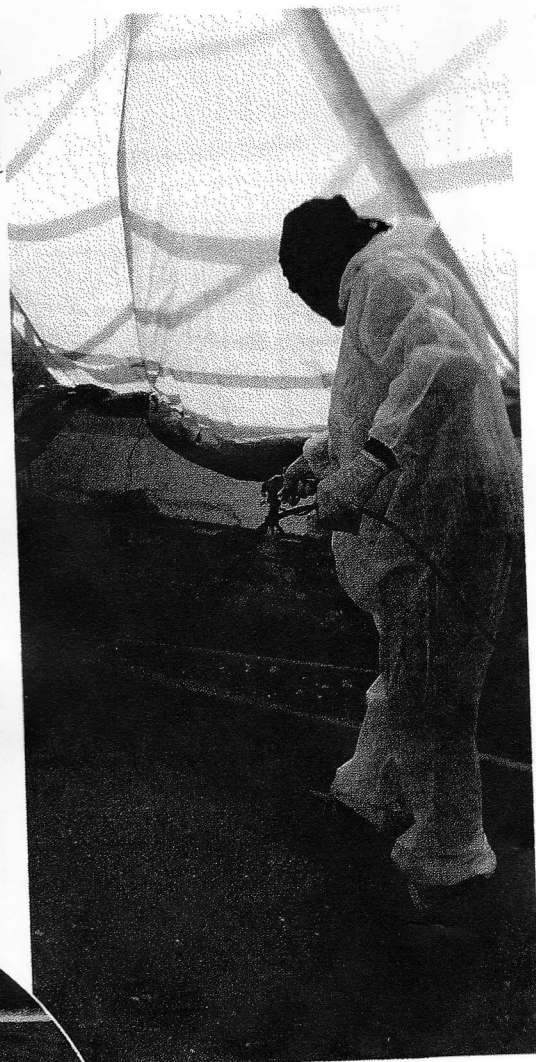


# Bridge, Prague



(Photos: Stirling Lloyd.)



*Main picture: The world-famous Charles Bridge, bathed in sunlight.*

*Figure 2 left: Application of Eliminator to the model of the bridge.*

*Figure 3 above: Spray application of Eliminator on the Charles Bridge.*

Eliminator's ability to bond to itself, irrespective of the time between applications, and maintain an effective, seamless membrane even when applied in small sections would overcome this particular issue.

## Proving the system

Despite these impressive credentials, such was the importance to the city that the refurbishment went smoothly that a full-scale model of a section of the bridge was built, which included the detailing and the various joints to be encountered on the bridge deck itself for trialling the processes to be used. Prior to the application, random spot tensile adhesion tests were taken to confirm the high bond strength that Eliminator would achieve to the actual bridge. The application to the replica section also illustrated the product's ease of use and ability to cope with the various substrate types and complex detailing on the structure itself.

Stirling Lloyd's authorised contractor HELIFIX CZ arrived on-site in December 2007. Due to the need to keep the vast majority of the bridge open at all times and to maintain



its splendour for the visitors from all over the world, the refurbishment of the 4500m<sup>2</sup>, 516m-long deck was programmed to take two years.

Each 150m<sup>2</sup> section of the refurbishment followed the same respectful, but efficient, methodology. Once the area was tented off and prior to the application of the new waterproofing, the granite paving was removed and each piece numbered to ensure that it could be returned to its original position or replaced with a replica. This painstaking process was carried out with the utmost care

to make sure that as much of the original material as possible could be reused.

The whole of the old concrete deck and previous waterproofing system, which had failed, allowing water to penetrate into the structure of the bridge, was then removed. The new concrete deck was put in place and left to cure and gain strength for seven days. This was primed with Stirling Lloyd's MMA-based PAR1 primer, which seals the concrete, preventing any outgassing, as well as enhancing the adhesion of the subsequent membrane to the substrate and sandstone upstands.

The Eliminator waterproofing membrane was then spray-applied in two separate coats. Each coat is of a different, contrasting colour to provide a visual check to confirm