



IS 1195 “Bitumen Mastic for Flooring- Specification”

Bitumen-mastic is a mixture of **ground limestone** or any other rocks, **coarse aggregate**, **limestone dust filler** and pigments, if required, incorporated with **asphaltic bitumen**. Bitumen-mastic has been considered very suitable for use in the **flooring of industrial buildings**, warehouses, **grain storage structures** and **surfacing of bridge decks, roads, foot-paths**, etc, because of its **resilience**, **imperviousness**, wearing quality and **ease of maintenance**. Bitumen-mastic may also be used as a **base coat** to receive **floor coverings**, such as linoleum, flexible PVC sheets and rubber.

The Indian standard, **IS 1195**, covers the requirements for **four grades** of bitumen-mastic for buildings depending on usage namely **Grade 1** Special flooring, **Grade 2** Light duty flooring, **Grade 3** Medium duty flooring and **Grade 4** Industrial factory flooring. This standard **does not cover** special grades of bitumen-mastic flooring such as **chemical resistant**, **oil resistant** or **spark free flooring**. A guide to the selection of the **appropriate grade** and **recommended thickness** of flooring for **typical situations** is also given in the standard.

The standard specifies the **physical properties** of Bitumen used in the manufacture of Bitumen-Mastic alongwith their test methods which include **Penetration at 25°C**, **Softening point (ring and ball)**, **Minimum solubility in trichloroethylene**, **Maximum Ash content (mineral matter) percent by mass** and **Maximum Loss on heating for 5 h at 163°C, percent by mass**.

The standard mentions the **Percentage and Size of Coarse aggregate** for Bitumen-Mastic for **Flooring, Grading of Fine aggregates and Composition of Bitumen-Mastic** excluding Coarse Aggregates. The standard specifies that the **percentage and size of coarse aggregate** incorporated in the bitumen-mastic will be dependent primarily upon the **thickness of the finished work**.

The standard provides the **method of analysis** of Bitumen-mastic alongwith it's **Hardness number** grade-wise both at the time of manufacture and at the time of laying.

The standard lays down **labelling and marking** requirements for Bitumen-mastic manufactured in compliance with IS 1195. The Bitumen-Mastic complying with the requirements laid down by IS 1195 and marked with **BIS Standard Mark** will ensure desired quality for the user.