

Spec. Number HM-1
Date 2006
Revision 1

Hot Mirror

This film is designed to reflect infrared energy and transmit the visible. Hot mirrors are usually inserted into a beam of light to reflect the infrared back toward the source or at an angle out of the beam.

Typical characteristics for a Hot Mirror include:

- Over 80% transmission in the visible wavelengths
- Reflects over 60% of tungsten source heat
- Can be modified to respond to other light source characteristics

Due to the diverse characteristics of different light sources in terms of output energy, no one Hot Mirror design will give optimum performance in all applications. Applied Coatings can develop a hot mirror design to your requirements by examining your light source and your desired IR rejection.

Contact us for more details and a preliminary discussion about your application today.

Characteristic	Test/Attribute	Indication
Visible wavelength Transmission	Transmission greater than 90% average from 430nm – 680nm	
Angle of Incidence	Customer specific	
IR reflection	85% from 750nm-1100nm	
Adhesion	Snap Adhesive tape test	Physical adhesion to substrate
Heat Testing	550°C for 12 minutes	Indicates the film will withstand high temperature.
Thermal Shock	Cycle 450°C Air to 20C Water (3 times)	Indicates thermal stability
Humidity	24 hours at 95%RH, 120°F	Indicates resistance to heat and moisture.
Substrate Specifications	Customer specific	
Cosmetics Specifications	Customer specific	