

Advances in Field Applied UV Curable Floor Coatings

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UV固化地坪涂料

Abstract

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Field applied UV curable floor coatings were first introduced around the turn of the century. Since that time, numerous improvements in UV curing equipment have enabled the commercialization of UV curable concrete, wood, and vinyl composition tile (VCT) floor coatings. These UV curable commercial floor coatings provide value to the end user through fast return to service and improved coating properties that are fully developed immediately after cure. These two characteristics of UV curable coatings minimize down times, post coat defects, and maintenance, thereby providing cost savings to the end user.

The performance of the UV curable floor coatings used in these field applications has also been improved since their first introduction. However, there is still a need for even better coating performance. Increased scratch and abrasion resistance, improved chemical resistance, and better appearance are just some of the areas that need enhancement. This paper will discuss recent improvements in resin and formulation design that allow for enhanced coating performance in UV curable concrete, wood, and VCT floor coatings.

ABBREVIATED VERSION (120 words max, plus shorter title)

Advances in Field Applied UV Curable Floor Coatings

Field applied UV curable floor coatings were first introduced around the turn of the century. These floor coatings provide value to the enduser through fast return to service and improved coating properties that are fully developed immediately after cure. This value serves to minimize down times, post coat defects, and maintenance, thereby providing cost savings to the enduser.

The performance of the floor coatings has been improved since their first introduction. However, there is still a need for even better performance, such as increased scratch and abrasion resistance, improved chemical resistance, and better appearance. This paper will discuss recent improvements in resin and formulation design that allow for enhanced coating performance in UV curable concrete, wood, and VCT floor coatings.