## **De-Mystifying Dichroic Glass**

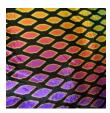
Dichroic Glass is created when multiple layers of Quartz crystal and metal oxides are vaporized by an electron beam gun in an airless vacuum chamber using a highly technical process. The resulting vapor then floats upward and first attaches, and then condenses on the surface of the glass in the form of a crystalline structure. The colors obtained through this process are the result of as many as 30 layers of these vaporized crystals and oxides applied in carefully controlled thicknesses.

Typically, a piece of dichroic glass has two very distinct colors; transmitted and reflected. The "transmitted color" is the color we see when we gaze through a clear piece of dichroic glass. The "reflected color" is the color we see in a clear or opaque piece of dichroic glass when light bounces off of the surface of the glass.

The Two Lasses have often commented that <u>Di</u>chroic glass could, in some instances, be known as <u>Tri</u>chroic as there is yet another "perceived color" that we are able to view when the glass is held at a 45 degree angle. This third shade is often referred to as the "shift" color.

In our store, we list the dichroic glass exactly as the manufacturer specifies. Most of the colors are listed with the transmission color mentioned first, followed by the reflective color. For example a "Blue/Gold" coating on clear glass will transmit blue and reflect gold. However, when black or opaque glass is coated with the same "Blue/Gold", you will only see the reflected shade of Gold with very subtle hints of blue when the glass is held at a 45% angle.

In some cases the glass is coated with multiple shades referred to as a "rainbow" or "mixture" coating. The rainbow coating applies to the rainbow shades that are deposited on the glass in graduated stripes (just like a real rainbow – see Rainbow Marquis on Clear) ...



whereas the mixture coating has multiple layers of the same rainbow colors deposited one on top of the other (see Mixture Balloons on Clear) ...



So now you know the mystical secrets of Dichroic Glass. Happy Fusing!