C6 - Quality Management & Control

In traditional British (BS) Standards, the evaluation of compliance levels was covered by the contractual arrangements between the producer of the concrete and the customer. BS EN Standards are different. They contain requirements for controlling 'conformity'.

The requirements for conformity cover the detailed procedures that a producer must follow to demonstrate that the concrete complies with the requirements of the Construction Products Directive.

The procedures must be followed by all producers, using a programme of sampling and testing. They demonstrate conformity with the relevant parts of:

BS EN ISO 9001Quality management systems. RequirementsBS EN 206-1Concrete. Specification, performance, production and conformityBS 8500Concrete. Complementary British Standard to BS EN 206-1

The intent of the rules is that concrete that does not comply with the Standard is not placed on the market.

The Standard also recognises that some customers may wish to sample and test delivered concrete. This is known as identity testing.

Guidance

Guidance on the conformity rules in BS EN 206-1 is given on the Quarry Products Association (QPA) website: www.qpa.org. Follow the links to 'Products' and then 'Ready mixed concrete'. The conformity guidance document is listed under 'More Information'.

Certification bodies

An additional requirement of BS EN 206-1 is that the control of production and conformity is regularly assessed by a certification body.

The two best known certification bodies that operate schemes for the ready-mixed concrete industry are:

- BSI Product Services (Kitemark® scheme) www.bsi-global.com/en/productservices
- Quality Scheme for Ready-Mixed Concrete (QSRMC) www.qsrmc.co.uk

The procedures used by the certification bodies ensure that a producer of ready mixed concrete has a quality management system (QMS) that complies with the general requirements of BS EN ISO 9001, and the specific requirements for concrete in BS EN 206-1 and BS 8500.

Certification bodies assess production control at the plant, personnel and equipment, the supporting technical control system, and customer related activities. Assessments usually take place once each year.

Certification bodies maintain a register of certified companies that can be accessed by clients and customers.