

**Method for Improving Corrosion Protection by Paint Coating over Metal Layer with Plating and Thermal Spraying  
Materials on Steel Bridges**

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Steel bridges are generally coated to control the progression of corrosion. Since the corrosion resistance of paint coating tends to decrease with age, a method has been proposed in which a metal coating such as plating or thermal spraying is used as a base coat and then painted over metal coating. However, there are few cases in which the long-term durability of cases using this method has been evaluated. Therefore, in order to understand the long-term durability of combination of various metal coatings and paint coatings, we investigated the deterioration of metal coating under the paint coating on specimens exposed for about 40 years. Furthermore, accelerated degradation tests using newly prepared specimens were conducted to evaluate the long-term durability of metal coating with damage reaching bare metal.