



Black Glass: A Special Surface for Heated Shelves

Heated Shelf Warmers are traditionally constructed with a stainless steel or finished aluminum surface. Other materials, such as stone or black colored glass, are also used.

Thermal conductivity, density, and specific heat are three very important factors in determining what surface material is best suited for a Heated Shelf Food Warmer. Thermal diffusivity is the combination of these three properties and the measure of the rate at which heat flows through a material.

The low *Thermal Diffusivity* of glass requires less thermal energy to heat; therefore, glass heats up gradually to reach a steady state condition, and once it's hot, it consistently holds its temperature. Black is the color of choice since it is the best absorber and emitter of heat.

In addition to the effect of material properties, the thickness (mass) of glass also changes the heating characteristics. Thicker glass surfaces allow more uniform heat distribution.

Furthermore, Heated Black Glass is highly attractive, and has a sophisticated look to fit many settings, providing an alluring approach to displaying and holding a variety of food types. To supplement its sleek appearance, glass surfaces are sanitary and easy to clean and maintain. Glass is also environmentally friendly; it is 100% recyclable and it is one of the safest materials due to its composition and properties. For example, glass does deteriorate, corrode, stain or fade, giving it product longevity.

Black Glass is an attractive alternative surface material to stainless steel, aluminum or stone for warming and merchandising food products and can help to increase operator sales and profits.