

Kenwood Viewpoint Interpretation

04 February 2016

E10 In situ concrete

15 SPECIFICATION

- Concrete generally: To BS 8500-2.
- Exchange of information: Provide concrete producer with information required by BS 8500-1, clauses 4 and 5.

20 DESIGNATED CONCRETE Foundation Base

- Designation: FND2.
- Fibres: Not required.
- Aggregates:
 - Size (maximum): 20 mm.
 - Coarse recycled aggregates: Not permitted.
 - Additional aggregate requirements: Rounded coarse aggregate.
- Special requirements for cement/ combinations: None.
- Consistence class: Contractor's choice.
- Chloride class: Cl 0.40.
- Admixtures: Concrete producer's choice.
- Additional mix requirements: None.

45 PROPERTIES OF FRESH CONCRETE

- Adjustments to suit construction process: Determine with concrete producer. Maintain conformity to the specification.

50 PREMATURE WATER LOSS

- Requirement: Prevent water loss from concrete laid on absorbent substrates.
 - Underlay: Polyethylene sheet 250 micrometres thick.
 - Installation: Lap edges 150 mm.

60 PLACING AND COMPACTING

- Surfaces to receive concrete: Clean, with no debris, tying wire clippings, fastenings or free water.
- Timing: Place as soon as practicable after mixing and while sufficiently plastic for full compaction.
- Temperature limitations for concrete: 30°C (maximum) and 5°C (minimum). Do not place against frozen or frost covered surfaces.
- Compaction: Fully compact to full depth to remove entrapped air especially around reinforcement, cast-in accessories, into corners of formwork and at joints. Continue until air bubbles cease to appear on the top surface.
 - Methods of compaction: To suit consistence class and use of concrete.

70 CURING AND PROTECTING

- Evaporation from surfaces of concrete: Prevent throughout curing period.
 - Surfaces covered by formwork: Retain formwork in position and, where necessary to satisfy curing period, cover surfaces immediately after striking.
 - Top surfaces: Cover immediately after placing and compacting. Replace cover immediately after any finishing operations.
- Curing periods:
 - Surfaces which in the finished building will be exposed to the elements, and wearing surfaces of floors and pavements: 10 days (minimum).
 - Other structural concrete surfaces: 5 days (minimum).
- Protection: Protect concrete from shock, indentation and physical damage.

E30 Reinforcement for in situ concrete

30 FABRIC REINFORCEMENT AS DRAWING

- Standard: To BS 4483.
- Strength grade: B500B.

40 CONDITION OF REINFORCEMENT

- At time of placing concrete: Free from corrosive pitting, loose mill scale, loose rust and contaminants which may adversely affect the reinforcement, concrete, or bond between the two.

55 LAPS IN REINFORCEMENT

- Laps in bar reinforcement (minimum): 450.
- Laps in fabric reinforcement (minimum): 450.

70 FIXING REINFORCEMENT

- Standard: To BS 7973-1 and -2.
- Installation: Provide adequate support, tie securely and maintain the specified cover.
 - Tying wire: 16 gauge black annealed. Prevent intrusion into the concrete cover.