



TECHNICAL DATA
FROM
Anemostat[®]
DOOR PRODUCTS
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FREQUENTLY
ASKED
QUESTIONS

**PILKINGTON
PYROSTOP**[™]

DETAIL DRAWING

What is it?

Pilkington Pyrostop[™] is a multi-laminate fire-resistant glazing material, manufactured by Pilkington for more than 20 years. It offers high impact safety and fire ratings up to 2 hours. In addition to stopping the spread of flames and smoke, Pilkington Pyrostop[™] acts as a barrier to the transfer of heat, protecting lives and property.

Why a multi-laminate?

Ordinary glass cannot survive intense heat on its own. Unless you're talking about alternate glazing materials, such as the ceramic FireLite products, fire-rated glass must be "reinforced" in some way to provide fire protection. There are several ways to do this. Glass can be specially tempered, which works to a degree, but tempered glass cannot withstand thermal shock. Wires can be inserted in the glass to hold it in place during a fire, but that can raise concerns over impact safety. And wired glass has a less desirable appearance than clear glass.

Pilkington Pyrostop[™] achieves a fire rating via a different option. Multiple layers of glass "sandwich" special interlayers. During a fire, the pane facing the fire fractures but is held in place by the interlayer. That interlayer turns to foam, which effectively prevents heat from passing through. As the fire continues to burn, the next layer of glass breaks and the next interlayer turns to foam. This pattern repeats for the duration of the fire.

Why does Pilkington Pyrostop[™] vary in thickness?

The thickness of Pilkington Pyrostop[™] depends on the fire rating required. A window with a 45 minute rating will be much thinner than a 2 hour fire-rated wall. The longer the time frame, the more layers needed to block the heat.

What does a "barrier-to-heat" mean?

A "barrier-to-heat" product is one that has been tested to the same standard as a solid barrier wall (ASTM E-119). It prevents a fire's heat from transferring through the wall to the space on the other side.

This can be critical in certain areas of a building. For example, in a multi-story office building, there might be the possibility of tenants being trapped in a stairwell for a long period of time during a fire. Since structural fires can quickly exceed 1,500° F, temperatures could quickly rise to an intolerable level, even if flames do not enter the stairwell.

Similarly, sensitive computer rooms can be protected from damage by barrier-to-heat products. Tests have shown that even with a fire raging on one side of Pilkington Pyrostop[™], a person can safely place their hand on the opposite side of the glass without getting burned.

Some products are being marketed as "significantly reducing radiant heat." However, these products do not meet the required test standard for barrier-to-heat products. If there is a concern about the dangers of high temperatures, make sure the glass you choose has been tested as a fire wall and meets ASTM E-119.

Does Pilkington Pyrostop[™] have a tint?

Most multi-laminate products take on a significant amount of color, due to the iron in the glass. Pilkington incorporates a special OptiWhite[™] process in all Pyrostop[™] products with a rating of 60 minutes or more to eliminate any tint and provide outstanding clarity.

Ordinary multilaminate products have a definite green tint.

Pilkington Pyrostop is clear.

Can it be cut?

As with all glazing that acts as a true fire barrier wall, Pilkington Pyrostop[™] cannot be cut in the field.

Other Questions?

Check our Technical Data Sheets, e-mail: sales@anemostat.com or call 310-835-7500. We're here to help!