

Summary of reinforced concrete^{A)} durability requirements for exposure class XS3^{B)} for an intended working life of not less than 50 years

Code of Practice, British Standard	Concrete made with: Portland cement, CEM I				Concrete made with: Blast-furnace cement, CEM III/A ^{C)}			
	mcc ^{D)} , kg/m ³	mwc ^{E)}	$f_{ck,cube}$ MPa	C_{nom} ^{F)} mm	mcc ^{D)} , kg/m ³	mwc ^{E)}	$f_{ck,cube}$ MPa	C_{nom} ^{F)} mm
CP 110-1: 1972	330	0.45	50	50	330	0.45	50	50
BS 6349-1: 1984	400	0.42	40	50	400	0.42	40	50
BS 8110-1: 1985	400	0.45	50	50	400	0.45	50	50
BS 8110-1: 1997	400	0.45	50	50	400	0.45	50	50
BS 6349-1: 2000	400	0.40	50	60	360	0.50	37	50
BS 8500-1: 2002	360	0.40	50	60	360	0.40	45	50
BS 8500-1: 2006	380	0.40	50	60	380	0.40	45	50
BS 6349-1-4: 2013	360	0.35	50	90	380	0.35	50	60
BS 8500-1: 2015	380	0.35	55	90	380	0.35	50	60

A) Maximum aggregate size 20mm

B) Assuming XS3 is equivalent to exposure classes previously described as severe, very severe or extreme

C) Assuming a nominal GGBS content of 40%, representative of UK Portland blast-furnace cements 1925–1990

D) Minimum cement or combination content

E) Maximum free water:cement ratio

F) Nominal cover assuming required minimum cover plus an allowance of 10mm.