

Controlled Cannabis Light Deprivation with Polycarbonate Multiwall Panels

For growers, the increasing legalization of cannabis in many states for medicinal and recreational use is a positive trend. But with legalization comes more regulation, higher operating costs, increased competition and lower prices. More than ever, cannabis growers, both experienced and new, need to maximize yield to increase profits and stay competitive.

Cannabis grown outdoors can produce well, but many things can go wrong. Weather is always a variable factor. But inconsistent light will reduce the THC content of the plants, lessen the terpenes and increase the potential for disease and mold growth. Indoor growing requires more of an infrastructure investment, but the controlled conditions – lighting, fans, hydration, dehumidifiers – provide more consistent growth and yield year over year.

Indoor operations have another competitive advantage over outdoor growers: The ability to apply critical light deprivation techniques in a consistent, efficient and measurable way. Cannabis, like any other plant, has specific photoperiodic needs for optimum growth and potency. Female plants flower and produce buds only when the days get shorter. Outdoor crops will yield buds about twice a year, depending upon geographic location. But with controlled light deprivation, indoor growers can yield three full crops per year. These growers can offer product when dispensaries are running low on inventory from outdoor growers – a distinct competitive advantage.

Of course, not all light deprivation materials are created equal. If any light enters the structure during the critical flowering process, the plants may stop flowering, reverse flowering, or worse, become hermaphrodites (producing no buds). One proven light deprivation material is ThermaGlas™ Opaque, a polycarbonate multiwall roof and sidewall solution. ThermaGlas Opaque is guaranteed to allow 0% light transmission into a structure for up to 10 years.

ThermaGlas Opaque is an extremely durable, lightweight material, able to withstand harsh storms and hail up to 1/2" in diameter. The panel's multiwall structure is a glossy white on the outside, with an inner black multi-wall core to

block light completely. The outer layers are highly reflective, providing light reflection by grow lights or sunlight as required. The multi-wall construction adds airspace inside the panel, providing superior thermal insulation. ThermaGlas Opaque also has a durable UV coating that is coextruded on both sides. (Coextruding is more effective than lamination, because the UV layer will not delaminate and become ineffective over time.)

Installation of ThermaGlas Opaque is not labor-intensive. It is lightweight, can be cold-formed into an arch, and is installed using ordinary tools. Metal profiles are used to join the panels to maintain the product's light deprivation properties. In addition, ThermaGlas sheets are self-extinguishing in a fire, and comply with the most demanding international resistance standards defined by the plastics industry. Finally, the opacity of the panels offers security for grow operations.

If your indoor grow operation requires a roof/sidewall material that offers durability, ease of installation, 0% light transmission, thermal insulation and visual security, it's worth getting a sample of Thermaglas Opaque to see if it fits the bill.

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