



Resene Paints Limited

# Architects Memo

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## Painting Concrete Surfaces specialised products for specialised jobs

The concept of fair-faced concrete is that concrete, carefully placed, using high-quality formwork accurately constructed, will provide a surface of sufficient standard that plastering will not be necessary. This is an important aim as plastering is not only highly expensive but also the number of skilled craftsmen available in New Zealand to do this sort of work is not high.

There are two main factors affecting the successful outcome of fair-faced concrete (a) the accuracy of the formwork and (b) the presence of 'bug-holes'. With regard to the latter, many papers have been written on the formation of bug-holes and opinion is that they are affected by (1) shape and surface characteristics of the formwork, (2) ratio of fines to aggregate in the concrete, (3) slump of the concrete, (4) type of form-release agent used, (5) degree and type of vibration used. Notwithstanding this however, the major problem is what to do with them when you have got them? Standard paints won't fill them. One approach has been to 'bag' the surface with a fine sand/cement slurry. 'Bagging' leaves a very obvious surface which weathers differently to the base concrete; it also provides a very weak surface for subsequent painting.

When the problem was considered by Resene Paints Limited (about 10 years ago) it soon became obvious that a successful system would need to physically bridge the 'bug-holes' rather than attempt to fill them. This led to a concept of 'fish-scales' which was eventually achieved in practice using very coarse mica flakes in the product Masonry Filler. When the product is brushed onto a pitted surface, the mica flakes overlap one another in one place forming a strong mineral 'bridge'. The flakes are cemented together by the acrylic binder used. Although coarse flake

reinforcement of films has become common overseas, Resene were first with the concept and were granted New Zealand patent rights.

Although developed as a 'fix it' product, experience over the years has shown that Masonry Filler has other advantages. The interleaved plate structure provides a tremendous barrier to the ingress of moisture; and the uv-opaque properties of the mica flake gives excellent protection from U. V. light. Masonry Filler has been used to bring concrete block surfaces up to a hygienically acceptable standard as well as waterproofing them.

Lack of accuracy in the formwork can result in a wall having within it various planes. This is visually very obvious and not pleasing aesthetically. One method of overcoming this is to trick the eye into not seeing it by applying a textured coating to the surface. The texture diffuses light and substantially reduces the obviousness of surface defects.

A textured coating allows the paint chemist to achieve the optimum in durability. He is not bound by the constraints of thin film technology but free to incorporate reinforcing fibres, durable aggregates, and gap-graded minerals. The Resitex range of products have been formulated to take advantage of every avenue open to increase durability. Couple this with the fact that they are applied at at least 300 microns dry film thickness and you have a permanent finish in a can. Durability and cleanliness can be further enhanced by overcoating with F10 Acrylic Laquer Glaze. The Resitex system is guaranteed for 10 years and is available in the full BSS 5252 colour range.

Refer to Date Sheet D37 and D70 in Resene Architects Manual for further information on Masonry Filler and Resitex.

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