

Resene

Resene Paints Limited

Architects Memo No 17 APRIL 1982 SPECIFYING FOR INTERIOR PAINTING

As is normal at this time of year when dependability of fine weather becomes less, more concentration is placed on interior painting. We have therefore decided to use this memo No. 17 to put together a collation of ideas and 'do's and don'ts' for this important area. We feel that the best way to handle this subject is via the various surfaces used starting with timber.

Interior timber work comes under closer scrutiny than its exterior counter-part and although its protection requirement is less because it is out of the weather, very high demands are placed on the surface appearance. High film build is desirable in order to produce the smooth finishes desired as is the use of plenty of sandpaper. Interior primer/undercoats have proved valuable in this field as, not requiring the flexibility of their exterior counter-parts, they can be very highly filled to achieve high film build.

Filling of timber should be done after the first coat has been applied and sanding is preferably left until the penultimate coat. High class interior work often demands four coat finishing so that there is sufficient body of coating present to withstand fine sanding to a flaw-free surface. Enamels are preferred and semi-gloss enamels can be used to minimise any defects left by imperfect sanding (see Architects Memo No. 14).

Use of interior rubbing stains followed by low gloss varnishes is a much more forgiving system. The Polychromatic effect of stained timber tends to divert the eye from other minor flaws. The use of Colorwood stain is fully covered in Architects Memo No. 9.

Fibrous plasters present their own special problems. A thin skin of chemically modified gypsum plaster is cast on a smooth table precoated with a mutton fat release agent. This thin skin is then backed up with sisal re-inforced standard plaster. When taken from the mould some of the thin skin comes away with the sheet but some is sometimes left behind. The surface of the sheet could therefore vary from very glossy areas to dull relatively weak areas. To further complicate things the glossy areas may have some residual areas of the mutton fat releasing agent. Any stopping used could also be of quite a different nature to the surface of the sheet.

Our recommendations are always to lightly sand highly glossy areas in order to give about 70% dulling. The whole surface should then be coated with a penetrating sealer such as Resene Sureseal. Once the Sureseal has been applied the desired finishing coats, whether water-based or solvent-based, can follow. It is important with fibrous plastered sealings to ensure that the wadding has fully dried before coating, otherwise stains may still occur even through the coat of sealer.

Stopped Gibraltar board presents a similarly non-uniform surface which can again feature gypsum plasters. It is important to realise that gypsum plasters do not have anything like the cohesive strength of paint films and peeling of water-based paints directly applied to gypsum plasters, is not uncommon. The peeling in fact is not loss of adhesion of paint but loss of cohesion within the surface layer of the plaster. The penetrating sealer recommended over gypsum plaster, penetrates within the crystal structure of the plaster and

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re-inforces it much the same way as polyester re-inforces glass fibres. Although the paper coating on the Gibraltar board is satisfactory to take paint directly, it will have a different porosity to the stopping; consequently sealing of the whole surface is recommended. The paper used on Gibraltar board after a period of aging uncoated, will develop a yellowish brown colour which is in fact water soluble and can migrate through latex paints. The sealer used also provides a barrier to this dye migration.

Particle Boards and Fibre Boards have, as an integral part of their manufacture, wax added to the chips or fibre. This is an important part of the board which greatly adds to the water resistance of the material. It does however, present a problem when decoration of the board is attempted.

Solvents containing paints or varnishes penetrate some way into the board and dissolve wax near the surface. As the solvent evaporates from the surface of the film the wax is deposited on that surface leaving a fine layer. On egg shell and flat finishes this is scarcely visually discernable but, as a side effect, the wax layer greatly slows down the ingress of oxygen to the film. All oil modified film binders dry by an auto-oxidative process; if access of oxygen is reduced, the drying period is greatly extended. Subsequent coatings redissolve this layer of wax and redeposit it on the new film surface therefore perpetuating the problem. In the worst instances, when a gloss enamel finish is required, a dull patchy surface can result which could have drying periods extended up to many days.

It is imperative when coating such boards to use a sealer which will seal off the wax content and not allow the problems outlined above to occur. The obvious choice is water-based materials. Resene Paints have two products on their range that they recommend, Resene Particle and Custom Floor Sealer and Resene Quick Dry Acrylic Undercoat. The use of water-based paints on particle boards can result in some initial chip raising which may necessitate sanding and the use of an extra coat of sealer. An annoying problem occurs when veneered custom wood is used for profiled doors with the unveneered edge of the custom wood routed to the desired profile. The veneer could be satisfactorily painted but the exposed custom wood must be treated with a suitable sealer in order to avoid this area being affected by wax.

One of the newer boards to come onto the market is called Sabrelite. Work to date on this material seems to indicate that wax is not a significant problem with it but it is an extremely porous surface to paint. In our opinion an extra coat of undercoat or primer/undercoat is required to bring it up to an acceptable painted surface.

Obviously with a subject such as we have attempted to tackle, not all surfaces met will be covered in this memo. Should you have any specific query, please contact our technical staff for additional advice.

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