

Drills and Bits

Lumicor can be readily drilled using a standard drill press or handheld drill with sharp, clean drill bits. Drill bits designed for use with plastic are recommended. Bits designed for use with polycarbonate have been found to work well with Lumicor sheets. Standard drill bits can, on occasion, be used but may have to be ground or filed to reduce the depth or angle of cut. As with any plastic sheet product, it is important to keep vibration to a minimum to prevent chipping or cracking. Hold the work securely in place when drilling but avoid excessive clamping pressure.

Drilling Procedure

Optimum bit speed, feed rate, and applied pressure will depend on hole size and sheet thickness. Drill speeds up to 1,750 rpm are best for smaller holes, while speeds as low as 350 rpm can work for larger holes. Use compressed air to minimize heat buildup when drilling sheets thicker than 4.8 mm (0.187 in.), stacked sheets, or very large holes. When drilling holes that will penetrate the second surface, back up the piece with wood to cushion the drill bit as it passes through the sheet. Move the drill bit in and out to remove plastic shards.

Recommendation

In general, the distance between the edge of the panel and the hole should be at least 2 times the panel thickness.

Do

- Use sharp drill bits designed for plastic.
- Use just enough clamping pressure to prevent vibration.
- Use a load spreader to distribute clamp pressure evenly.
- Use compressed air to prevent overheating, especially if sheet is more than 4.8 mm (0.187 in.) thick.

Don't

- Apply excessive clamping pressure.
- Use a dull drill bit.
- Use power tools without proper protection.



The information and data contained within this document pertain to the properties of Lumicor material only. We believe this information to be reliable, and offer the information in good faith without guarantee, as conditions and methods of use are beyond our control. We recommend prospective buyers perform their own testing to determine suitability of Lumicor for all purposes before adopting Lumicor on a commercial scale. In no case is Lumicor, Inc. liable for direct, consequential, economic, or other damages. Lumicor disclaims all other warranties, expressed or implied, including the warranty of merchantability and fitness for a particular purpose.