

भारतीय मानक

नहरों के कंक्रीट अस्तर में प्रसार जोड़ों की सीलबन्दी —  
रीति संहिता

( पहला पुनरीक्षण )

*Indian Standard*

SEALING EXPANSION JOINTS IN CONCRETE  
LINING OF CANALS — CODE OF PRACTICE

( *First Revision* )

UDC 626.134

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**BUREAU OF INDIAN STANDARDS**  
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## FOREWORD

This Indian Standard ( First Revision ) was adopted by the Bureau of Indian Standards, after the draft finalized by the Irrigation Canals and Canal Linings Sectional Committee had been approved by the River Valley Division Council.

When the expansion joints in the concrete lining are sealed with sealing compound, the same has to be done in a manner so that these are watertight and stop ingress of foreign matter into them without affecting the usefulness of the joints for the purpose they are meant. This standard has been formulated for sealing such joints so that watertight joints would be provided in canal lining. This standard was first published in year 1968. This revision has been done so as to revise the procedure, based on the prevalent practice and further specification part is deleted and covered in a separate standard ( *see* IS 13143 : 1991 Joints in concrete lining on canals — Sealing compound — Specification ).

*Indian Standard***SEALING EXPANSION JOINTS IN CONCRETE  
LINING OF CANALS — CODE OF PRACTICE***( First Revision )***1 SCOPE**

This standard covers the requirements of the method of application for filling in sealing joints in concrete lining on canals when these are sealed with the sealing compound.

**2 PRIME WORK**

The sealing process should be taken up after concrete curing period is over. The joints should be thoroughly cleaned of dust and grit before the sides are primed by a portable air-blow or brush. Before applying the sealing compound the sides should be sprayed or brushed with a primer conforming to IS 3384 : 1985 'Specification for bitumen primer for use in water proofing and damp-proofing (*first revision*)'. The primer is applied cold either by spraying machine or by brush. The primer should be allowed 4 to 12 hours to dry out thoroughly before sealing compound is poured into the joints. One litre of primer should be used for a length not more than 80 running metre of joints of depth of 25 mm.

**3 PROCEDURE FOR SEALING JOINTS**

The sealing compound ( *see* IS 13143 : 1991 ) should be heated ( working temperature 175° to 185°C ) in a suitable heater-boiler vessels. The sealing compound is cut in pieces smaller than 15 cm cube by a wetted axe prior to heating. Molten sealing compound poured into the joints

with minimum loss of temperature after transferring to a molten pourer from main heater-boiler. In the absence of molten pourer, pouring may be done by suitable cans with extended spouts. For a length of 100 running metre of joint of 12 mm thickness and 75 mm depth not less than 40 kg of sealing compound should be used.

It will be helpful if suitable size of wooden or metallic pieces are laid on each side of the joint in the sealing compound. The sealing compound should be poured till the horizontal joints are filled up to the lower edge. The wooden board or metallic pieces are removed after sealing compound starts hardening.

**4 PRECAUTIONS**

**4.1** Primer is inflammable and should not be placed near a naked flame.

**4.2** The bottom of the heater-boiler vessels should always be covered with the molten sealing compound while firing is in progress.

**4.3** Temperature in the heater-boiler should be carefully controlled.

**4.4** The sealing compound should be poured into the joints slightly over the side surface. Weeds from joints area should be removed completely so that infestation does not spread.

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