



BS 4485 : Part 3 : 1988

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British Standard

Water cooling towers

Part 3. Code of practice for thermal and functional design

Tours de refroidissement par l'eau

Partie 3. Conception thermique et fonctionnelle — Code de bonne pratique

Wasserkühltürme

Teil 3. Leitfaden für die Bemessung unter thermischen und funktionalen Gesichtspunkten

Foreword

This Part of BS 4485, which has been prepared under the direction of the Civil Engineering and Building Standards Committee, deals with the thermal and functional design of natural draught, mechanical draught and factory prefabricated cooling towers. This Part of BS 4485 is a revision of BS 4485 : Part 3 : 1977, together with its Addendum No. 1 (1978) both of which are withdrawn. In this revision the following principal changes have been made.

- (a) The guidelines on water treatment have been expanded as these were not considered sufficient for good operating practice.
- (b) Reference has been made to the potential health hazard arising from the bacterial population of cooling towers, as it relates to the design of the towers. However, operational techniques for control in this area are outside the scope of this Part of BS 4485.
- (c) Factory prefabricated cooling towers previously dealt with in Addendum No. 1 to BS 4485 : Part 3 : 1977 have been covered by suitable modification of the main text of this Part of BS 4485.
- (d) Information to be supplied by the purchaser and the manufacturer, which was included in Addendum No. 1 to BS 4485 : Part 3 : 1977, now appears as appendix A in this Part of BS 4485 as it is considered relevant to all types of cooling towers.
- (e) Materials of construction have been omitted as these are dealt with in BS 4485 : Part 4*.
- (f) A new clause on maintenance has been added which was in Addendum No. 1 to BS 4485 : Part 3 : 1977.

This Part of BS 4485 provides information on design principles, siting and spacing. Guidance is given on specific thermal and hydraulic requirements, on mechanical equipment and on environmental aspects such as discharge into rivers and cooling tower noise.

The other Parts of BS 4485 are as follows.

Part 1 Glossary of terms

Part 2 Methods for performance testing

Part 4 Structural design of cooling towers

Where necessary, definitions have been included in the revisions of BS 4485 : Parts 2, 3 and 4 so that when they have all been published BS 4485 : Part 1 can be withdrawn.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

* Under revision.