Introduction:

Ceram Building Technology carried out tests on various aluminium panels to determine their resistance to surface marking.

Sample Description:

The following 1000mm x 500mm sheet samples were tested:

- Plain mill finish (reference sample)
- GA AXS21 (anodised finish)
- Plain mill finish (reference sample)
- GA AXM21 (mill finish)

Test Method:

Each sample, commencing with the plain mill finish, was horizontally attached to a rigid substrate.

A 120mm x 40mm piece of P40 grade emery paper was placed, abrasive side down, onto the sheet. Lead weights, totalling 2.16kg, were then placed onto the emery paper. A cable, attached at one end to weights and passing over a pulley, was then attached to the emery paper and allowed to pull the emery paper and lead weights along the surface of the sample sheet.

This procedure was carried out once on the plain mill finish, and the damage to the surface assessed visually, at an angle of approximately 45 degrees and a distance of approximately 1 metre.

The Axis patterned sheet samples were then tested in the same way, with repeated passes of the emery paper, until the damage to the surface was assessed to be similar visually to the reference sample.

Please refer to the next page for the surface marking test results >
Test Results – Resistance to Surface Marking
Textured Sheet – Axis Pattern

Test Results:

The full results for the tests are given in Table 1.

From the results obtained, it is clear the surface texture and finish of the sample or, profile of the sample, are the major controlling factors to the visual assessment of the damage.

Table 1: Surface Marking Test Results

<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Number of Passes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain Mill</td>
<td>1</td>
</tr>
<tr>
<td>(Reference Sample)</td>
<td></td>
</tr>
<tr>
<td>GA AXS21</td>
<td>30</td>
</tr>
<tr>
<td>GA AXM21</td>
<td>2</td>
</tr>
</tbody>
</table>