

foamalux

SUNLIGHT EFFECTS



Sunlight affects all materials, to varying degrees, by the action of the UV radiation component of sunlight and by raising surface temperatures.

UV effect

Ultraviolet (UV) light attacks many materials, as is evident by the fact that, for example, painted surfaces fade. Foamalux, like all other plastic materials is affected by UV light: a colour will change according to its colourfastness and the quantity of radiation absorbed.

In practical terms, all coloured foam PVC sheets will fade but this may be immaterial in short term outdoor applications and is irrelevant where the panel is completely coated with, for example, ink paint or varnish.

Brett Martin does not recommend the use of Foamalux colours for exterior uses where extended life is expected. Exterior uses which demand colour retention of Foamalux for an extended period can be satisfied by applying a transparent vinyl or acrylic film or varnish.

Surface Temperature Effects

At moderate ambient air temperatures, 25oC to 35oC, material surfaces can, depending on colour and duration of exposure to direct sunlight, reach temperatures which would adversely affect any PVC sheet material causing, for example permanent buckling.

Surface Temperature in Direct Sunlight

| Surface Colour | Typical Temperature (°C) |
|----------------|--------------------------|
| Black | 80 |
| Dark Blue | 68 |
| Grey | 67 |
| Red | 68 |
| Green | 70 |
| Yellow | 57 |
| White | 40 |

The maximum surface temperature for Foamalux and Foamalux Ultra in service is 60oC. For exterior use, lighter colours, or darker panels predominantly covered with light coloured laminates, paints or inks, are best suited. Applications using extensive darker coloured panels, or panels with dark coloured laminates, paints or inks, when exposed to sunlight may achieve undesirably high temperatures. Small darker coloured panels or components are less liable to damage.

Use behind glass requires adequate spacing from the glass and ventilation as, in a relatively enclosed space; temperatures may get high enough to cause distortion. Internal applications require careful positioning in relation to heat sources, for example, radiant heaters or artificial lighting, which could produce panel distortion.



Brett Martin Ltd. pursues a policy of continuous product development and reserves the right to amend specifications without notice.

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