

Basilica of the Assumption

Baltimore, MD

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**Stone Repair
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PROJECT TASK

To repair cracking due to Virginia earthquake in 2011.

PROJECT SOLUTION

Required customized anchor sleeves to secure arches and injection grouting of cracks caused during earthquake.

PRODUCTS

Injection Grout



Top three photographs and bottom left and center were taken "before and during" and the bottom right was taken "after" the work was completed.



PROJECT HISTORY

The Baltimore Basilica, the first metropolitan cathedral constructed in America after the adoption of the Constitution began construction in 1806. Benjamin Henry Latrobe collaborated with John Carroll (the architect of the Capitol and founder of Georgetown University) to produce a building that in its day rivaled the Capitol in size, scale and architectural sophistication. The Basilica was completed in 1821.

In the summer of 2011 an earthquake caused considerable damage to a number of buildings in the area including the Washington Monument, the Smithsonian Castle and the Basilica of the Assumption. At the Basilica, the movement caused cracking in the plaster finish of the ceiling domes that covered the brick backup. Approximately 600 lineal feet of cracks ranging from hairline to 2 inches wide and from several inches to up to 24 inches deep were identified as needing repair. Smaller cracks were addressed by drilling

ports and filling with Conproco Injection Grout, a cementitious micro-grout that is unique in that can fill cracks from hairline to 2 inches wide. For larger cracks the plaster was removed and Injection Grout was pumped into the voids in the brick backup caused by the earthquake. Some arches were reinforced with customized anchor systems to stabilize the backup the masonry in conjunction with the newly installed grout. The plasterwork was restored and recoated to complete the renewed finish.