

Technical bulletin 2

Rejection

Rejection, commonly known as Silicon Effect is a pullback of a coating applied to a substrate. Rejection is caused by the presence of contaminants, either in patches, or all over the floor surface.

The most common contaminants which can cause a timber floor finish to fail are

1. Timber extraction (resin, wax, oil)
2. Aerosol sprays
3. Food spillage
4. Silicones
5. Contaminated equipment

Unfortunately, in most cases it is not possible to predict rejection on a floor prior to the coating application. Signs of rejection normally occur after application of the first or second coat during the initial drying process and evaporation of solvents. A contamination may be picked up in an isolated spot on the floor during the sanding process and could be spread all over the timber or cork surface.

The chemistry of rejection involves the surface tension difference between the coating and the substrate otherwise the coating cannot wet and pulls back from the surface.

Eracoat FCA Flow additive is a specially designed additive to reduce the surface tension of all Eracoat floor coatings. Generally an addition of less than 0.5% (5ml per liter) is sufficient to overcome rejection problems.

When Eracoat FCA Flow additive is used in a coating, the next applied coating should also contain at least the same quantity of Flow Additive because of the reduced surface tension.

Unlike other additives including silicone drops, Eracoat FCA flow Additive does not cause any undesired side effects like foaming, adhesion problems or cracking if used no more than the recommended maximum addition of 1%.

Always properly clean old floors in order to remove contaminants including grease, oil, wax etc. Before the sanding process is started it is recommended that Eracoat FCA thinner is used to clean the floor.



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Plenty of clean rags should be used when cleaning the floor to ensure that contaminants are removed and not spread all over the surface.

It is better to throw away equipment like sandpaper, screenbacks, or rollers if they were used on a problem floor as contaminants may be transferred to following jobs. Silicones can be a serious problem, therefore always check if such materials were used on or near the floor.

The removal of contaminants from the floor prior to the coating application is critically important. Even when a floor has been cleaned and is free of rejection, a high concentration of certain contaminants remaining on the floor may weaken the bond between the coats and later cause delamination.

Eracoat FCA flow additive is recommended as an anti-rejection additive for Eracoat FC 2450 Gloss and Eracoat FC 2454 Satin.

For further information please call (02) 9623-5200

