SUMMARY OF INDIAN STANDARD

IS 2185 (Part-4) : 2008

CONCRETE MASONRY UNITS- SPECIFICATION

PART 4 PREFORMED FOAM CELLULAR CONCRETE BLOCK

Preformed foam cellular concrete blocks are **concrete blocks** having **homogeneous**, **uniformly distributed** and **stable void or air cells**. The **cell structure** is attained with the **addition of preformed stable foam** in the concrete mix. These blocks are **light weight, eco-friendly, economical** and **better alternative** to **conventional burnt clay bricks** and **cement concrete blocks** in the modern building industry. Concrete masonry, widely used internationally, is gaining traction domestically due to its durability, strength, stability, fire resistance, insulation, and sound absorption. Economical benefits include faster construction due to larger, precisely shaped units, reduced mortar usage, and minimal plastering requirements, especially in low-rainfall areas. Concrete masonry also offers design versatility, allowing for various surface finishes and compatibility with architectural styles. Cellular concrete, developed abroad and now in local use, provides thermal insulation, often used in non-load bearing applications like cold storage, garden walls, and load-bearing walls for low- rise buildings.

The Indian Standard, **IS 2185 (Part-4) : 2008** covers the requirements of cellular concrete blocks produced under ambient conditions using preformed stable foam and having density from **800 kg/m³) to 1800kg/m³)** and primarily used for the construction of **load bearing** and **non-load bearing walls** .The standard classifies preformed foam cellular concrete blocks into non-load bearing (800–1000 kg/m³) and load-bearing (1200–1800 kg/m³) units, outlining specifications for dimensions, defect-free surfaces, and raw materials used for production of cellular concrete blocks and also the process of manufacturing. Further, for each of these categories, physical Properties of Preformed Foam Cellular Concrete Blocks are defined. The guidelines and requirements outlined in the standard ensure product quality and reliability, helping manufacturers and users maintain consistent standards in concrete block production and application. This is very important considering that Preformed cellular concrete blocks are modern building materials and alternative to conventional burnt clay bricks and concrete blocks and the demand for housing in the country is much higher than supply.