HIGH STRENGTH CONCRETE COMPOSITION AND METHOD OF PREPARATION

ABSTRACT OF THE DISCLOSURE

A high performance concrete composition which comprises in relative parts by weight:

i. 20 - 26% by weight of CEMI and GGBFS;

ii. 4%-12% by weight of silica fume;

iii. two polycarboxylate (PC) based admixture (around 2 litres/100 kg cementitious material);

iv. water binder ratio of 0.22 to 0.33;

v. 26 - 32% by weight of natural sand and 35 - 45% by weight of a 20 mm graded granite stone;

vi. a WCS and RCA as a replacement to natural sand and 20mm coarse aggregates respectively by a maximum of 10% by weight; and

vii. Polypropylene fibre at a dosage of 1 – 2 kg/m^3.

No Figure