Why do we often see lines in color match panels and not on the coated building panel?

The small parallel lines seen on lab prepared panels are the result of the application method used in the laboratory. (See Picture 1) To achieve a uniform thickness of coating in the laboratory, wire wrapped around metal rods is used to apply the coating. (See Picture 2) The amount of coating applied is controlled by the diameter of the wire used. The wire wound rods apply a wavy film that results in small parallel lines when the coating is drawn down the panel.

In most of Valspar’s Fluropon coatings these lines flow together to form a smooth film. Some pigments such as pearlescent or metallic used in the Fluropon Classic and Fluropon Classic II coatings restrict the flow and the lines remain in the coating after baking.

In the coil coating process the paint is applied to the metal strip by a polyurethane roll turning in the opposite direction to the metal. A reverse roll coater applies a smooth and uniform thickness of coating to the metal strip. (See Picture 3)

The reverse coil coated method used to coat metal coils for building panels cannot be economically duplicated in the laboratory. Similarly the small parallel lines in the lab prepared panel cannot be duplicated on a reverse roll coater.