AUToclaved Aerated ConCrEte (AAC)

The Perfect Building Material

Autoclaved Aerated Concrete (AAC) is a lightweight, yet strong and durable building material. The first aerated concrete production started in 1929 in Europe and it has become one of the most used building products around the world since then. Produced all over the world, AAC is extensively used in residential, commercial and industrial constructions today.

AAC is an eco-friendly building material, made from natural raw materials such as sand (or fly-ash), cement, lime, gypsum, aluminium powder and water. This mix creates an aerated concrete providing excellent insulation, structure and fire protection in one lightweight product.

Energy and Resources Efficiency

Thanks to the air pores in the material, AAC is a great acoustic and thermal insulator. The thermal conductivity (λ) values are between 0.08 - 0.16 W/mK depending on density used. This low thermal conductivity value allows for around 30% savings on heating and cooling costs.

AAC product densities vary between 300 - 800kg/m³ and compressive strengths are between 2.5 - 7 N/mm². The finished product volume is 3x the volume of the raw materials used, making it an extremely resource-efficient and environmental friendly building material.

Large Variety of AAC Products

WALL PANELS
FLOOR AND ROOF PANELS
PARTITION AND CLADDING PANELS
LINTELS
BLOCKS
O-BLOCKS
U-BLOCKS

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FAST AND EASY BUILDING SYSTEM
Autoclaved Aerated Concrete blocks and panels are lightweight and easy to handle; therefore, construction times are 2–5 times faster than other conventional methods. AAC panels offer new possibilities for product applications beyond AAC blocks. In panel based systems, installation of prefabricated elements is quite fast and easy. As a result, the total time and cost of an installed m² is significantly reduced in terms of labour and overheads.

The SUPER SMOOTH surface of the blocks and panels adds to quick finishing of the total construction as the walls require less plaster, surface treatment and finishing materials.

FIRE PROOF AND SAFE BUILDINGS
All AAC products are well-suited to withstand fires, earthquakes, and other natural disasters. AAC achieves the highest possible level of fire safety and can withstand up to 4 hours of direct fire exposure. It is non-combustible and classified as Euroclass A1.

AIRCRETE PLANT

**SUPER-SMOOTH SURFACES**
**8 METER LONG PANELS**
**ULTRA THIN PRODUCTS**

**ZERO PROCESS WASTE**
**LOW-CARBON FOOTPRINT**
**MINIMUM FOUNDATION REQUIREMENTS**

01 Ball Mill (sand grinding)
02 Slurry Tanks
03 Mixing and Casting
04 Reinforcement Preparation
05 Rising (pre-curing)
06 Flat-Cake Cutting Line
07 Stacking and Autoclave Loading
08 Autoclaving
09 Unloading and Packing
10 Sawing and Milling

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