

# Metal Sign & Label Pty Ltd

ABN 57 074 376 284 15 Jules Avenue Rochedale South 4123

> P O Box 1414 Springwood 4127 Brisbane Australia

Email metal@metalsignlabel.com.au www.metalsignlabel.com.au

> **Phone (07) 3299 3877** Fax (07) 3299 1377

### **SPECIFICATIONS**

### **Anodised Aluminium EN5005 H14 AQ**

Anodic coating thickness

0.3 and 0.5 mm metal 15 - 18 microns 1.0 and 2.0 mm metal 18 - 20 microns

(most architectural window frame anodising is only 12 - 15 microns thick, thicker coating = better durability)

MetalPRINT and MetalPREMIUM meet the following U.S.A. specifications:

Mil. spec A 8625, type II - P514C - P51 4D

Fed. Std.: P455B, type II, and all standards or specifications similar to the above mentioned.

### **DURABILITY**

#### **Abrasion**

Taser Abraser according to ASTM 4060-84, wheels CS17. 1 Kg. load, wheels grounded after each 500 rotations on grinding disc S-11.

After 1000 rotations: wear off 7,5 mg. (10 times better than a good epoxy coating)

After 3000 rotations: wear off 15,5 mg. (a decrease of the anodised layer of only 7.7%.

The anodic layer, Aluminium Hydroxide, is just slightly softer than window glass)

### O.U.V. Fade Test according to ASTM G53 (weather) accelerated test

Black - After 500 hours: no discolouring. Excellent U.V. resistance for black print, estimated equivalent to 20 years outdoor exposure.

Other Colours - After 250 hours, discolouring or fade, amount dependant upon colour

(Black print is virtually unaffected by UV with long term outdoor exposure, all other colours will fade over time with the rate of fade dependant upon colour, location, orientation and degree of exposure. Experience has shown most obvious fade over initial 2-3 years then a slowing of fading. Over time the dyes used to produce colour print will fade as a result of exposure to the high UV typical of Australia. In applications where fade resistance is critical leave colour out or ensure critical information is black or greyscale.)

## Saltspray

According to ASTM 8117-85 duration 1000 hours: No affection.

### **Solvent immersion**

The image cannot be affected by any solvent.

(The printed image is embedded into the anodic layer. Solvents do not affect anodised aluminium and therefore the printed image is protected.)

#### **High Alkaline or Acid Environments**

Printed aluminium should not be used in environments of high alkaline or acid concentrations as these environments attack the aluminium. While anodising does afford some protection, long term the metal and therefore the printed image is damaged. If concentrations exist to cause damage to aluminium chances are damage is also occurring to other substrates with potential adverse health risks to humans. Specify stainless steel for these environments.

