



## POLISHED WIRED GLASS AND FIRE RESISTANT GLASS

The following information will help you answer questions concerning the fire resistance and safety glazing capabilities and limitations of Polished Wire Glass.

The Polished Wired Glass (Baroque and Misco) being sold is manufactured to meet UL fire resistant requirements and carries UL labels from the manufacturer.

Wire glass, as the name suggests, is simply two pieces of glass with a wire mesh in between. The two pieces, or lites, of glass are fused together during the manufacturing process to create a single, monolithic glass with properties useful where fire safety requirements apply. Underwriters' Laboratories rate it as a fire retardant material.

Polished wire glass meets the requirements of: ASTM C 1036 and ANSI Z97.1-1984 for safety glazing. Pattern wire glass meets the requirements of ASTM C 1036 but does not meet the safety glazing requirements of ANSI Z97.1-1984. Neither polished or pattern wire glasses meet the safety glazing requirements of CPSC 16 CAR 1201. Limitations can be reviewed in the Building Materials Directory by Underwriters' Laboratories, Inc. Also consult the National Fire Protection Association manuals.

### General Precautions

- Since the exposed metal strips are bent when wired glass is cut, hairline cracks can occur along edges, decreasing strength.
- Exposed metal strips along the edges of the glass can be rusted by rainwater or condensation. Wired glass can be damaged as rust spreads, and it can be damaged by thermal stress and wind pressure.
- Maintain an ample distance between the surface of the glass and thick curtains, shades, lockers, etc.
- The glass surface should not be painted nor coated with paper.
- The glass surface should not be exposed to direct currents of air from air conditioning equipment.

Basically, the approval covers an area of ¼" Polished or Patterned Wire Glass of up to 1,296 square inches (no dimension exceeding 54") for three-quarters of an hour of fire, reaching a temperature of 1600 F followed by a hosing with a stream of water at a pressure of 30 lbs per square inch, and approval of an area of glass of up to 100 square inches for the same test, but for one and a half hours. In either case, the glass breaks but stays in place, qualifying it as fire resistant within these conditions.

These tests apply to fire windows and fire doors generally. If more specific information is required, refer to the NFPA80 (Fire Doors & Windows), NPPA252, (Standard Methods of Fire Tests of Door Assemblies) manuals published by the National Fire Protection Association, Inc. Batterymarch Park, Quincy, MA 02269, or Underwriters Laboratories, Inc. 333 Plington Rd., Northbrook, IL 60062. Of course, local fire codes will have to be taken into consideration. The selection of the products and their application is the responsibility of the design professional.