

Finishing & Decoration of Plasterboard



A joint Industry Approach



The Association of Wall and Ceiling Industries and the Australian Paint Manufacturer's Federation, recognising the need for a clear and concise position on the finishing and decoration of plasterboard, have collaborated on the publication of this Fact Sheet. This document identifies the standards of finish which may be expected from different installation, finishing and decoration practices and problems that may arise from inappropriate choices

A plasterboard wall or ceiling presents the painter with a surface comprising two materials of differing texture and porosity. To ensure a satisfactory finish, these differences in surface characteristics must be addressed.



Unless otherwise specified a Level 4 plasterboard finish (as defined in AS/NZS Standard 2589.1:1997 *Gypsum linings in residential and light commercial construction. Application and finishing: Part 1 Gypsum Plasterboard*) shall be taken as the standard finish for plasterboard presented for painting.

Level 4

Plasterboard should be installed on walls horizontally. Ceiling sheets should be installed parallel to primary light source and where appropriate back-blocked. Where possible full sheets should be used thus minimising the need for butt joints.

Jointing should comprise a 3 coat system. Each coat should be fully dried. The top coat should be sanded to a smooth, even finish. Edges should be feathered in order to minimise scuffing of the paper face.

Similarly, internal and external corners, fixings and cornice installation should be finished to the same standard. This will deliver a substrate in a suitable condition to accept paint.

Gloss Banding/ Sheen Staining

These terms are used to describe the phenomena where the plasterboard joints exhibit variability in gloss level compared to the overall surface appearance. This is often due to the failure to use an appropriate sealer/undercoat

Relevance of AS2311

One of the objectives of the paint system, as defined in *Australian Standard AS 2311 – Guide to the Painting of Buildings* is to deliver the appearance of a uniform surface texture and colour.

Sealing the Surfaces

An essential first step is to seal the face of the plasterboard and the plaster joints with a good quality sealer/undercoat. This will ensure an even "suction rate" and provide a degree of opacity for subsequent paint coats. In some cases the sealer/undercoat could be considered as the most important component within the paint system. The application of the sealer/undercoat should be carried out in such a way as to ensure that the plasterboard paper face fibres remain flat.

Once the sealer/ undercoat has fully dried 2 top coats of water based paint must be applied (ensuring adequate drying between coats) as defined in AS 2311.

The performance of the finished paint system and the appearance of walls and ceilings are highly dependent on the quality of the paint used, application method, colour and sheen level.

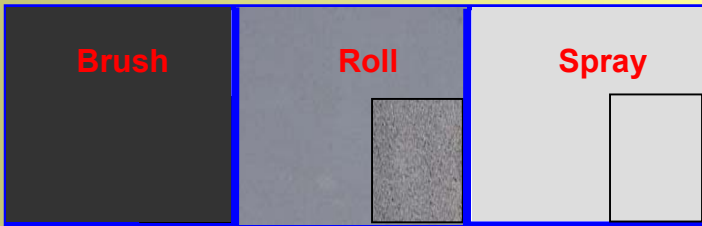
Expectations of Painted Plasterboard

- A level surface with no visible joints
- A serviceable and even sheen decorative finish

These expectations will be difficult to achieve due to:

- Poor design concepts
- Poor workmanship
- Poor quality paint
- Failure to use a suitable sealer/ undercoat
- Glancing light due to natural and/or artificial lighting conditions
- Crowned or starved joints
- Insufficient drying times
- Dark coloured paints
- Gloss paints

Brush, Spray or Roll?



Brush

Provides a reasonably smooth finish but slow application – not common practice. Brush application does not impart an appropriate texture.

Roller

Provides a low to a medium build 'orange peel' texture finish. It is generally agreed that roller application of paint is the preferred method as a uniform finish and texture is imparted to the surface with each coat of paint. Roller application also provides an even film build over the plasterboard and jointed areas.

Spray

Provides the smoothest finish and is 20% quicker than rolling. It is however difficult to touch up after the job is completed and does not deliver a uniform finish.

However, if spray application is used an acceptable finish can only be achieved if the sealer/undercoat is "back rolled". This will provide a uniform texture over the entire surface prior to subsequent spray applications.

Other problems that may arise from spray application:

- Temperature conditions may prematurely dry the paint before back rolling can impart the required texture to the surface
- Over dilution of the paint will reduce paint opacity
- Heavy application/overloading of a single coat will soften the top coat of jointing compound resulting in "joint peaking" on ceilings and the general break down of the compound
- Shrink-back of topping compound around fastener heads may occur

Glancing Light

This phenomenon is also known as "Critical Lighting" and is defined as natural or artificial light projected across a surface at a low incidence angle. See example below of a painted plasterboard wall photographed over a 40 minute interval.



Which level of finish / paint system?

Best

- Level 5 plasterboard installation
- Sand, dust & wipe surface with damp cloth
- 1 coat of water/ oil based sealer/ undercoat
- 2 top coats of premium paint of selected sheen level
- Sanding between all coats

Acceptable (AS 2311 requirement)

- Level 4 plasterboard installation
- Sand & remove dust
- 1 coat of acrylic sealer/ undercoat
- 2 top coats of selected flat or low sheen paint

Common (Does not meet standard. May result in the problems outlined in this fact sheet)

- Sand & dust
- 1 coat of acrylic sealer/ undercoat – tinted to the final colour
- 1 top coat of flat or low sheen paint

Common (Does not meet standard and may fail to meet customer expectations. Is more likely to result in the problems outlined in this fact sheet)

- Sand & dust (sometimes)
- 2 coats of flat or low sheen paint

Experience shows that under ideal conditions, non specified products and systems i.e. 2 coat paint systems, can in some cases in the short term deliver an acceptable paint finish. Frequently, however an acceptable paint finish will not be achieved. In these circumstances the cause of the failure will have to be determined and appropriate rectification carried out which may be expensive and time consuming.

Summary

Whatever the system, the objective is to equalise the texture difference and suction rate of the paper face and stopped joint. This can only be achieved by good plasterboard installation practice, selection of quality paints and suitable application methods.

The final result can be influenced by other factors such as inappropriate lighting. These factors should be considered at the design stage.

Unless the plasterboard and paint systems have been installed and/or applied strictly in accordance with the manufacturers' specifications and those of the applicable Australian Standards, the plasterboard and paint manufacturers cannot warrant the performance and integrity of the plasterboard, the jointing and the paint systems.