

Assignment 02: Question 2

a)

An internal 450mm square column is to be provided with 25mm vertical bars and 10mm links, maximum size of aggregate is 40mm. Exposure is class XC1, concrete strength is C30/37 and required fire resistance is 3 hours. Assuming a load reduction factor of 0.7, **what is the nominal cover (mm) ?**

b)

The ground floor slab of an office development is cast on blinding and has a concrete strength class of C32/40. It is exposed to moderate humidity and chlorides. Maximum aggregate size is 20mm and bar size is 16mm. **What is the recommended nominal cover ?**

NO NEED TO CHECK FIRE RESISTANCE COVER FOR b)

Notes for calculations

Note: All calculations must be on “calculation sheets” and should show full workings out, including which eurocode sections were used.

Make sure you write clearly. There is no need to type out calculations.