# Brisbane City Council

# Reference Specifications for Engineering Work

# S240 Coatings

## Amendment Register

|  |  |  |  |
| --- | --- | --- | --- |
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| 1.0 |  | Original issue | Oct 2001 |
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## GENERAL

### Section Content

Specified in this section: Coatings, colour selection, surface preparation, coating systems and applications.

### Standards

|  |  |  |
| --- | --- | --- |
| Australian/New Zealand Standard | AS/NZS 2310 | Glossary of paint and painting terms |
| Australian/New Zealand Standard | AS/NZS 2311 | Guide to the painting of buildings |
| Australian Standard | AS 2700 | Colour standards for general purpose |

### References

Refer to the following other Reference Specifications for Engineering Work:

|  |  |
| --- | --- |
| S110 | General Requirements |
| S230 | Structural Steel |

## QUALITY

### Inspection

Witness points – coating stages

*Refer annexure*. Give sufficient notice so that inspection may be made at the following stages:

* Completion of surface preparation.
* After application of prime or seal coats.
* After application of undercoat.
* After application of each subsequent coat.

Witness points – clear finishing stages

*Refer annexure*. Give sufficient notice so that inspection may be made at the following stages:

* Before surface preparation of timber.
* Completion of surface preparation.
* After staining.
* After sanding of sealer.
* After application of each clear finishing coat.

### Contractor’s Submissions

Samples

Submit, on representative substrates, 1 m2 samples of each coating system showing surface preparation, colour, gloss level, texture, and physical properties.

Materials

Manufacturer’s data: Submit the paint manufacturer’s published Material Safety Data Sheets (MSDS) showing the health and safety precautions to be taken during application.

Proprietary materials: If the brand of paint has not been specified, submit the proposed brand of paint and paint line, at least 3 weeks before the paint is required.

Records

Record and submit the following data:

* Prevailing weather conditions.
* Standard of surface preparation, endorsed by inspector.
* Identification of coatings supplied, including batch numbers, material and the condition of containers.
* Results of inspection of applied coatings including wet and dry film thickness. Include the name and designation of the inspector in a signature block of the report.
* Details of equipment used during application and testing of coating.

## MATERIALS AND COMPONENTS

### Coatings

General

Quality: Use premium quality lines.

Delivery: Deliver coatings to the site in the manufacturer’s labelled and unopened containers.

Combinations

General: Do not combine coatings from different manufacturers in a coating system.

Clear timber finish systems: Use only the combinations of putty, stain and sealer recommended by the manufacturer of the topcoats.

Tinting

General: Use only products that are colour tinted by the manufacturer or supplier. Tint each coat of an opaque coating system so that each has a noticeably different tint from the preceding coat, except for topcoats in systems with more than one topcoat.

Tinting by contractor: Add tinters or stainers only if this is without detriment to the durability or aesthetic performance of the product.

Putty

General: Oil based or polymeric based.

Putty for timber finishers: Lacquer or water based, or 2K inert putty. Do not use oil based or glazing putty.

### Colour Selection

Manufacturer’s chart

Select colour from the standard colour chart of the nominated manufacturer.

Australian Standard

Select colour from the standard colour range specified in *AS 2700*.

Samples

Coating systems: Mix or tint coating to match samples provided. Consult the coating manufacturer to ensure that the colours selected are of satisfactory durability and opacity, and will comply with requirements in the specified number of coats.

Clear timber finishes: By reference to coated samples.

## EXECUTION

### General

Order of work

Other trades: Before coating, complete the work of other trades as far as practicable within the area to be painted.

Clear finishes: Complete clear timber finishes before commencing opaque finishes in the same area.

Protection

Fixtures: Remove fixtures before starting to paint, and refix in position undamaged on completion.

Adjacent surfaces: Protect adjacent finished surfaces liable to damage from coating operations.

**Wet paint warning signs**

Place warning signs in conspicuous locations. Do not remove notices until the paint is dry.

Light levels

During surface preparation, coating and inspection, maintain light levels such that the luminance (photometric brightness) of the surface is equal to the specified permanent artificial illumination conditions or 400 lux, whichever is the greater.

Restoration

Preparation: Clean off marks, paint spots and stains progressively.

Restoration: Touch up damaged decorative paintwork or misses only with the paint batch used in the original application. Restore damaged surfaces to their original condition.

Transportation

Protection: Protect coatings from damage during transport and handling. Do not handle or transport members until the coating has reached sufficient hardness to avoid damage.

Slings and securing chains: Cover slings and securing chains adequately with felt. Do not use steel chains wrapped around coated members.

### Surface Preparation

General: Prepare substrates to receive the coating system.

Cleaning: Clean down the substrate surface. Do not cause undue damage to the substrate or damage to, or contamination of, the surroundings.

Filling: Fill cracks and hole with fillers, sealants, putties or grouting cements as appropriate for the finishing system and substrate, and sand smooth.

Drying: Use a moisture meter to demonstrate that the moisture content of the substrate is at or below the recommended maximum level for the type of paint and the substrate material.

### Coating Systems

Number of coats: Unless specified as one coat or two coat systems, provide paint systems consisting of at least 3 coats. Provide additional coats if necessary, to prepare porous or reactive substrates with prime or seal coats consistent with the manufacturer’s recommendations; achieve the total film thickness or texture; and achieve a satisfactory opacity.

System description: If a paint or clear finish system is referred to only by its final coat (for example by the manufacturer’s brand name or the generic name) provide in addition to the final coat, the appropriate stains, primers, sealers and undercoats, suitable for the substrate and compatible with the finished coat and each other.  *Refer annexure*.

No system description given: If a surface is to be painted but no system is nominated, select the system from *AS/NZS 2311 Section 5*, using System 1 where a choice is offered.

### Coating Application

General: Apply the first coat immediately after substrate preparation and before contamination of the substrate can occur. Ensure each coat of paint or clear finish is uniform in colour, gloss, thickness and texture, and free of runs, sags, blisters, or other discontinuity.

Inaccessible surfaces: Where surfaces will be in contact or near contact after fabrication of erection, apply the coating and allow it to dry before assembly.

Spraying: If the paint application is by spraying, use conventional or airless equipment which satisfactorily atomises the paint being applied; does not require the paint to be thinned beyond the maximum amount recommended by the manufacturer; and does not introduce oil, water or other contaminants into the applied paint.