

Mystic River bridge

Case study

Focus product: Intercrete® 4842

Location: Route 1, Connecticut, USA

Client: Connecticut Department of Transport

Summary: Waterproofing and freeze-thaw protection of mass concrete counterweights on historic bridge



Background

Since its construction in 1922, Connecticut Dept. of Transport has carefully maintained the Route 1 Mystic River Bridge which links the townships of Groton and Stonington.

Over the decades, the repeated cycling of freezing and thawing during the wintertime, and the effects of general ageing, meant that a suitable protective coating system was needed to upgrade and preserve the huge concrete counterweights that raise the bridge to the delight of local tourists.

The solution

In considering the range of coating options available, the environmental impact of the proposed system was a determining factor in making the final selection. Intercrete 4842 was chosen as it is a highly flexible water-based coating, exhibiting over 100% elongation to resist cracking. It is applied directly to a damp concrete surface without a primer, curing to form a dense alkaline protective skin which keeps water out and therefore prevents further freeze and thaw related deterioration. Intercrete 4842 is non-toxic when cured and has very low VOC content.