



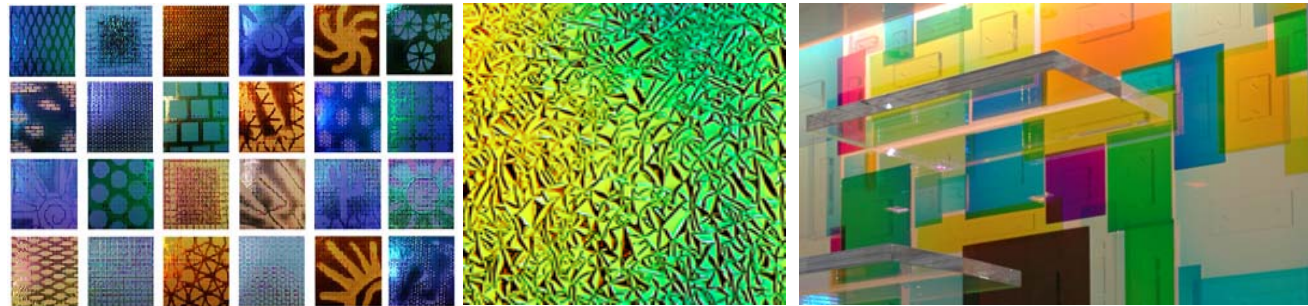
### What is “Dichroic Glass”?

**Dichroic** glass is glass containing multiple micro-layers of metal oxides which give the glass dichroic optical properties.

Multiple ultra-thin layers of different metals (gold, silver), metal oxides (titanium, chromium, aluminum, zirconium, magnesium) and silica are vaporized by an electron beam in a vacuum chamber. The vapor then condenses on the surface of the glass in the form of a crystal structure. This is sometimes followed by a protective layer of quartz crystal. The finished glass can have as many as 30 to 50 layers of these materials, yet the thickness of the total coating is approximately 30 to 35 millionths of an inch (about 760 to 890 nm). The coating that is created is very similar to a gemstone and, by careful control of thickness, different colors are obtained.

Glass colors are classified by whether they are transmitted colors – color(s) visible when the glass is viewed in front of a light source, or, reflected colors – color(s) visible when viewed behind a light source.

Dichroic glass is used in military and aerospace optics, large architectural glazing applications, jewelry and artwork, furniture, accent tiles, and insets for stained glass.



**Information & Image Source:** Wikipedia, Source-Book.com, CBS Coatings by Sandberg, Inc.