

# Revision of BS 8500

**Chris Clear, of MPA-BRMCA and chairman of the British Standards Committees for Concrete (B/517) and Concrete – production and testing (B/517/1), looks at the issues surrounding revision to the British Standard for concrete.**

**C**oncrete readers will be aware that a revised version of the European Standard for concrete<sup>(1)</sup> was published on 31 December 2013 in the United Kingdom. Other European member states have not been so quick to add their National Foreword and make the Standard available. The main reason for this is that EN 206:2013 includes normative references to the 2013 version of the *Aggregates for concrete* Standard EN 12620<sup>(2)</sup>, published on 31 May 2013 but withdrawn on 10 January 2014 to be replaced by its predecessor<sup>(3)</sup>. Subject to confirmation by the European Concrete Committee (TC104) that met on 6–7 March 2014, a correction to EN 206:2013 will be issued, after which it will be possible for European member states to publish workable versions.

Although published in the UK, the current version of BS EN 206:2013 is not usable as it refers to the now withdrawn EN 12620. It is also not usable because the BSI Standards Policy and Strategy Committee (on whose authority the BS EN 206:2013 was published) did not include text in the National Foreword making reference to BS 8500<sup>(4)</sup>, the British Standard for concrete. This omission also makes the BS EN 206:2013 unusable in the UK, as all the necessary recommendations and guidance required to implement the European Standard in the UK are within BS 8500.

The British Standard Concrete Committees (B/517 and B/517/1) have already started the necessary revision to BS 8500 by compiling a draft of all the proposed changes. It is evident that this may entail some clever wording to cover the likely content of the revised *Aggregates for concrete* Standard as well as changes due to the revision of EN 206. In addition, there are a number of other changes required or items that have been proposed for consideration. The following is a list of the ten most significant aspects to be included in the revision of BS 8500 as discussed by the British Standard Committees at their joint meeting on 25 February 2014:

1. Making it clearer that Product Conformity Certification is mandatory for designated concrete and that it conforms to minimum requirements as proposed by QSRMC and the BSI Kitemark Scheme for Ready-Mixed Concrete.
2. The inclusion of designated cement bound 'CB' concrete with aggregate grading requirements

and minimum cement content. These are necessary to cover a range of dry-lean and roller-compacted concretes specified by characteristic strength and using cements and combinations outside the scope of EN 14227-1<sup>(5)</sup>.

3. Consider changing the durability recommendations from intended working lives of 50 and 100 years to 60 and 120 years.
4. Review the durability requirements for seawater exposure in the light of the revision of BS 6349-1-4<sup>(6)</sup> in 2013.
5. The use of  $D_{upper}$  and  $D_{lower}$  by the specifier to define the required upper and lower size of the coarsest aggregate.
6. Guidance for the specifier on the maximum time between placing layers.
7. Guidance with respect to concrete for geotechnical works.
8. Recommendations for slump flow identity testing.
9. The requirement for a quarterly calibration of weigh batch equipment.
10. Replace references to sulfate-resisting Portland cement by the nomenclature of the European equivalent cements CEM I+SR0 and CEM I+SR3.

Notwithstanding the above, if there are users of BS 8500 who consider that there are other items requiring attention then they should let BSI know as quickly as possible, but preferably no later than July 2014 as this is when the draft for public comment will be prepared. (e-mail: [mussa.awaleh@bsigroup.com](mailto:mussa.awaleh@bsigroup.com) and copy to [chris.clear@mineralproducts.org](mailto:chris.clear@mineralproducts.org)) ●

## References

1. BRITISH STANDARDS INSTITUTION, BS EN 206. *Concrete – Specification, performance, production and conformity*. BSI, London, 31 December 2013.
2. BRITISH STANDARDS INSTITUTION, BS EN 12620. *Aggregates for concrete*. BSI, London, 31 May 2013, withdrawn (this standard published in May 2013 by the European Standards body (CEN) had to be withdrawn because of some procedural anomalies which occurred during its development).
3. BRITISH STANDARDS INSTITUTION, BS EN 12620. *Aggregates for concrete*. BSI, London, 2002+A1:2008.
4. BRITISH STANDARDS INSTITUTION. BS 8500. *Concrete. Complementary British Standard to BS EN 206-1. Parts 1 and 2 – 2006+A1: 2012 Specification for constituent materials and concrete*. BSI, London, 31 December 2012.
5. BRITISH STANDARDS INSTITUTION, BS EN 14227. *Hydraulic bound mixtures – Specifications. Part 1 – Cement bound granular mixtures*. BSI, London, 31 May 2013.
6. BRITISH STANDARDS INSTITUTION, BS 6349. *Maritime works. Part 1-4 – General. Code of practice for materials*. BSI, London, February 2013.



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