

Excerpts taken from Australian Standard AS2728: 2013.

K1 GENERAL	<p>All organic coatings gradually change their appearance when exposed to the weather. The changes that take place occur at different rates depending on the aggressiveness of the environment and on the ability of the coatings to resist those changes.</p> <p>Changes in the appearance of an organic coating do not necessarily imply that the coating has lost the ability to protect the base metal.</p> <p>The changes that can occur and their likely effect on the performance of refinished metal products are outlined in Paragraphs K2 to K5.</p>
K2 LOSS OF GLOSS	<p>Initial loss of gloss is used by ageing on exposure to ultraviolet light, particularly when the surface is facing north or west. Contamination by atmospheric pollutants, eg. Sulphurous and ammoniacal fumes and by the collection of dirt, can also cause deterioration of gloss.</p> <p>The rate of impairment of gloss by the collection of dirt is less for vertically installed surfaces than for horizontal surfaces. Pre-finished products can be expected to retain their gloss better than products with conventional architectural paints used for the same application.</p> <p>Loss of gloss usually precedes chalking.</p>
K3 CHALKING	<p>Chalking involves the release of one or more of the constituents of the organic film in the form of loosely adherent fine powder. Chalking occurs slowly on refinished products and is not considered a serious defect unless it occurs early in the life of the product.</p>
K4 CHECKING	<p>Checking is the formation of breaks in the surface of an organic coating which do not render the underlying metal visible. Although checking can occur in a number of forms, it does not greatly detract from the appearance of a coating until the breaks become quite visible. Checking does not have a great effect on the durability of pre-finished metal products.</p> <p>Slight checking, especially if it occurs during or after cold weather is not detrimental to the product, and is considered to be a means whereby internal stresses that occur from time to time are relieved.</p>
K5 COLOUR FADING	<p>Although fading involves loss of colour, the term is used to cover any colour change, including darkening. The degree and rate of loss of colour increases as exposure to ultraviolet light (sunlight) increases. Loss of colour is also associated with the inherent characteristics of pigments and the exposure environment.</p>