Clear Polycarbonates, Vinyl Seals, and Edge Wipes *(Optional- Architect to Specify)*
L. Sealant- WCS Water Clear Silicone Sealant by C.R. Laurence

2.3 ACCESSORIES

A. Hardware and Accessories: Manufacturer's hardware and accessories. *(Finish to be specified by Architect).*

1. Grab Bars  
2. Fixed Panel Supports  
3. Headers  
4. Robe Hook  
5. Door Stops  
6. Toilet Tissue Roll Holder  
7. Transom Clamps  
8. Thresholds

B. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel or chrome-plated steel or brass, finished to match the items they are securing. For concealed anchors, use stainless steel, hot-dip galvanized steel, or other rust-resistant, protective-coated steel.

2.4 FABRICATION

A. Door Size and Swings: Refer to architectural drawings and specifications. (Not to exceed manufacturer’s maximum recommended door weight or door width).

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb with uniform joints. Secure units in position with manufacturer's recommended anchoring devices.

B. Do not erect warped, bowed, deformed or otherwise damaged or defaced members. Remove and replace any members damaged in the erection process as directed.

3.2 ADJUSTING

A. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges to return doors to fully closed position.

3.3 CLEANING

A. Remove site cuttings from finish surfaces.

B. Clean and wash prefinished surfaces with mild soap and water; rinse with clean water.
3.4 PROTECTION

A. Protect installed assemblies from subsequent construction operations.

END OF SECTION