Q. PAINTING

Q1. ENVIRONMENTAL MANAGEMENT

Refer to the approved Environmental Management Plan submitted in accordance with the requirements of Section 6, ENVIRONMENTAL MANAGEMENT, and ensure the mitigation and waste management processes to counter any environmental impact are established and in place.

All materials intended for use in this project shall, as applicable, conform to the requirements of Section 6, ENVIRONMENTAL MANAGEMENT, Part 7 “SELECTION AND SUPPLY OF PRODUCTS AND MATERIALS”.

Particular attention is drawn to the requirements for all painting materials to conform to Part EM4 “CRITERIA FOR PRIMERS, PAINTS AND STAINS” including site control, reusage and proper ‘disposal of any residue’.

Q2. GENERAL REQUIREMENTS

Q2.1 FINISH

All painted surfaces shall present a clean and even appearance with no evidence of poor workmanship. Finish paint surfaces free from sags, wrinkles, drips and other defects or imperfections.

Defects occurring to steelwork, plastering, timberwork, concrete or masonry or any other painted surface during the maintenance period are to be made good and the area or item repainted to produce final paint surfaces as above.

Q2.2 PAINT CO-ORDINATION

Provide finish coats which are compatible with prime and undercoat paints used. Check type of priming paint used where carried out by other trades. Provide barrier coats over incompatible primers or remove and reprime as required. Notify Superintendent in writing of any anticipated problems using specified coating systems on substrates or priming provided by other trades.

Q2.3 STANDARDS

All materials and workmanship shall comply with the relevant Australian Standards and Codes and in particular the following except where more stringent requirements are nominated in this specification.

AS 1580 Paints and related materials - Methods of Test
AS 1627 Metal finishing - preparation and pre-treatment of surfaces
AS / NZS 3750.9 Zinc-rich organic priming paint
AS / NZS 3750.15 Inorganic zinc silicate paint
AS 2310 Glossary of paint and painting terms
AS 2311 The painting of buildings
AS / NZS 2312 Guide to the protection of iron and steel against atmospheric corrosion
AS 3715 Metal finishing – Thermoset powder coatings

Q3. MATERIALS

Provide the best quality and grade of the various types of coatings as manufactured by approved paint manufacturers. Use only paint materials that comply with APAS specifications.
Q3. MATERIALS (Continued)

Use only factory mixed paints delivered to the job in the original unbroken containers. Use all paint unadulterated except where otherwise recommended by the paint manufacturer.

Undercoat and finishing paints are to be compatible and by the same manufacturer.

Use only the manufacturer’s premium grade lines and not lines normally known as Trade or Master Painter’s Lines.

Where a product is not backed by the manufacturer’s printed directions as required in this specification, obtain written directions from the manufacturer to suit the application of the product before using such product. Forward a copy of such directions to the Superintendent.

At least 2 weeks before the application of any paint submit to the Superintendent for information only a list of the brands, type of paint and application techniques to be used. Relate this submission to the specification.

Approved Manufacturers

In accordance with the Environmental Management Plan, paint materials shall be manufactured by the relevant firms noted in the schedules as pre-approved for particular paint lines or by other firms who subsequently supply adequate data to establish compliance with the criteria referred to in Clause Q1.

Q4. WORKMANSHIP

Use, store and apply paint in accordance with the manufacturer’s directions.

Use applicators and techniques best suited for the type of material being applied. Spray application will not be acceptable unless approved for specific areas or for coatings of a specialised type suitable for application by spray equipment. The texture of roller applied coats shall not exceed a slight stipple effect and “ridging” at roller overlaps will not be accepted.

Apply additional coats of paint as required to obtain complete opacity and to cover all base coats and substrate blemishes and other defects.

Proceed with painting only in areas that are free from dust until the paint surfaces dry.

Apply finish coats as heavily as possible without running to provide a uniform finish and colour free from brush marks, hairs and other imperfections.

Paint surfaces behind movable equipment and furniture the same as exposed surfaces. Paint internal surfaces behind permanently fixed equipment or furniture with first or prime coat only.

Paint interior surfaces of ducts where visible through registers or grilles with a flat black paint.

Paint the back and all edges of access panels and removable or hinged covers to match exposed surfaces unless specified to be otherwise finished.

Sand lightly between each succeeding coat where recommended by the paint manufacturer.

Apply each material at not less than the manufacturer’s recommended spreading rate.
Q5. PAINT COLOURS

A Colour Schedule will be issued for the project by the Superintendent.

Match the colours shown in the Schedule and submit samples as specified before proceeding with the work.

The final colours applied shall exactly match the respective approved samples.

Intermix colours to comply with the Colour Schedule should the standard range of a particular paint manufacturer not match.

Do not add tinters beyond the maximum percentage volume as recommended by the paint manufacturer to obtain the selected colour. Where deep colours are selected, obtain direct from the manufacturer as a completely milled product.

Q6. SAMPLES

Submit paint samples for permission to use. Include a listing of the material, application and location of each sample finish. Superintendent’s approval will be for colour and texture only.

Provide 2 samples of each colour and material with texture to simulate actual conditions. Label and identify each sample. Resubmit samples until required colour and texture is achieved. Samples shall be submitted as follows:

- for masonry or concrete surface submit sample on a concrete block
- for timber surfaces submit on 400mm x 100mm actual timber block
- for plaster and other surfaces submit on 400mm square of hardboard.

Q7. SURFACE PREPARATION

General

Perform preparation and cleaning procedures in strict accordance with the paint manufacturer’s instructions and as specified for each particular substrate condition.

Clean surfaces to be painted before applying paint or surface treatments. Remove oil and grease prior to mechanical cleaning. Programme the cleaning and painting so that contaminants from the cleaning process will not fall onto wet, newly-painted surfaces.

Metalwork

For specific preparation of metalwork surfaces for metallic and non-paint finishes and for powder coating refer to Section H METALWORK Clause H8, H9, and H10.

Q8. ACCEPTANCE OF CONDITIONS

Carefully examine the areas and conditions under which painting work is to be applied. Do not proceed with the application of any paint or coating until satisfactory conditions are available.

The start of painting work will be construed as the applicator’s acceptance of the surface and conditions within any particular area.

Do not paint over dirt, dust, scale, grease, moisture, scuffed surfaces or conditions otherwise detrimental to the formation of a durable and acceptable finish.
Q8. **ACCEPTANCE OF CONDITIONS** (Continued)

Do not apply paints when surrounding temperature and humidity conditions exceed that recommended by the paint manufacturer.

Q9. **HARDWARE AND FITTINGS**

Remove all hardware, hardware accessories, plates, light fittings and similar items in place and not to be painted or provide surface-applied protection prior to surface preparation and painting operations.

After completion of painting of each space or area, reinstall the removed items using workmen skilled in the trades involved.

Q10. **COMPLETION**

**Clean Up**

After completion of the paintwork, all paint cans, other materials, containers, debris and protective coverings shall be cleaned up and removed from the site in accordance with the Management Plan.

**Touch Up**

Immediately before Practical Completion all areas of paintwork which have been damaged or blemished by the works of other trades or by accident, shall be repaired and touched up to match the required finishes.

Q11. **WARRANTY**

Submit a written warranty in the Principal’s name which guarantees all paint systems against defective materials and workmanship for a period of not less than 3 years from the date of Practical Completion.

Q12. **PAINTING SYSTEMS**

Where required for applicable surfaces in the Works the number of coats specified for each of the following painting systems shall be regarded as the minimum necessary for each system used under this Contract. Use exterior quality paints for external situations.

Apply the following paint systems, as applicable, to surfaces scheduled to be painted. Pre-coated metal finishes such as galvanised or zinc-aluminium if not scheduled for paint coatings are to be left in the pre-finished state other than damage or post-welding repairs.

Metal primer for general use as primer or finish coat shall be a 2 pack, water borne Inorganic Zinc Rich Silicate Primer (IZSP) such as Jotun Jotacote 5.

**Exterior Surfaces**

<table>
<thead>
<tr>
<th>Surface</th>
<th>Primer</th>
<th>First coat</th>
<th>Second coat</th>
<th>Third coat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Iron and Mild Steel</td>
<td>Jotacote 5-IZSP</td>
<td>Jotacote 5-IZSP</td>
<td>Enamelised acrylic</td>
<td>Enamelised acrylic</td>
</tr>
<tr>
<td>Metallic primer finish</td>
<td>Enamel finish</td>
<td>Gloss level as selected</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q12. PAINTING SYSTEMS (Continued)

2. **Aluminium-zinc Alloy Coated Steel**
   **Non-ferrous Metals**
   Metallic primer finish One coat: Jotacote 5-IZSP
   Enamel finish First coat: 2 pack etch primer
   Gloss level as selected Second coat: Enamelised acrylic
   Third coat: Enamelised acrylic

3. **All Metals**
   Powdercoat finish Refer METALWORK – Clause H10

4. **Timber – Windows & Doors**
   Preservative – stain finish First dip-coat: Penetrating water-borne preservative WP650
   Sikkens factory pre-finish Second spray-coat: Tinted penetrating water-borne preservative WF750
   Dry film thickness 0.100 microns Third spray-coat: Tinted penetrating water-borne preservative WF750

5. **Timber – Shutters & Decking**
   Preservative finish One coat: Penetrating water-borne
   Sikkens site applied finish Preservative clear

6. **Other Timber**
   Enamel finish First coat: Water-borne acrylic primer
   Gloss level as scheduled Second coat: All-purpose acrylic undercoat
   Third coat: Enamelised acrylic
   Fourth coat: Enamelised acrylic

7. **Concrete and Masonry**
   Plastic finish First coat: Washable acrylic topcoat
   Gloss level as selected Second coat: Washable acrylic topcoat

   Water sealant finish Refer – ROOFING Clause H3.7

8. **Fibre Cement Sheeting**
   Plastic finish First coat: Washable acrylic topcoat
   Gloss level as selected Second coat: Washable acrylic topcoat

**Interior Surfaces**

9. **Black Iron and Mild Steel**
   Metallic primer finish One coat: Jotacote 5-IZSP
   Enamel finish First coat: Jotacote 5-IZSP
   Gloss level as selected Second coat: Enamelised acrylic
   Third coat: Enamelised acrylic
## Q12. PAINTING SYSTEMS (Continued)

10. **Aluminium-zinc Alloy Coated Steel**  
    **Non-ferrous Metals**  
    Metallic primer finish  
    One coat: Jotacote 5-IZSP  
    Enamel finish  
    First coat: 2 pack etch primer  
    Gloss level as selected  
    Second coat: Enamelled acrylic  
    Third coat: Enamelled acrylic

11. **All Metals**  
    Powdercoat finish  
    Refer METALWORK – Clause H10

12. **Timber – Slat Screens**  
    Preservative – stain finish  
    First dip-coat: Penetrating water-borne preservative WP650  
    Sikkens factory pre-finish  
    Second spray coat: Tinted penetrating water-borne preservative WF750  
    Dry film thickness 0.100 microns  
    Third coat: Tinted penetrating water-borne preservative WF750

13. **Other Timber**  
    Enamel finish  
    First coat: Water-borne acrylic primer  
    Gloss level as selected  
    Second coat: All-purpose acrylic undercoat  
    Third coat: Enamelled acrylic  
    Fourth coat: Enamelled acrylic  
    Clear plastic finish  
    Pre-coat: Water based stain coat where required  
    Gloss level as selected  
    First coat: Washable acrylic topcoat  
    Second coat: Washable acrylic topcoat  
    Third coat: Washable acrylic topcoat

14. **Concrete and Masonry**  
    Plastic finish  
    First coat: Washable acrylic topcoat  
    Gloss level as selected  
    Second coat: Washable acrylic topcoat  
    Anti-graffiti finish  
    Silicon-Teflon based penetrating sealer with colourless, matt surface appearance, low VOC emissions, installed to manufacturer’s directions

15. **Fibre Cement Sheeting**  
    **Plasterboard**  
    Plastic finish  
    Pre-coat: Plasterboard sealer where required  
    Gloss level as selected  
    First coat: Washable acrylic topcoat  
    Second coat: Washable acrylic topcoat
Q13. CARPARK LINE MARKING

Material:

Dulux A1 White Road Marking Paint or equivalent applied in accordance with the manufacturer’s instructions.

Application:

Apply using airless spray system as recommended by the paint manufacturer.

Lines shall be 75mm nominal width for full length of lines with neat, clean edges and sharp angles.

Extent:

Refer to drawings for indicative layout of car bay marking. Verify final set out with Superintendent prior to commencing work.

Line marking shall also include directional arrows, parking bay numbers and disabled symbols in colour/colours to be selected.

Q14. SIGNS AND GRAPHICS

The Contract Sum shall include the Provisional Sum listed in the Preliminaries Section to provide for the supply, installation and completion of permanent signs which have not been otherwise specified in the Contract Documents.

Unless specified otherwise, the permanent signs shall include all relevant mounting boards, plastic or metal letters and figures, signwritten signs, door and room naming and numbering, safety signs, exit signs and similar signs necessary for the Works as directed.

The Provisional Sum does not include allowances for identification, marking of services pipes, ducting, electrical equipment instructions, or similar services signs specified in the Contract Documents, or which are specifically required by the various Authorities controlling services installations. Job signs and other temporary signs required during the currency of Contract shall be provided by the Contractor and are not included under the Provisional Sum.