

(PREVIEW)

IS : 10788 (Part 1) – 1984

Indian Standard

CODE OF PRACTICE FOR CONSTRUCTION OF DIVERSION WORKS

PART 1 CELLULAR COFFER DAMS

1. SCOPE

1.1 This standard (Part 1) lays down guidelines for the construction of cellular coffer dams.

FOREWORD

0.1 This Indian Standard (Part 1) was adopted by the Indian Standards Institution on 30 January 1984, after the draft finalized by the Diversion Works Sectional Committee had been approved by the Civil Engineering Division Council.

0.2 Prior to the commencement of actual construction of any work under water, it becomes obligatory in most cases, to exclude temporarily water from the proposed work area during the construction period, so as to permit the work to be done in the dry or semi-dry condition. An efficient scheme of diverting water away from the work area should be capable of limiting the seepage into the work area to a minimum (generally limited to 0.5 cumecs) so that the work area can be kept dry.

0.3 A temporary diversion scheme essentially consists of :

- a) coffer dam(s) built across a part or full width of the water way to divert water away from the work area;
- b) works to transfer the diverted water from upstream to the downstream of the work area without affecting the same, such as :
 - 1) diversion through (construction) sluices in the main work
 - 2) diversion by one or more tunnels along the side of the main work area,
 - 3) diversion through low level blocks of the main structure left for the purpose or through channels excavated outside the main structure, and
 - 4) secluding part of the work area for construction and allowing the river to flow through the remaining work area ; and
- c) coffer dam built to exclude water from the working area for construction to be undertaken in still water.

Reference may be made to IS : 9795 (Part 1) - 1981* for the proper choice of the type of coffer dam after considering all the relevant aspects mentioned in the standard.

0.4 This standard is one of a series of standards covering the choice, design and construction of coffer dams. The standards already published, in this series are IS : 9461-1980† and IS : 9795 (Part 1) - 1981*.

0.5 In the formulation of this standard, due weightage has been given to the practices prevailing in the field in this country.

0.6 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960‡. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.