

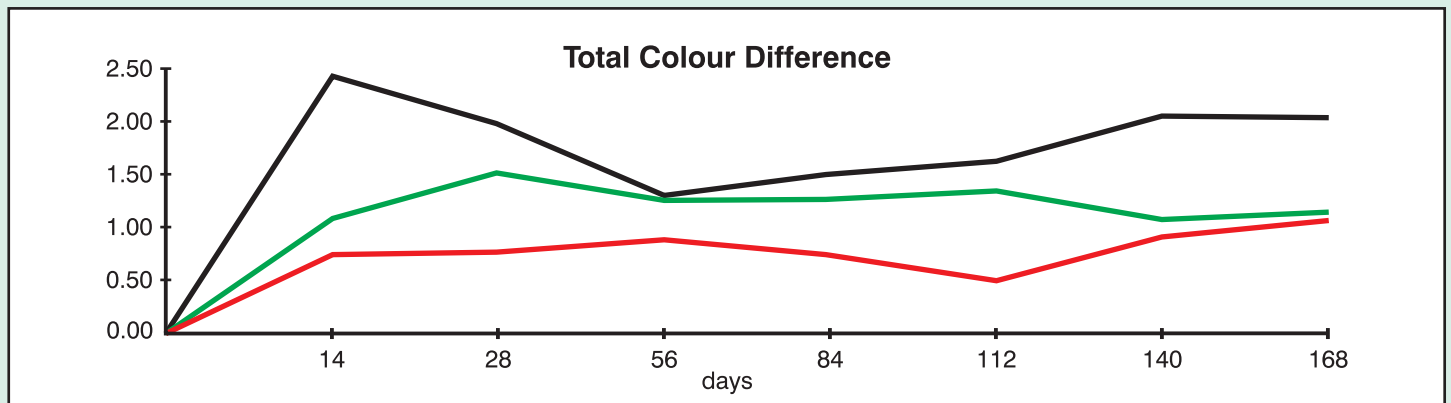
# A COMPARATIVE STUDY ON THE EFFECTS OF NATURAL WEATHERING OF BRICK AND MASONRY TINTERS

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In 1997, Dr. Richard Warren of W Hawley & Son Ltd (the former parent company of Construction Cosmetics, now a wholly owned subsidiary of Bayer plc) was commissioned to undertake a study of the effects of natural weathering on the colour of tinted bricks compared to an untinted control.

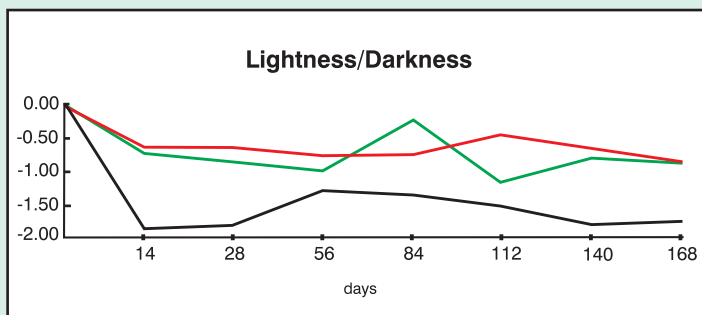
Two typical tinter formulations were applied to freshly cut slips from Hepworth Buff dragface bricks. The tinters were allowed to fully dry and then the colours of the two treated slips and the colour of an untreated control of the same brick were measured using a Datacolor® International Microflash sf6000 Spectrophotometer. Each sample was measured ten times over the entire surface of the slip and the results averaged to ensure that consistent results were obtained.

All samples were then placed outside in a southerly aspect for a duration of 6 months and the effects of the prevailing weather condition were measured initially over 14 days and then over 28 days to chart the effects of exposure had on the 3 samples in respect of total colour difference and the components of colour difference.



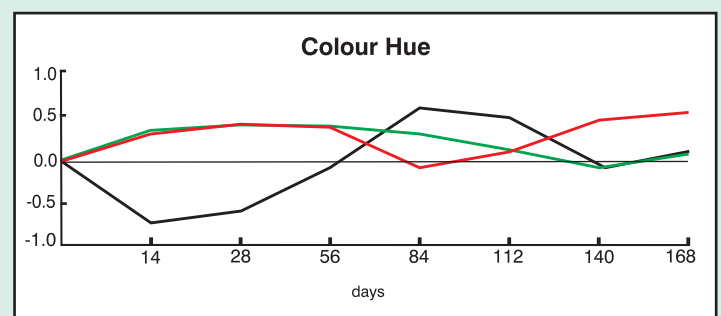
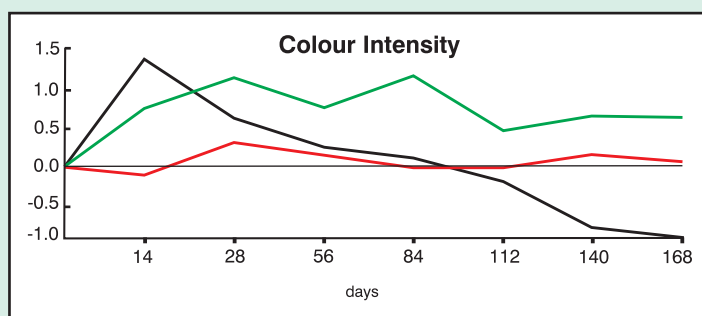
Black - Control. Green - Tinter A. Red - Tinter B.

## COMPONENTS OF COLOUR DIFFERENCE



## Conclusions

The total colour difference over time shows that the natural control sample has consistently shown greater colour differences than the two tinted samples. From the lightness/darkness component of total colour difference we can see that the main contribution to colour difference is darkening of the samples which occurred immediately on exposure.



This immediate darkening could be due to the effect of rain washing soluble components out of the surface of the samples. This effect has actually been reduced by the application of a tinter to the surface of the brick.

Brick and masonry tinters formulated and applied by Construction Cosmetics can therefore be relied upon to effect a durable and consistent solution.