Editorial Note - This version of this specification removes reference to GPC and incorporates a general format update.

APAS Document D188 should be read to obtain a broad overview of the Australian Paint Approval Scheme (APAS).

Manufacturers who wish to participate in APAS within Australia should consult APAS documents D177 (for Australian manufacturers), D178 (for overseas manufacturers) & D180 (for toll manufacturers).

Manufacturers who wish to participate in APAS within their own countries should consult APAS document D175.

APAS approval to this specification may be gained by compliance with the requirements detailed in this specification and those in document D192 “The APAS Product Approval System”.

All APAS Documents may be downloaded from the APAS web site located at:
www.apas.gov.au

1. Scope

1.1 Description and guide for users

This specification covers coating systems for application to steel structures on which optimum surface preparation can be achieved. The systems are intended to provide a service life in excess of 10 years under Category C (Medium) atmospheric corrosivity conditions (refer AS/NZS 2312) or in situations where frequent maintenance is impractical.

Refer AS/NZS 2312 Table 6.3 for likely times to first maintenance and for other durable systems.

The manufacturer's printed data sheet should confirm that the exposure conditions to which the coating system is to be exposed is within the capabilities of that system. Where surface preparation is likely to be marginal and surface tolerant coatings are required, reference should be made to APAS specification 0156.

1.2 Sub-classes

None

1.3 Basis of this specification

This specification is based on AS/NZS 3750.11 Paints for steel structures - Chlorinated rubber - High build and gloss with the following modifications;

- Inclusion of a mechanical thumb hard dry test
- Increase in exterior durability requirements from 48 to 72 months.

2. Other relevant documents

2.1 Compliance

Paints approved under this specification are described in AS/NZS 2312 as Paint Reference Number (PRN) C25.

2.2 Referenced documents

This specification makes reference to;
- AS/NZS 1580 Paints and related materials - Methods of test
- AS/NZS 2312 Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings
- AS/NZS 3750.11 Paints for steel structures - Chlorinated rubber - High build and gloss

available in Australia from Standards Australia in all capital cities (and on-line at www.standards.com.au). In New Zealand, they are available from Standards New Zealand offices.
Uniform Paint Standard (Appendix I of the Standard for the Uniform Scheduling of Drugs & Poisons), available from Australian GovernmentInfo bookstores in all capital cities.

3. Compositional Requirements

3.1 Binder
The binder shall comply with the requirements of clause 2.2 of AS/NZS 3750.11.

3.2 Volatiles
The volatile portion shall principally be comprised of hydrocarbons.

3.3 Pigmentation
The pigmentation shall be chosen to impart the properties detailed in Table 1 below.

3.4 Colour requirements
Products approved under this specification are normally available in a limited range of colours.
Where the decorative properties of these coatings are considered important, it is crucial that the appearance of the coating be maintained essentially throughout the life of the coating. Therefore, before other colours are used, purchasers should obtain the manufacturer's written assurance that the selected colour will have acceptable colour stability for the intended purpose.

4. Requirements for Product Approval

4.1 General requirements
The product and its application for approval shall comply with the relevant requirements of APAS Document D192 during the life of the approval.

4.2 Technical requirements
The product shall comply with all the requirements of Table 1 below.

4.3 Safety & environmental requirements
The product shall comply with the requirements of clause 3.7 of APAS Document D192.
Read the Material Safety Data Sheet for the product before use and comply with the relevant state regulations.
All pumping equipment should be adequately earthed.
A full face air fed respirator should be used when spraying. It is anticipated that most of these products would be applied by operators in well ventilated spray booths or in the field by operators with adequate safety equipment.
### Table 1 – Performance Requirements

<table>
<thead>
<tr>
<th>TEST</th>
<th>AS/NZS 1580 METHOD</th>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>General requirements</td>
<td>AS/NZS 3750.11</td>
<td>Shall comply with all requirements of clause 2.4, 2.5 and 2.6. All results shall be reported.</td>
</tr>
<tr>
<td>Thinning or mixing properties</td>
<td>208.1</td>
<td>Using 10% of manufacturers recommended thinner there shall be no signs of incompatibility.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>214.x</td>
<td>To be recorded</td>
</tr>
<tr>
<td>Hard dry condition (Mechanical thumb test)</td>
<td>401.6</td>
<td>2 hr max</td>
</tr>
<tr>
<td>Resistance to weathering (Cat 1)</td>
<td>457.1</td>
<td>After 72 months exposure at all three exterior atmospheric exposure sites listed in APAS Document D192 Note 2, the coating shall show no integrity failure ie. at the end of 6 years, the ratings shall be;</td>
</tr>
<tr>
<td></td>
<td>481.1.7</td>
<td>Checking 0</td>
</tr>
<tr>
<td></td>
<td>481.1.8</td>
<td>Cracking 0</td>
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<tr>
<td></td>
<td>481.1.9</td>
<td>Blistering 0</td>
</tr>
<tr>
<td></td>
<td>481.1.10</td>
<td>Flaking &amp; peeling 0</td>
</tr>
<tr>
<td></td>
<td>481.3</td>
<td>Corrosion 0</td>
</tr>
</tbody>
</table>