

Indian Standard

GUIDE FOR LAYING COMBINATION LINING FOR EXISTING UNLINED CANALS

(First Revision)

1. SCOPE

1.1 This standard lays down guidelines for lining of existing unlined canals with combination lining which consists of lining the sides of a canal with rigid lining with or without polythylene film or bitumen felt underneath and the bed with a suitably protected flexible type of lining.

1.2 Combination lining is suitable for those reaches which are in regime or which have acquired working stability. Combination lining may also be adopted for reaches not in regime but not subjected to scouring by taking suitable steps, such as changing the side slope, providing falls, etc.

2 REFERENCES

2.1 The following standards contain provisions, which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

| <i>IS No.</i> | <i>Title</i> |
|-------------------------|---------------------------------------------------------------------------------------------------------------|
| IS 269 : 1989 | Specification for 33 grade ordinary Portland cement (<i>fourth revision</i>) |
| IS 455 : 1989 | Specification for Portland slag cement (<i>fourth revision</i>) |
| IS 456 : 2000 | Plain and reinforced concrete - Code of practice (<i>fourth revision</i>) |
| IS 1489 (Part 1) : 1991 | Specification for Portland pozzolana cement Part 1 Flyash based (<i>third revision</i>) |
| IS 1489 (part 2) : 1991 | Specification for Portland pozzolana cement Part 2 Calcined clay based (<i>third revision</i>) |
| IS 1344 : 1981 | Specification for calcined clay P07.Z01ana (<i>second revision</i>) |
| IS 1542 : 1992 | Specification for sand for plaster (<i>second revision</i>) |
| IS 2116 : 1980 | Specification for sand for masonry mortars (<i>first revision</i>) |
| IS 2508 : 1984 | Specification for low density polyethylene films (<i>second revision</i>) |
| IS 3367 : 1993 | Specification for burnt clay tiles for use in lining irrigation and drainage works (<i>second revision</i>) |
| IS 3812 (Part I) : 2003 | Specification for pulverized fuel ash for use as pozzolana in cement, cement mortar and concrete |
| IS 3872 : 2002 | Lining of canals with burnt clay tiles - Code of practice (<i>first revision</i>) |
| IS 3873 : 1973 | Laying cement concrete/stone slab lining on canals – Code of practice (<i>second revision</i>) |
| IS 7193 : 1994 | Specification for glass fibre base bitumen felts (<i>first revision</i>) |
| IS 8112 : 1989 | Specification for 43 grade ordinary Portland cement |

IS 9097 : 1979
IS 9698 : 1995

IS 10646 : 1991
IS 12269 : 1987

Guide for laying lining of canals with hot bitumen or bituminous felts
Code of practice for lining of canals with polyethylene film (*first revision*)
Canal linings - Cement concrete tiles - Specification (*first revision*)
Specification for 53 grade ordinary Portland cement