

Press release 6/1/2020

Durable and Maintenance-free lock doors made from **Ultra-High Performance Concrete (UHPC)**

In collaboration with the **Province of Groningen** and co-financed by the **Province of Friesland**, **FDN GROUP** (Functional Design Netherlands) has started an investigation into the design and testing of ultra-high performance concrete point lock doors with the dimensions of 7.25m by 5.3m. The lock doors are composed of concrete plates with a thickness of only 60 mm (strength C170 /195 UHSB concrete mixed with steel fibers). Lock door samples are tested for dynamic loads (ship thrusts) to analyze the damage and repair. UHPC concrete is a very dense material and not permeable to harmful substances. The material is **indestructible** with many applications possible.



FDN Group is an innovative construction company. With this development, FDN hopes to be able to replace the maintenance-sensitive wooden doors (25-year service life) and steel doors (frequent coating maintenance) with maintenance-free UHPC doors with a long service life of minimum 100 years, which are lightweight and economical. It is a very challenging project in which the latest civil and concrete technological developments are applied to a mechanical building product (movable part).

For more information AND APPLICATION OPTIONS, please contact the FDN Group in Amsterdam

Tel +31-20-3306260 e-mail: info@fdngroup.nl website: FDNGROUP.NL