

Indian Standard IS 6072:1971- Autoclaved Reinforced Cellular Concrete Wall Slabs

Autoclaved Reinforced Cellular Concrete (ARCC) wall slabs are lightweight, precast building elements made from a mixture of cement, lime, sand, water, and an aerating agent. These materials are cured under high pressure in an autoclave, creating a porous structure that is reinforced with steel. The resulting slabs are highly durable, providing structural strength while maintaining low density. ARCC wall slabs are used in construction for both load-bearing and non-load-bearing walls, offering thermal insulation, fire resistance, and acoustic benefits. One expects ARCC walls shall have good Structural Strength, Lightweight and Insulating, Fire Resistance, Ease of Installation, Long life etc.

Indian Standard IS 6072 developed by Bureau of Indian Standards covers the requirements for autoclaved reinforced cellular concrete wall slabs, having density above 450 kg/m3 and up to 1000 kg/m3. Standard also outlines the specifications and guidelines for manufacturing and testing autoclaved reinforced cellular concrete wall slabs, ensuring they meet the performance criteria expected by consumers. Key aspects covered in IS 6072 are Quality of Raw Materials, Reinforcement and Strength, Thermal and Fire Performance, Dimensional Tolerances and Marking.