

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

METHODS FOR TESTING ANODIC OXIDATION
COATINGS ON ALUMINIUM AND
ALUMINIUM ALLOYS

PART 6—LIGHT FASTNESS

AS 2039.6.1

GREY SCALE METHOD FOR LIGHT FASTNESS OF
ANODIC OXIDATION COATINGS

1 SCOPE. This standard describes the procedure for assessing the resistance to light of coloured anodic oxidation coatings on aluminium and aluminium alloys.

2 APPLICATION. The method is suitable for assessing the resistance of dyed anodic oxidation coatings to fading by natural or artificial light.

3 PRINCIPLE. Anodic oxidation coatings and a piece of a standard reference cloth of known fading characteristics are exposed to natural or artificial light under identical conditions. Following exposure, test pieces are compared against the grey scale. The extent of any colour change is assessed and expressed on a numerical scale and, if desired, in appropriate qualitative terms.

4 REFERENCE STANDARDS.

4.1 Blue Light Fastness Standards. Standard numbers 1 to 8 as specified in AS 1177, Part 2*, shall be used. Pieces shall be 15 mm × 60 mm.

NOTE: These standards consist of blue wool cloths ranging from very low light fastness (No 1) to very high light fastness (No 8) (available from The Australian Wool Testing Authority, Melbourne).

4.2 Grey Scale. The grey scale for evaluating change in colour, as described in AS L15, Part I†, shall be used.

* AS 1177, Methods for Determining the Colour Fastness of Textiles (Metric Units), Part 2—Colour Fastness to Light-Daylight.

† AS L15, Methods for Determining the Colour Fastness of Textiles, Part 1—General Principles of Testing: Use of Grey Scales (under revision).