

Designed concrete to BS EN 206 -1 & BS 8850

Why BS EN 206-1 & BS8500-1

BSI have withdrawn BS5328 to be replaced by BS EN 206-1 and complemented in the UK by BS8500-1 for use by specifiers of concrete.

This is in the interests of trying to rationalise concrete standards throughout Europe

Methods of specifying in BS8500-1 (very similar to BS5328)

- Designed concrete
- Designated Concrete
- Standardised prescribed concrete (standard mixes)
- Prescribed concrete
- Proprietary concrete (for special applications)

Strength classes

Compressive strength is dual classified per table A due to EC codes being expressed in **cylinder strength**, whilst most producers use **cubes** for conformity testing.

The lower number is the cylinder strength, whilst the higher number is cube strength (**We generally quote in cube strength**)

Table A -- Compressive strength classes for normal weight and heavy weight concrete

Required min. characteristic cylinder Strength (n/mm ²)	Required min. characteristic cube Strength (n/mm ²)	Compressive strength class
8	10	C8/10
12	15	C12/15
16	20	C16/20
20	25	C20/25
25	30	C25/30
28	35	C28/35
30	37	C30/37
32	40	C32/40
35	45	C35/45
40	50	C40/50
45	55	C45/55
50	60	C50/60
55	67	C55/67
60	75	C60/75
70	85	C70/85

Slump & Flow are used as a measure of consistence (see Tables B & C below)

Table B slump

Table C flow

Slump Class	Slump class range mm	Likely target slump	Flow Class	Flow dia. Range mm	Likely target flow mm
S1	10-40	20	F2	350-410	380
S2	50-90	70	F3	420-480	450
S3	100-150	120	F4	490-550	520
S4	160-220	180	F5	560-620	590

Refer to our web page www.masterconcrete.co.uk for additional information