भा. मा. ब्यू. 'जल आपूर्ति के लिए उन्मुख असुघटियत पॉलीविनाइल क्लोराइड (पीवीसी-ओ) पाइप
— विशिष्टि' पर एक नया भारतीय मानक, आईएस 16647:2017 जारी करता है

BIS RELEASES NEW INDIAN STANDARD IS 16647:2017 ON 'ORIENTED UNPLASTICIZED POLYVINYL CHLORIDE (PVC-O) PIPES FOR WATER SUPPLY — SPECIFICATION'

भारतीय मानक ब्यूरो (भा. मा. ब्यू.) एक नया भारतीय मानक, आईएस 16647:2017 'जल आपूर्ति के लिए उन्मुख असुघटियत पॉलीविनाइल क्लोराइड (पीवीसी-ओ) पाइप — विशिष्टि' जारी करता है, जो, भूमिगत तथा भूमि के ऊपर लेकिन प्रत्यक्ष सूर्य प्रकाश से अनावृत पानी की आपूर्ति के लिए स्थापित पाइपिंग सिस्टम में प्रयोग के लिए उन्मुख असुघटियत पॉलीविनाइल क्लोराइड (पीवीसी-ओ) पाइप की आवश्यकताओं को निर्दिष्ट करता है। यह मानक न्यूनतम आवश्यक शक्ति (एमआरएस) वर्ग 450 एवं 500 तथा डिजाइन गुणांक 1.4 एवं 1.6 की 63 मि.मी. से 1 200 मि.मी. आकार के पाइप की आवश्यकताओं को शामिल करता है।

यह मानक भा. मा. ब्यू. के विभिन्न विक्रय केंद्रों पर खरीद के लिए उपलब्ध है और इसे www.standardsbis.in लिंक पर ऑनलाइन भी खरीदा जा सकता है।

मानक के बारे में अधिक जानकारी के लिए, कृपया अगले पृष्ठ में दिया गया अन्लग्नक देखें।

BIS releases a new Indian Standard, IS 16647:2017, which specifies the requirements of Oriented Unplasticized Polyvinyl Chloride (PVC-O) Pipes, for piping systems intended to be used underground, or above ground but not exposed to direct sunlight, for water supply. This standard covers requirements for pipes of sizes 63 mm to 1 200 mm with minimum required strength (MRS) class 450 and 500 and design coefficient of 1.4 and 1.6.

The standard is available for purchase at various BIS sales outlet and may also be purchased online at the link www.standardsbis.in.

For more details on the standard, please see the Annex given in the next page.

ANNEX

The piping system according IS 16647:2017 is intended for the conveyance of cold water under pressure and are suitable for conveyance of water, including potable water, up to and including 45°C and especially in those applications where special performance requirements are needed, such as impact loads and pressure fluctuations, up to a pressure of 2.5 MPa.

This new technology for manufacturing pipes, commonly named as PVC-O (Polyvinyl Chloride-Oriented), involves process of controlling circumferential and axial orientation of molecular structure resulting in formation of a laminar structure of the material used in the pipe construction. Manufacturing of pipes by this technology increases performance and strength of pipes. This standard has therefore been formulated to provide guidance to the manufacturers for manufacturing of pipes by this technology and to users for procurement and use of such pipes.

The parameters covered in the standard for the PVC-O pipes include requirements for the material; visual appearance, colour and opacity of pipes; geometrical characteristics of pipes like, diameter, wall thickness, length, dimensions of integral sockets and pipe ends; mechanical characteristics of pipes like, resistance to hydrostatic pressure, resistance to external blows at 0°C, ring stiffness and orientation factor; physical and chemical characteristics like, Vicat softening temperature, effect on water and resistance to dichloromethane (or uni-axial tensile test as an alternative to resistance to dichloromethane).

The standard also covers mechanical characteristics of assemblies including joints and gives a list of type of assemblies with non-end-load bearing joints and prescribes short-term pressure test, short-term negative pressure test and long-term pressure test for leak-tightness of assemblies. The standard also gives requirements for elastomeric seals used for joining components.

In addition, the standard covers sampling procedure and criteria for conformity and a clause on marking of pipes.

The standard also gives an informative annex on guidelines for the storage and installations of PVC-O pipes.