Marmoran
Natural Protection
CUSTOMISED WALL COATING SYSTEMS

PAINT TERMINOLOGY

The success of a coating system is dependant on the understanding of the substrate in relation to the system employed. Invariably coating systems fail due to poor specification, unskilled application and or poor substrate preparation. The following lists common defects encountered, and offers some solution to rectify where applicable.

BITTINESS
Bits or nibs in the finish are as a result of dirty surfaces, dirty brushes or rollers being used, dusty atmosphere when applying the coating, or skins and bits in the paint itself. Application equipment should be cleaned, and paint sieved.

BLEACHING
A loss of colour of the coating due to chemical attack from the substrate generally. The chemicals affect the pigmentation of the coating. Apply a coat of a chemically inert sealer.

BLEEDING
The discolouration of a coating due to the solvents of the finishing coat dissolving substances from the underlying coats or the substrate itself e.g. resins in wood. Apply a coat of a non dissolvable sealer.

BLISTERING
Coatings blister due to the volumetric expansion of volatile substances under the coating. Most frequently due to solvents trapped at the substrate or the application of coatings onto wet surfaces. Allow substrate to dry completely, or wipe off residual solvents or detergents from surfaces to be painted.

BLOOMING
The development of a dull, film, typically on a glossy finish. Generally caused by the application of coatings at high humidities, or surface temperatures close to the dew point. Also caused by solvent imbalance of coatings. Apply coatings at specified humidities and temperatures, or alter solvent mixture of coating.

BRUSH OR ROLLER MARKS
The contours of the previous coming shows through due to not sanding down to smoothness, or the application of a coating onto an extremely porous surface, reducing flow and leveling properties. Excessive working of a wet film reduces flow, or working in a draft that promotes rapid drying of the coating film. The application of too little material also retards flow properties. The use of poor quality application equipment. The application of coatings at low temperatures reduces flow and leveling.

CISSING
The appearance of uncoated spots due to the paint receding from greasy or waxy areas of the substrate, or the application of a coming over unprepared hard or glossy surfaces. Clean surface well, and sand to provide a key.

CHALKING
The development of powder on the surface of a coating, due to the effects of Ultra Violet radiation breaking down the binder system of the coating, or the under bound composition of paint. Chalking in moderation is not objectionable, as it prevents dirt accumulation, and provides a suitable surface for repainting. Employ a paint system that has resistance to the effects of Ultra Violet radiation, or select a well-bound paint.

CRACKING / CRAZING
The development of fine cracks in the coating, due generally to cracks in the underlying plaster carrying through to the coating. Can also be due to poor coating selection, or insufficient drying times between coats. Apply suitable coating to bridge cracks (hairline), or allow sufficient drying time between coats.

CRATERING
The formation of craters on a coating surface due to inadequate cleaning of the substrate, the non-preparation of a new roller cover, over shaking water based paints thus introducing excessive air. The application at high temperatures prevents bubbles from breaking and flowing out.

DISCOLOURATION
(Not dirt related) Due to the application of coatings unsuitable to the substrate condition or exposed environment, e.g. coatings containing pigments not resistant to alkaline conditions applied onto new plaster, or mould growth on a coating surface.

EFFLORESCENCE
The crystallisation of typically water soluble salts behind a coating, generally causing the breakdown of the coating itself. Typical of Masonry substrates. Allow the salts to leach out. Do not clean with water. Apply a solvent based penetrating sealer.

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FLOATING
The development of differing coloured streaks in a paint finish, usually following brush or roller marks due to the use of unsuitable or unstabilised mixtures of pigments or colourants. Apply an alkali resistant primer before the application of an enamel.

FADING
The gradual loss or change of colour due to effect of sunlight on the pigmentation of the coating. Not to be mistaken with chalking, the coating remains intact.

FLAKING
The coating breaks away from the substrate in patches due to the lack of adhesion of the coating or the poor preparation of the substrate. Typical of hard coatings with minimal elasticity. Prepare substrate adequately, and select coating accordingly.

GRIN THROUGH
The substrate shows through the coating due to inadequate obliteration. Typically due to a coating with poor hiding power, the adulteration of the coating, or the exceeding of the recommended spreading rate of the coating.

PEELING
The coating delaminates off the substrate in sheets. Due to lack of adhesion of the coating onto the substrate, the lack of providing a key through mechanical sanding or the application of the coating onto a distempered or dirty surface. Sand down surface to be painted, or clean as necessary, or apply a sealer to powdery surfaces.

PINHOLES
The appearance of micro fine holes in the coating, due to a lack of flow of the coating, especially when air is trapped underneath. Typically evident when paint is applied on very hot days. Add a retarder solvent to the paint before application.

SAGGING
Typical of high build coatings e.g. when aggregate is cast into plaster, the whole mass slides off the substrate. Generally due to a defect in the coating or the application of the coating at elevated temperatures, or the lack of a suitable primer.

SAPONIFICATION
The formation of a soap typically behind an enamel applied directly to new plaster. The alkalinity of the plaster reacts chemically with the acid radicals of the enamel to produce a soap. The chemical reaction is referred to as saponification.

SHEARINESS
An uneven appearance of gloss or sheen of a coating, generally due to the application on substrates of variable porosity, or not maintaining a wet edge in

WRINKLING
The formation of webbed wrinkles on the coating due to the coating being applied in an excessively thick film. The surface of the film dries, but the bottom layer remains soft. The application of a second coat before the first coat is thoroughly dry or the application of a coating in the hot sun, resulting in solvent entrapment. It could also be caused by the application of a coating onto an extremely cold surface.

WEATHER PROBLEMS
The best time to paint is when the weather is warm and dry with little wind.
Some defects result from the following weather conditions:
Damp Weather: At high humidities condensation occurs which interfere with the adhesion and gloss of coatings.
Dry Weather: Very low humidities cause rapid drying off of the coating, resulting in cracking or brush and lap marks.
At low temperatures: the drying process is retarded, it becomes difficult to achieve high film builds, and condensation is highly likely.
At high temperatures: while coatings dry rapidly, problems stemming from solvent entrapment, brush or roller marks occur. The pot life of catalysed material is decreased.
Strong winds result in rapid drying, dirt accumulation while the coating is drying, poor spray application, and lap marks drying at the wet edge.
Dew and condensation cause serious problems especially on steel, with flash rusting being possible, as well as other defects already covered.