BVD CONSTRUCTION

Capability Statement

STRUCTURAL STRENGTHENING DESIGN & CONSTRUCT

CONCRETE INVESTIGATION & REMEDIATION

POST-TENSION TRUNCATION/ WEDGING

STRUCTURAL STRENGTHENING

Structural strengthening is the process of upgrading structures to improve their load bearing capacity either under existing loads or to increase the strength of structural members to carry additionally imposed loads.

The use of a building or civil engineering structures may change throughout the course of its service life, as for example its whole function can change, loads can increase, or higher design standards are required and the structure must be made compliant. This strengthening can be achieved with the use of Fibre Reinforced Polymers.

Carbon Fibre systems can be designed to facilitate the requirement to increase the bending, shear or seismic resistance, tested and proven systems are available for use on reinforced concrete, steel, wood and masonry load-bearing structures. BVD Construction can provide Design & Construct services for structural strengthening systems.

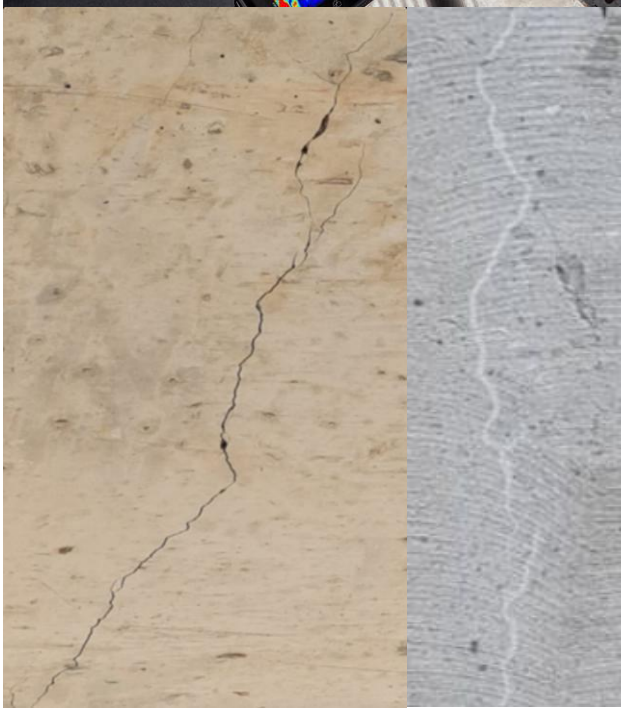
BVDCON Limited Insurances
Public Liability: €6.5M
Employers Liability: €13M
Professional Indemnity: €1M

CONCRETE INVESTIGATION & REMEDIATION

Concrete spalling or concrete cancer occurs with the ingress of water through cracks or pores in concrete. If caught early, this can be rectified using crack injection, but if not, a quote can be provided for a high-quality, cost-effective structural repair.

BVD Construction offers investigation and reporting services for concrete spalling and concrete cancer. These services can take place on a small scale, to receive suitable, long-lasting remediation. We can also investigate and report on a larger scale, to ensure the integrity of the structure is not compromised, and either repair accordingly or engineer a solution.

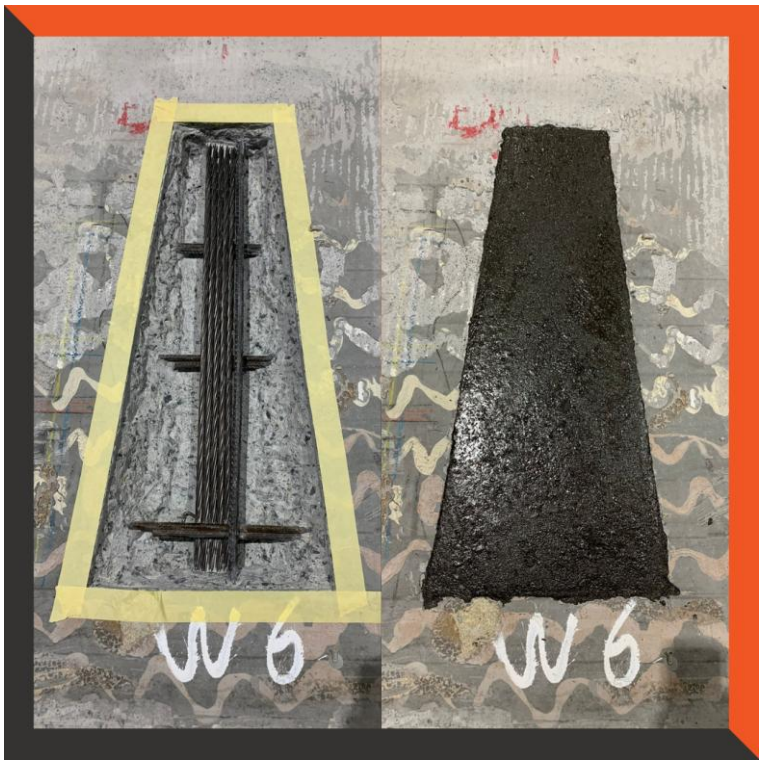
- Corrosion inhibiting coatings
- Crack Injection
- Concrete Repair
- Adhesion Testing to EN 1542
- Chloride & Sulfate Testing to EN 12390-18
- Compressive Strength Testing to EN 12390-3
- Carbonation Testing to EN 12390-12



POST-TENSION WEDGING/TRUNCATION

Most common with the incorporation of left shafts/stairs/travelators etc. When a proposed opening is to be cut into a Post-Tensioned slab, epoxy wedges are used to anchor the PT strands.

Once the proposed cut-out lines have been marked on the slab, concrete scanning for the tendons, then the wedge is centred over the tendon. The wedge shape is cut into its perimeter, so that the concrete inside the wedge area can now be broken out. Once depth is achieved by reaching all around the tendon, any exposed reinforcement is mechanically cleaned, the tendon sleeve is cut back, the sleeve grout is removed, and the steel strands are cleaned and treated. The wedge is then ready to be cast with epoxy grout. So when the slab is cut, the wedge is sufficiently bonded to the steel strands in case of any movement in the tendon.



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