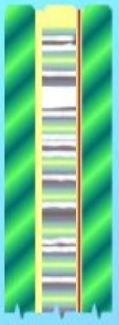
Panel Makeup and Construction Options for Dichrolam Red and Green

Apart from the most common obvious uses for the safety glass of Dichrolam Red and Green, these diagrams illustrate typical technical constructions for using the flat, non-textured (Not the "Sea" textured Dichrolam), Dichrolam, whether translucent or opaque, for a variety of applications.

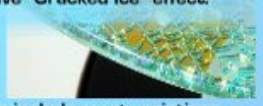
Common Dichrolam Red or Green, as CPSC Category II Safety glass utilizing full field resin bond of .040" to .060" inner plastic layer including Dichrolam layer.

For opaque surfacing panels, the inner layer can have black or white backing for purely reflective effects similar to "Black Sea" or "Caribbean".

Glass options include Annealed, Tempered, or Heat Strengthened of any thickness from ¼" to 1". Glass can be clear, Low Iron (Starphire®), Satin-etched, or custom specified.

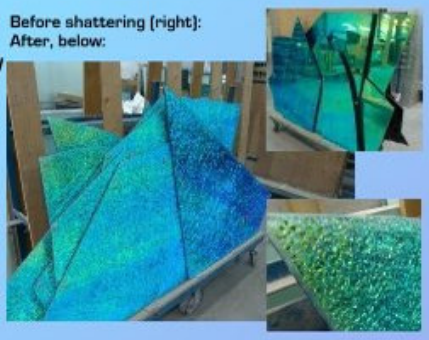


Triple laminated Dichrolam called "Chromacrystal" has a tempered core lite of glass which is intentionally shattered to create a crystalline, reflective "Cracked Ice" effect.



Options include most variations described at left, like backpainted core (ceiling at Las Vegas Hilton was Chromacrystal Green, with black backpainting, see pics at right).

Before shattering (right):
After, below:



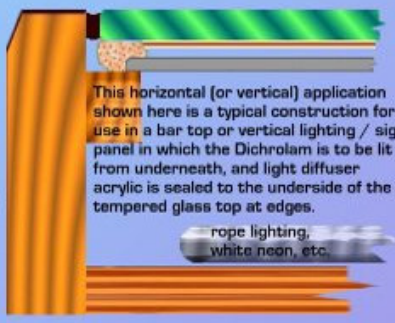
Dichrolam Red and Green is available in Acrylic and Polycarbonate for strength and weight reduction. Both of these types of plastic can be ordered with scratch resistant hardcoatings. Surface can be satin-etched, called "P-95" in acrylic.

All plastic constructions of Dichrolam Red or Green have the color-changing film layer on the back face, and is not laminated between two sheets like the safety glass version above.

Black and white opaque backings can also be applied to this construction for surfacing applications.

The edge-bonded construction shown here is an example of an exterior application for vertical glass panels as an Insulated Glass (IG) Unit, to be sealed in a frame at installation. Typically tempered glass is outboard lite capped to the Dichrolam annealed or Heat Strengthened laminated safety glass

This construction also meets most sloped glazing codes for the application as skylight panels.



Using special laminations of Dichrolam Red and Green, it is possible to create angular, polyhedral and prismatic shapes like tetrahedrons (pyramids) and various polyhedrons using proprietary adhesive and fabrication techniques developed by the Sculpture and Art Division of John Blazy Designs.

These special laminations allow for fabrication of the Dichrolam into geometric shapes never before possible with any kind of glass or plastic, let alone glass or plastic that changes colors. The amazing effect of these shapes is the creation of inter-reflective surfaces within the interior of the hollow forms that operate like infinite mirrors that splash compounded colors throughout their surroundings like virtual confetti. A must-see in direct sunlight.

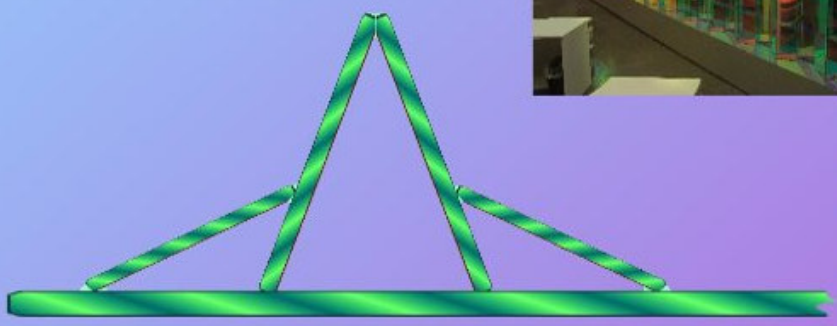
Here are a few examples, at right, of compound tetrahedrons made as sculpture utilizing structural "gussets" - also made in Dichrolam.

Shapes like these - from simple cubes all the way to octahedrons and icosahedrons, are fascinating as atrium sculpture where sunlight can create the "virtual confetti" around an interior or skylight shaft.

The ability to create these shapes using acrylic or polycarbonate with welded seams allow for lightweight, safe installations.

A more architectural application of this "faceted panel" effect is what we call "Appliqué", where the Dichrolam is made into tall prisms or pyramids that are applied ONTO large monolithic panels of glass for dividing walls or feature panels that can be mounted in a frame or conventional metal shoe base like handrail glass panels.

Here are a few examples of the Appliqué effect on glass at right and a cross-section view below of a typical vertical column similar to the prisms in the facet wall at right.



All specifications that call for the polyhedral sculpture or "Appliqué" effect in Dichrolam require design and engineering collaboration between the architect and John Blazy for the purpose of feasability, structural, adhesive and design evaluation.

Due to the proprietary, trade secret nature of this method, coupled with design collaboration, John Blazy requires credential and citation as co-designer (primary designer in some cases) and published as such for all specifications calling for the polyhedral sculpture or "Appliqué" effect in Dichrolam.