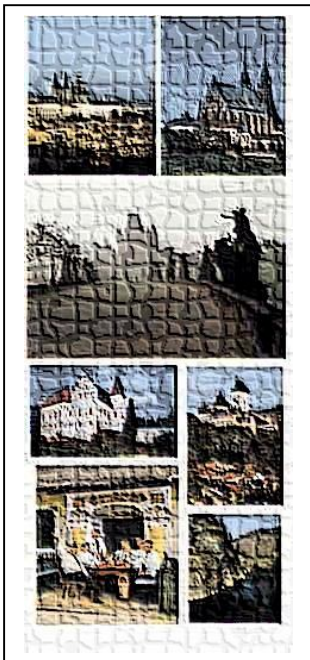
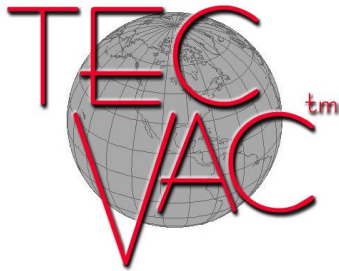


# Tecvac, Inc. Tecvac, Inc.

*"Taking Quality To A New Level...Worldwide"*



Tecvac, Inc. is an award winning restoration company specializing in the repair and maintenance of concrete, masonry and stone structures. While providing a full line of conventional repair services, Tecvac, Inc. also provides a number of distinctive and exclusive vacuum impregnation processes, where appropriate repair resins are introduced into cracks and voids under negative force. Originally developed in Europe, the basic processes have been utilized in North America since 1985. The application of Tecvac's second generation vacuum permeation processes by our technicians have successfully dealt with such problems as, delaminations, composite bonding, joint sealing, deep penetration sealing, porous and friable surface sealing, Alkali-Silica Reaction and micro cracking of concrete, brick and stone. Tecvac received the American Concrete Institute's first Award of Excellence for Concrete Repair in the new millennium.

Unlike pressure injection, the vacuum processes withdraw air and moisture from cracks prior to the installation of appropriately selected repair resins. The tendency to burst the damaged member, so characteristic of conventional pressure injection methods by pressurizing the liquid repair resin, is totally eliminated. The Tecvac Injection Permeation and Impregnation Processes are proven to not only waterproof and strengthen the individual member, but also, to provide an extended serviceability to the entire structure.

The technological advantages of using the Tecvac vacuum (negative) processes over conventional pressure (positive) techniques are numerous. Thermal expansion of arrested air can degrade the repaired concrete, masonry or stone in time. There is no residual water, air or stress concentrations at the ends of cracks using the Tecvac processes. This is the only structural repair system proven to fill dead end cracks.

As a further example, with negative force, the Tecvac vacuum process will actually hold the disrepair or broken pieces together during the permeation process and, all the while, eliminate the internal damages caused by the effects of induced high pressures; this greatly extends the reparability range of structural members so that, in many cases, an otherwise condemned structure or sculpture can be economically saved.



Moreover, unlike common pressure methods, the vacuum processes used by Tecvac, Inc. actually encourages cracks, interconnecting cracks and voids, as fine as .001" to be filled and sealed. Laboratory conducted petrographic analysis has observed and documented the presence of low viscosity repair materials in cracks as narrow as 5 microns using vacuum introduction.

In addition to many completed projects in the Washington, DC area, including extensive repairs for WMATA, Fairfax County and Union Station Redevelopment Corporation (Amtrak), our technicians have performed a number of difficult repairs around the world. In Taiwan, our technicians restored earthquake damaged columns and beams in a building previously condemned. Load testing of the structure at completion confirmed 97% structural restoration. In Southern California, technicians repaired alkali silica damaged high line tower pier footings to a depth of 15' with minimal excavation (4'-5'). Core drilling the member revealed interconnected lateral cracking at a depth of 50". In Connecticut, technicians pulled repair resins through a cold joint crack extending 14' through a defective bridge pier cap. Architectural stone has been repaired without a trace of setup or takedown. Cracks have been blended so close to the color and texture of the member they disappear. To give you an idea of just how diverse our services can be we are currently performing restoration of early 17<sup>th</sup> century marble grave stones. *We received NCC/ACI Concrete Repair Project of the Year Awards in both 2000 and 2001.*

Finally, you should note we are trained and qualified in the use of Impact-Echo testing technology. This remarkable area of technology expands our ability to provide you with concise member analysis through non-destructive testing survey information. When Impact-Echo is coupled with our distinctive concrete repair expertise, you can rest assured you have aligned with a company on the leading edge of assessment and repair technology.

Our experienced staff and our engineering support services will afford you unlimited applications and reasonably priced solutions for an array of problems. If you should need additional information, or have any problems or questions associated with a particular project, please contact the office at:

**703 742-9186 or toll free at 800 847-9324**

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