

**SUMMARY OF IS 2185 (PART 2) 'SPECIFICATION FOR CONCRETE MASONRY UNITS:  
PART 2 HOLLOW AND SOLID LIGHTWEIGHT CONCRETE BLOCKS'**

**Concrete masonry** is widely used in building construction for its durability, strength, fire resistance, insulation, and sound absorption. It is cost-effective, as large, accurately sized units enable rapid construction with less mortar. Its smooth, true surface minimizes the need for plaster, reducing material costs. Adaptable to various architectural styles, concrete masonry can be finished with different surface treatments. It is used for load-bearing and non-load-bearing walls, partitions, piers, retaining walls, and chimneys. Light-weight aggregate concrete masonry suits both internal and external walls, providing versatility and strength.

**IS 2185 (Part 2)** covers **hollow (open and closed cavity)** and **solid lightweight concrete masonry units** for **load-bearing** and **non-load-bearing** applications. Load-bearing units are classified into two grades:

- **Grade A:** Suitable for damp-proof courses below and above ground in exterior and interior walls, with optional weather-protective coating.
- **Grade B:** Used above ground level in damp-proof courses for exterior walls with weather-protective coating and for internal walls.

Non-load-bearing units, either hollow or solid, are intended for interior walls, partitions, and external panel walls in frame construction if protected from weather by suitable treatments.

The standard specifies that concrete masonry building units shall be made in sizes and shapes to fit different construction needs like stretcher, corner, double corner or pier, jamb, header, etc. It provides **nominal dimensions** for concrete masonry units, accounting for mortar thickness, and allows minor dimensional variations ( $\pm 5$  mm for length,  $\pm 3$  mm for width and height). Sizes other than the nominal sizes specified in the standard may also be manufactured and used by mutual agreement between the purchaser and the supplier.

The standard also outlines **material requirements**, including cement, lightweight aggregate, water, and admixtures, as well as requirements for mixing, placing, compaction, curing, and drying for manufacturing good quality blocks. It also specifies requirements for surface texture and finish, particularly ensuring that units for exposed walls shall be free from stains, discoloration, blemishes, or defects affecting the appearance.

Additionally, the standard specifies that all units should be sound, free from cracks or defects impacting their placement or structural integrity. Physical requirements for **block density, compressive strength, water absorption, moisture movement, and drying shrinkage** are also specified. Requirements for sampling, testing, criteria for conformity, manufacturer's test certificate, and marking of the product are also covered in the standard.

Using light weight concrete masonry units conforming to IS 2185 (Part 2) promotes quality, **durability**, and **safety in construction**. It ensures standardized, high-strength concrete masonry units that resist fire, moisture, and structural degradation. This supports sustainable infrastructure, reduces maintenance costs, and enhances resilience in buildings, contributing to national development and economic efficiency.

So, be an informed citizen, and use the right grade of light-weight concrete masonry unit conforming to the Indian Standard, IS 2185 (Part 2).