

DESCRIPTION SHEET #1

A. 1. Materials

Fused Glass: Multi-layers of compatible colored glass were fused together in an electric kiln until melted together. Glass particles (frit) from rock salt size to 60 mesh, and glass cane (thin stringer glass) were utilized to produce visual textures.

Kiln Cast Glass: Compatible clear and colored glass scraps were crushed and sifted for particle size selection. A positive model was made out of clay just as it would appear as glass in finished form. A plaster refractory mold mixture was prepared and poured over the positive model. The clay was removed from the mold after it hardened. The mold was dried and then packed with glass particles and heated slowly in an electric kiln to fuse glass particles together. It was then annealed (slow cooled) in the kiln to room temperature. The mold was broken away to reveal the glass piece. The glass was then finished by cleaning, grinding, and/or polishing.

Cement: Portland White Cement was mixed with 30 mesh White Silica Sand, Latex bonding additive, and powdered cement pigments. Reinforcing lath mesh was imbedded for additional structure. Cement was thoroughly cured before sealing.

Note: All glass used in murals was tested to be 90 coefficient compatible, manufactured in sheet glass form by Bullseye Glass Company and Uroboros Glass Company, both of Portland, Oregon.

DESCRIPTION SHEET #2

A.2. Material Finish

All grout was sealed with two coats of clear shellac and then painted with One-Shot sign painters paint, mixed with a matte additive. All colors were custom mixed by Brockmann.

The cement was sealed with two coats of Miller Paint Company Acrylic Sealer-620 Acri-Glaze, then painted lightly with Benjamin Moore/Regal Wall Satin Latex Interior Flat; Base 4E 1229, Base 5E 1231, and Base 4F 1167. Two additional coats of sealer were applied over the latex paint.

The elm frames were sprayed with a clear catalyzed lacquer. (Mar Resist Lacquer Semi Gloss from Rodda Paint.)

A.3. Materials used in the preservation of the artwork.

Grout in Murals- White Sanded Tile Grout by CUSTOM (Standard Series)

Mortar Type- White Thin Set Mortar by CUSTOM; Premium Blend.

Underlayer Material- $\frac{1}{2}$ " M.D.O. Professional Grade Sign Painters Board; Crown Simpson

Attachment System- Reinforcing metal lath was attached to M.D.O. board with #10 $\frac{1}{2}$ " zinc plated wood screws. The Thin Set mortar was scratch coated into the metal lath to mechanically attach the glasswork to the underlayer material. All kiln cast pieces had a textural grid sandblasted into their backsides. All backsides of fused glass had rough textures for best adhesion with the mortar.

Hanging System- The pieces of M.D.O. underlayer were screwed and glued with construction adhesive (Henry's) to the $\frac{5}{8}$ " fire-treated plywood that ran to the floor. The east mural, "A Legend of Multnomah Falls", contained 42 sections while the west mural, "The Bridge of the Gods", was comprised of fifty sections. These sections were developed as far as possible in studio, and were then detailed out on location, after hanging. Certain glass elements were attached to the mural surface using GE-1200, Clear Silicon.