Fixing the AHC crane in concrete floor.

Expansion bolt at concrete minimum quality K25: M16 with embedment depth

100mm.Concrete thickness 150mm.

Suggestions for expansion bolt: Sormat S-KA(K) 16/20

Torque: 120Nm

Expansion bolt at cracked concrete minimum quality K25 M16 with embedment depth

125 mm. Concrete thickness 190mm

Suggestions for expansion bolt: Sormat S-KA(K)D 16/45

Torque: 120Nm

NOTE

The bolts shall withstand a load of 6.5 kN / bolt tensile load.

To achieve optimum attachment onto the bolts they should be tightened to the specified torque after 2 weeks of use.

Factors to consider for the recommended expansion bolts to apply correct.

- The maximum edge distance from center anchor bolts to concrete edge: 170mm.
- Cross-hole distance is more than what affects the M16 expansion bolts.

All information is taken from the Swedish version of "Swebolt Manual - bolt dimensioning"

Safety Class of bolt attachment:

Safety Class 1

Fixing the installation (e.g. ventilation ducts and cable trays), exterior wall claddings with low height (e.g. cavity walls up to 3.5 m above ground), light ceilings (e.g. light absorbers). Bolting stating that only fix the position.

Safety Class 2, this we apply for attachment of an AHC crane:

Fixing of exterior walls, structures (eg concrete and cavity walls), roofing and ceilings. Fastening of column or other stabilizing structural elements.

Safety class 3 shall apply for:

A building's main structural systems and building components that are necessary for the system stabilization. Stairs and other structural elements belong to the buildings evacuation exits. Barriers along platforms where large number of people are staying.

Beams for overhead cranes.

Lifts on construction sites.