

Unbrako Concrete – Precast Concrete Panel Specification

Materials

- Concrete Strength at transfer – 30 N/mm².
- Concrete strength at 28 days – 50 N/mm² (Min.).
- Water / Cement ratio - 0.45(Max.).
- Pre-stressing strands – 9.3mm High Tensile Carbon steel ‘Super 7’ 7 strand wires with an ultimate strength of 1770 N/mm² stressed to 70% of ultimate capacity.

Design

- Units are designed to BS8110, to Class 3 with a limiting crack width of 0.2mm.
- Units have a design life of 100 years

Note:- Pre-stressing strands are left exposed and unfinished at ends of panels. The high cement content and carbon steel strands ensure that oxidation does not occur. Units have been used in aggressive environments including, highways, and salt stores with no detrimental oxidation of the pre-stressing strand ends.

Chris Lyons AMIStructE. BTech. IEng.