

Glazing Sealant: It is highly recommended that all sealant be of the non-acetic gas-forming or neutral-cure variety and that it be chosen based on the composition of the materials and substrates to be sealed. Appropriate bond-breaking tape and ethafoam backer rod should be used as required to achieve the flexibility necessary for expansion and contraction of the finished installation.

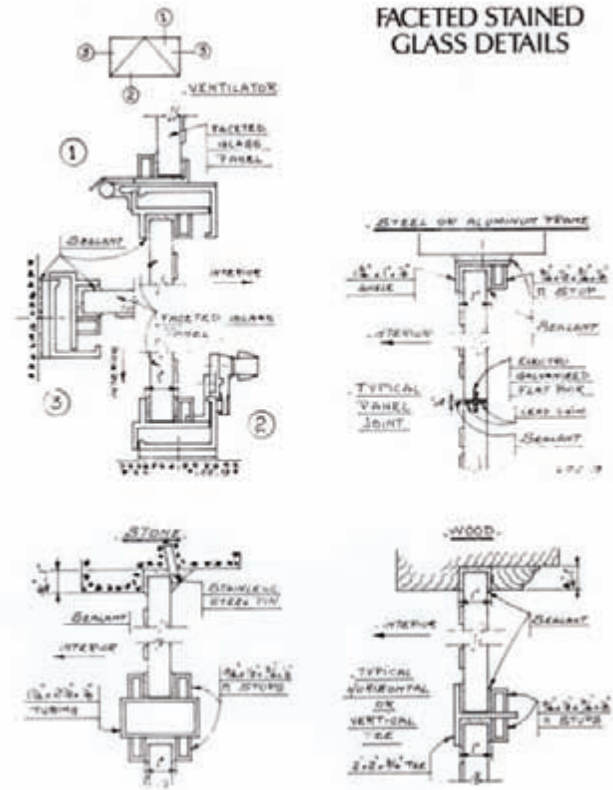
**Faceted Stained Glass
(Dalle de Verre)**

Process: A twentieth-century innovation in the art of stained glass introduced the use of glass dalles measuring approximately 8" x 12" x 1". These dalles, cast in hundreds of colors, can be cut into shapes and used, in combination with an opaque matrix of epoxy resin $\frac{5}{8}$ " to $\frac{7}{8}$ " in thickness, to create translucent windows and walls of great beauty.

The epoxy used in the casting of faceted glass panels must be a specially formulated slab-glass-setting compound consisting of epoxy resin and hardener. The material must be able to withstand temperatures of +130 degrees Fahrenheit on the exterior surface and a simultaneous +70 degrees Fahrenheit interior surface (air conditioned), and allow for humidity changes of 6% to 100%. In addition, cast panels must be water resistant on tests of 25 lbs. per square foot static air pressure while 2½ gallons of water pass over the surface of the panel for one hour.

The design and physical opening size determine size limitations. However, individual panels should not exceed 16 square feet. The height to width of a single panel should not exceed a 4:1 ratio. Large openings must have horizontal supports to carry the weight of the stacked panels. Thickness of the epoxy matrix should not be less than $\frac{5}{8}$ " for unstacked panels. When they are to be stacked, a minimum epoxy thickness of $\frac{3}{4}$ " is recommended, with the joints between the panels sealed with a flexible glazing sealant.

Installation: Faceted glass can be installed in openings and mullions of masonry, metal or wood, provided that the system is designed to receive the thicker panels and carry the



load of approximately 10 to 13 pounds per square foot. The stained glass studio should be consulted well in advance of finalizing the contract documents for the appropriate frame type for the project and location of any division bars and mullions, so as to coordinate them with the design before ordering frames or sash.

Clearance of $\frac{3}{16}$ " is recommended between the frame or substrate and panel edge to allow for proper expansion and contraction of the completed panel. Neoprene spacers (durometer 40 to 70) can be used as needed to insure proper clearance.

Glazing Sealant: Faceted glass panels should be set into a non-hardening material such as butyl, acrylic, silicone or polysulphide sealant, which should be used both as a bedding and finish bead. This will provide a weather-tight seal between the faceted glass panel and the frame or substrate into which the panel is installed. For spaces of more than $\frac{1}{4}$ " between the substrate and the panel, filler such as ethafoam is recommended under the sealant bead to allow for flexibility.