



HYDRO

HYDROCOAT METALLIC FINISHES

Metallic paint finishes are normally produced by incorporating aluminium Pigments, or more recently Mica pigments into the coating. They are becoming increasingly popular and various factors should be considered when these products are used.

The metallic effect is achieved by the reflection of light from the aluminium or mica flakes and is dependent on the orientation of these flakes during paint application. Because of this directionality, a difference in viewing angle will produce an apparent difference in the observed colourshade .

In manufacturing metallic finishes, transparent oxides are used to provide the color, but in order to maintain the metallic effect, the pigment levels must be kept low. Due to this, the control of color during paint manufacture is difficult and significant color variations will inevitably occur between different batches of a given color.

As a result of these low pigmentation levels and the semi-transparent nature of metallic finishes, application of the coating becomes more critical. Typical variations in coating film thickness during the course of a production run may lead to color variation during a run. Whilst process control is maintained at a very high level, different runs of the same paint batch may well lead to different shades.

In order to minimize the effects that arise due to the factors described above, the following procedures are **strongly recommended**:

Orders for metallic finishes dedicated to one project, should be completed in one line run, **i.e one order or production at the paintline**. Material from different supplies should not be mixed into the one and same project, unless careful evaluation before selecting stock material and installing the elements by end producer.

All sheets or strip must be installed in the same direction, so that the metallic pigments all face the same direction to avoid significant differences in apparent color.

To ensure a correct installation, we recommend to use a protective foil with arrows indicating the direction of the material being used, or specify printed arrows on the reverse side of the coated strip or sheet. This especially applies for façade and walling products.

For composite materials its advised to print a text in form of a LOT NO., or arrows at the backer, so that it can easily be seen that the material is correctly mounted also after the foil has been removed.

Using repair coatings on metallic finishes and large areas is not recommended as the difference in colourshade in most cases will be clearly visible. Repairing small damages as minor scratches can be done , but will, based on experience, also look different.