

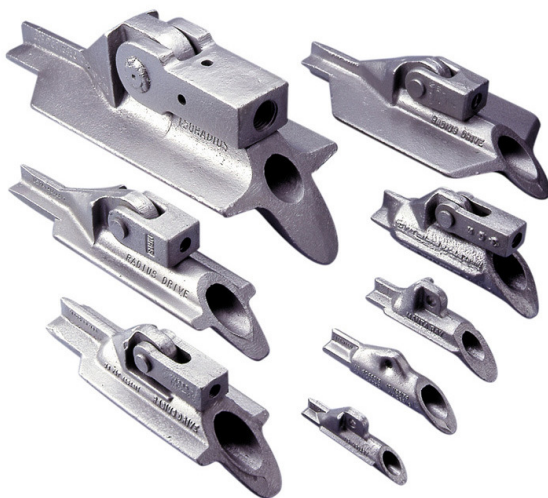
KINGS DOCK TEMPORARY ARENA, LIVERPOOL

Client: De Boer Structures Ltd

Requirements

A giant 4,200 seater temporary arena, built at Kings Dock in Liverpool for the City's annual summer pops by the Royal Liverpool Philharmonic, needed to be securely anchored to the ground to prevent the possibility of any movement or wind uplift and ensure total safety for audiences and performers.

During the four weeks the Arena was located at King's Dock it enabled a record 35,000 people to enjoy the orchestra's season of concerts and a further 10,000 to attend other live events.



The well proven range of Duckbill mechanical ground anchors with the MR2 anchor pictured centre left.

Solution

Designed and built by De Boer Structures, and constructed in just a few days, the pre-fabricated aluminium framework, solid PVC wall panels, PVC roofing, interlocking wood flooring and all seating was supported by a steel frame base.

Once the arena had been levelled it was then secured using Duckbill mechanical ground anchors which De Boer chose to help create a totally firm arena base because of their durability, cost-effectiveness and rapid easy installation.

Approximately 80 Duckbill MR2 anchors were installed by WT Anchor Systems to a depth of 3m around the perimeter of the stadium to provide a 40kN working load. The anchors were terminated with small load plates and then bolted to main structural plates on the steel base of the 5,000 sq.m. arena floor to prevent any uplift.