EFFECT OF SUNLIGHT AND RAIN ON THE COLOUR OF COLOURED ASBESTOS SHEET

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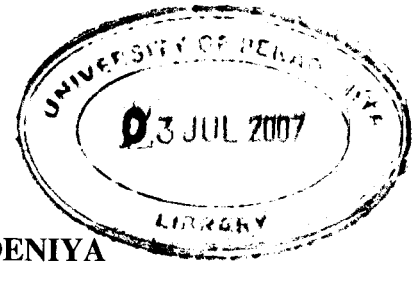

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EFFECT OF SUNLIGHT AND RAIN ON THE COLOUR OF COLOURED ASBESTOS SHEET

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Asbestos is commonly used as roofing sheets and new products are coloured for aesthetic effect. This project investigates the effect of exposure to sunlight and acid rain on the colour of asbestos sheet. Asbestos roofing sheets were introduced as the latest trend in roofing as colour plus sheets. The results show that during the time scale of the exposure (three months) no fading occurs in all colours except the Dark red. In this study the changes in colours upon exposure to environment have been investigated using visible reflectance and Infra Red spectroscopy. The light our eyes see is but a small part of a broad spectrum of electromagnetic radiation. On the immediate high energy side of the visible spectrum lies the ultraviolet, and on the low energy side is the infrared. The portion of the infrared region most useful for analysis of organic compounds is not immediately adjacent to the visible spectrum, but is that having a wavelength range from 2,500 to 16,000 nm, with a corresponding frequency range from 1.9×10^{13} to 1.2×10^{14} Hz. The most useful Infra Red region lies between 4000 – 670 cm^{-1}. Similar optical fibers can be used as measurement fibers to transport light from the sample. This wave length range occur 400 nm to 800 nm.