

WeatherTite RigidBoard Pure Aluminum Foil Film **Vs.** **Metallized Plastic Film**

Property	Aluminum Foil	Metallized Plastic	Difference
% of Reflected Radiant Energy	97%	77%	<ul style="list-style-type: none"> • 20% reduction in performance
Flame Spread	5	10	<ul style="list-style-type: none"> • 100% higher flame spread
Smoke Spread	0	35	<ul style="list-style-type: none"> • Self explanatory
Long Term Durability	Excellent	Good	

The table provides some notable differences between pure aluminum foil that is used on WeatherTite RigidBoard and a metallized plastic that is commonly used on competitive products. In addition to significantly lower performance properties, metallized plastic can also be wiped off of the surface of the base plastic that further worsens the products performance. This is due to the fact that the sliver material is vapor deposited onto the plastic in a microscopic layer, just enough to make it shiny –not very efficient for reflecting the radiant energy.

Try this out to test metallized plastic film’s ability to take the heat: Hold up the metallized plastic to a spot flood lamp and watch the heat of the lamp melt the plastic film. Perform the same with WeatherTite RigidBoard and see how the surface of the foil is able to dissipate the energy and not affect the material in any way. This test alone shows how ineffective the metallized plastic is at reflecting the radiant energy, which in turn costs money in higher utility bills.

Most metallized plastics are used for window treatments to reduce glare, however they are not as efficient in stopping radiant heat transfer, in addition metallized plastics are generally less expensive plastic films due to their lower performance, generally 30-40% less expensive. A typical example would be aftermarket automotive window tinting –the outside surface is reflective but you can still see through the film, now try that with pure aluminum foil film.

In conclusion, metallized plastic is commonly used because it is a less expensive alternative to pure aluminum foil, however due to it’s significant flame spread and smoke spread figures as well as it’s reduced ability to reflect radiant energy and thereby costing more over the long run, it is not well suited as a reflective radiant barrier insulation material. Your only choice is to use WeatherTite RigidBoard with it’s high quality pure aluminum foil facing materials!