

Structural Calculations

Project: ASS, Plot 9 SFEZ

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Designer: APW

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Subject:

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Rev:

Gas Protection Design / Statement

From Enviro solution report ref: CL101 a gas situation of CS2 should be considered.

The Building is categorised as commercial Type C building.

From Table 4 BS 8485 a gas protection score of 2.5 points will be required.

The Ground floor construction is a 275mm thick heavily reinforced in-situ concrete suspended slab with minimal penetrations.

Table 5, Structural Barrier Score = 1.5

Note 3 - Slab is doubly reinforced as such full crack control reinforcement is in place.

The remaining required point of 1.0 is intended to be obtained by providing a sub-floor ventilation system. The system will be a passive no fines gravel layer with gas draining system.

Using Table B.4 the 5 effectiveness can be associated with scores of 2.0, 1.5, 1.0, 0.5 & 0.0.

Poor effectiveness achieving a score of 1.0.

Table B.4 associates Poor effectiveness with the gas drained stone layer.