



## Concrete Uprising Stabilizes Inundated Elevator Pit

Chapel Hill, NC



### Problem

The elevator pit presented a daunting challenge as it was inundated with an astonishing 4 to 5 feet of water. This excessive water accumulation not only jeopardized the structural integrity of the elevator shaft but also led to the development of mold on the bottom floor due to the excessive moisture. Concrete Uprising swiftly identified the problem and embarked on a comprehensive approach to stabilize the pit. Understanding the urgency of the situation, Concrete Uprising initiated the stabilization process by promptly dewatering the elevator shaft. Recognizing the magnitude of the water ingress, the company had to utilize two pumps to effectively remove the substantial volume of water from the pit. By meticulously dewatering the shaft, the team created a conducive environment for the subsequent stabilization measures.

### Solution

Concrete Uprising then turned to the NCFI-120 (formerly Terra-Lok™ 24-120) for an effective solution to the water intrusion issue. Ensuring a thorough application, mechanical packers were strategically placed to inject the NCFI-120 behind the cinder block walls surrounding the perimeter of the elevator shaft. This polyurethane system, designed specifically for water infiltration problems, sealed the gaps and crevices, preventing any further water ingress into the pit. Given the volume of water present, a catalyst was used to activate the NCFI-120. Injections were made at 3-foot intervals at a height of 4ft along the walls, and on a 3ft gridded pattern on the earthen floor, creating a barrier against water intrusion.



### Results

This approach ensured a watertight seal, effectively safeguarding the elevator shaft from further water damage. Concrete Uprising's diligent efforts, combined with the exceptional performance of the NCFI-120, led to the successful sealing of the elevator pit. The once-troublesome water intrusion problem was resolved in just 2 days. This outcome highlights the effectiveness and efficiency of the solution employed. Concrete Uprising's commitment to providing superior services and innovative solutions was evident throughout the project. By leveraging the NCFI-120, the company showcased its expertise in concrete stabilization and repair.



Scan this code to read the full case study

### NCFI Geotechnical Division

Div. of Barnhardt Manufacturing Co. \* P.O. Box 1528 \* Mount Airy, NC 27030 \* 800-346-8229

WWW.NCFIGEО.COM