

भारतीय मानक

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बिटुमेन फर्शबन्दी — रीति संहिता

Indian Standard

LAYING OF BITUMEN MASTIC FLOORING FOR
INDUSTRIES HANDLING LPG AND OTHER
LIGHT HYDROCARBON PRODUCTS —
CODE OF PRACTICE

UDC 692.533.12 : 662.767

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BUREAU OF INDIAN STANDARDS
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FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Flooring, Wall Finishing and Roofing Sectional Committee had been approved by the Civil Engineering Division Council.

This standard has been formulated with a view to provide guidance for preparation of base, for laying and maintenance of bitumen mastic flooring.

This standard shall be read in conjunction with IS 13026 : 1990 'Specification for bitumen mastic for flooring for industries handling LPG and other light hydrocarbon products', IS 8374 : 1977 'Specification for bitumen mastic, antistatic and electrically conducting grade' and IS 1196 : 1978 'Code of practice for laying bitumen mastic flooring'.

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 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

LAYING OF BITUMEN MASTIC FLOORING FOR INDUSTRIES HANDLING LPG AND OTHER LIGHT HYDROCARBON PRODUCTS — CODE OF PRACTICE

1 SCOPE

1.1 This standard lays down the procedure for laying bitumen mastic flooring for industries handling LPG and other light hydrocarbon products.

2 REFERENCE

2.1 The Indian Standard IS 13026 : 1990 'Specification for bitumen mastic flooring for industries handling LPG and other light hydrocarbon products', is a necessary adjunct to this standard.

3 DESIGN CONSIDERATION

3.1 Bitumen mastic is jointless and impervious to the transmission of moisture. In designing the bitumen mastic flooring for hydrocarbon services, consideration shall be given to the anticipated service conditions as specified in IS 13026 : 1990.

4 THICKNESS

4.1 The total thickness to which bitumen mastic should be laid shall be 20 mm to 25 mm or as mutually agreed upon by both parties depending on actual conditions.

5 MATERIAL

5.1 Bitumen mastic shall conform to the requirements given in IS 13026 : 1990.

5.2 The bitumen mastic may be delivered to the site in the molten state and immediately laid.

6 EQUIPMENT

6.1 The equipment shall consist to bitumen boiler, a mechanically agitated mastic cooker and other accessories. The equipment shall be used near the site, so as to prevent cooling of the molten material.

7 CONSTRUCTION

7.1 The base on which the bitumen mastic is to be laid shall be stable to receive the mastic and to sustain the anticipated load on it.

7.2 Preparation of the Base

The base shall have an even and dry surface which has been roughened with stiff broom or

wire or coir brush and should be free from ridges and hollows. The base may be provided with suitable slope if needed for drainage of rain water, etc.

7.3 Laying

7.3.1 Transport of Molten Material

The molten mastic shall be carried in flat mortar pans. The pans are sprinkled with lime stone dust, to prevent sticking of mastic. Grease or oil shall not be used.

7.3.2 Spreading

Bitumen mastic should be laid in bays in one or more layer. The specified thickness be maintained by suitable hand tools, gauges, straight edges, band levels, etc.

7.3.2.1 The bubbles formed during laying should be punctured and the area rectified while mastic is hot.

7.3.2.2 Multi-layer work should be treated in same manner as that of single-layer, care being taken to arrange that the joints in successive layers are staggered.

7.3.2.3 Protection of the surface

The laid surface shall be protected from damage due to movement of heavy load, spillage of oils, etc. Bitumen mastic surface should not be used for preparation of cement concrete mixes or mortars.

7.3.2.4 Opening to traffic

The mastic flooring should not be opened to traffic until the material has cooled down to ambient temperature of the surrounding atmosphere.

8 REPAIRS

8.1 Damaged area shall be cut rectangular and replaced with new mastic. Blow lamp techniques to remove damaged layer are preferred.

9 MAINTENANCE

9.1 The bitumen mastic flooring requires little maintenance. Dirt and dust should be periodically removed with lukewarm water and detergent. Oils, fats and grease spilled, should be removed immediately.

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