

Glazing instructions for LCD Glass.



LCD Glass

LCD Glass is a switch-operated liquid crystal glass, featuring a choice of either a frosted or clear appearance - by simply applying an electrical current (110V). This laminated glass incorporates a specially manufactured liquid crystal film inserted between two sheets of float glass. It is designed for both interior and exterior windows. LCD Glass windows may be instantly switched from clear to frosted to secure privacy and create a high definition projection surface. LCD Glass can be used at temperatures within a range of -20°C to +60°C.



Storage

Improper LCD Glass storage may result in damage to glass components, glass surfaces, coatings or glass breakage. LCD Glass shipments should be scheduled as to minimize storage time at the project site. Glass crates should be stored in such a manner that will prevent them from tipping. A 5 to 7 degree lean against two broad sturdy uprights capable of withstanding crate weight is recommended. Glass should be stored indoors when possible and not be subjected to rain, water, or direct sunlight. In order to prevent condensation and subsequent glass staining while in storage, the temperature of the stored glass must remain above dew point. If outdoor storage is unavoidable, a protective canopy should be constructed with a waterproof, light blocking material. It must be installed in such a way as to allow air circulation around the tops and sides of the crates. Stored glass and packaging materials must be kept dry.





Glass Handling

Care must be taken during handling and glazing to ensure that glass damage does not occur. The glass should be unpacked from the front of the case only. Never remove glass units by sliding them out from the side of the case. Do not allow the glass edges to contact the frame or any hard surfaces during installation. The glass must never be allowed to rest on any un cushioned surfaces. Rolling blocks must be used if units will be rotated or “cart wheeled” on their corners. Damaged glass edges can ultimately result in delayed glass breakage as the units encounter in service thermal and mechanical stresses. Pro Display expressly assumes no responsibility for glass breakage.

Caution: Do not lift, rest, or otherwise handle LCD Glass by the conduit connector, conduit, or exposed wires as this may result wires as this may results in un repairable damage. Broken conduit or bus bar wire connections are not covered by warranty. Pro Display inspects and tests each LCD Glass unit for proper connections and electrical switching before shipment.

Framing System

The framing system must be designed to provide structural support to the glass and essentially allow the glass to “float” within the frame. The frame must not exert any loads or point pressures on the glass at any time.

The holes will have to be installed into the frame for the electrical connections. It is extremely important that the glaziers and the electricians coordinate the installation process. The LCD Glass conduit connector must not have any pressures applied to it, especially at the frame-conduit interface. It is critical that the centerlines for the frame hole(s) line up with the centerline of the LCD Glass conduit connector. We recommend over sizing the hole to prevent lateral pressure on the connector. Failure to follow this recommendation could result in un repairable damage to the electrical connection.



Glass Support and Clearances

All glass plies must be supported by two setting blocks. The blocks should have a Shore A Durometer hardness of 85 +/- 5 and be silicone compatible. The preferred location for setting blocks is at quarter points. The conduit or conduit connector must not be used to support the glass.

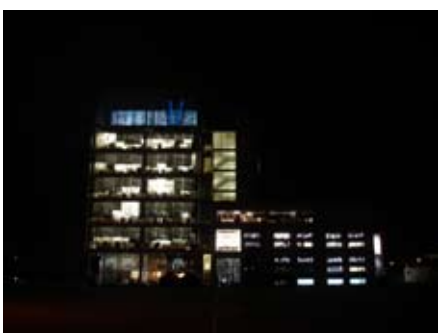


Inadequate clearances can cause glass breakage as a result of glass to frame contact. Pro Display recommends a minimum face clearance of 3 mm (1/8 inch), minimum edge clearance of 6 mm (1/4 inch) and minimum glass bite of 12 mm (1/2 inch). If the glazing system requires edge blocks or anti-walk blocks, a 3 mm (1/8 inch) clearance between the edge of the glass and the block is recommended. Uniform face clearances should be maintained by installing a resilient cushioning material between the framework and the glass components. Glass bite must be sufficient to hold the glass in place under maximum loading conditions. Minimum glass bite is also necessary to hide the unswitchable clear perimeter bands associated with LCD Glass.



Weep System

The edges of LCD Glass must not be exposed to standing water. This situation can cause premature failure in laminated glass units. LCD Glass requires either impervious weather seals or an adequate weep system to prevent this occurrence. The glazing system manufacturer or designer is ultimately responsible for the design of the weep system and its proper performance.



General Electrical Information

The glazing installation must be coordinated with the electrical installation. The electrical installation for LCD Glass must be provided by a qualified electrician to a grounded 110 VAC electrical system.



Maintenance and Cleaning

Once the glass is installed, the glazing contractor should make provisions to ensure that glass surfaces are protected from possible damage caused by the construction practices of other trades.

Special care must be taken during the initial cleaning, cleaning during the construction period, or when glass surfaces are severely soiled in order to prevent glass damage caused by abrasive contaminants. The glass surfaces must first be flushed with clean water to remove as many contaminants as possible. With the glass surfaces still heavily wetted, carefully work a squeegee from top to bottom removing excess water. Caution must be taken to ensure that any remaining abrasive materials do not become trapped between the glass surface and the rubber squeegee; otherwise the glass surfaces may become scratched. The glass should then be cleaned with a clean, soft, grit free cloth and a mild, non-abrasive, non-alkaline cleaning solution and rinsed immediately with clean water. Excess water should be removed from glass surfaces with a squeegee.

For routine cleaning, use a conventional window washing solution or mild soap and water. Uniformly spray the cleaning solution or apply it with a clean, soft, grit free applicator and rinse thoroughly. The glass surface should then be either wiped dry with a clean, grit free cloth or squeezed dry. Do not allow any metal or hard parts of the cleaning equipment to contact the glass surfaces.