

Technical Information

RENACON AUTOCLAVED AERATED CONCRETE (AAC) BLOCKS

A green building initiative from Renaatus Procon Private Limited

Overview

Renacon Autoclaved Aerated Concrete (AAC) blocks is extremely versatile for a non-load bearing construction applications including external walls, internal walls, fireplaces, garden beds, fences, etc. It has been manufactured from recycled material which offer lightweight, superior acoustic and thermal insulation benefits. It is a perfect alternate to traditional bricks and concrete blocks which are made available in various dimensions and can be laid in the traditional way.

Key Features

- ♦ Eco Friendly
- ◆ Certified Green Building material
- ◆ Economic
- ♦ Fire resistant
- ◆ Energy efficient
- ♦ Acoustic Insulation
- ♦ Seismic resistance
- ◆ Rapid and Robust construction
- ◆ Dimensionally accurate
- ◆ Reduces Structural cost and so on...

Standards & Certifications

- ♦ Renacon AAC Blocks Confirming to IS 2185 Part 3: 1984 (Reaffirmed 2005), an Indian Standard Specification for Concrete masonry units: Part 3- Autoclaved Cellular (Aerated) Concrete Blocks
- ◆ Renacon AAC Blocks has been certified by BIS for its quality
- ♦ Renacon AAC Blocks has been certified and listed as "Green Product" by GRIHA Council and Green Pro Organisation
- ◆Renacon AAC blocks also meets the Standard Requirements of ASTM C1693-11 and BS EN 771-4: 2003
- ♦ Renacon AAC blocks are certified as "Green Product" by various professional organisation like "GRIHA", "Green Pro", etc.
- ◆ Accredited by BIS for meeting the required quality parameters as per IS 2185 Part 3.

Areas of Application

- ♦ Internal & External walls, Partition walls, Fire rated applications, Insulated buildings, rapid construction needs, Fences, Residential, Commercial, Industrial and Institutional buildings
- ♦ Ideal replacement for conventional ricks and blocks
- ♦ Follow IS 6041 (1985): Code of practice for construction of autoclaved cellular concrete block masonry

Note: Contact Our Technical Services for recommendations.

Installation

- ♦ Install the AAC blocks by following a standard and established technique
- ♦Go through the Standard instructions manual to ensure proper handling and installation of Autoclaved Aerated Concrete (AAC) blocks
- ◆ Damage may occur if AAC is moved or handled several times



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| General Parameters Dimensions | Multi dimensions (Refer the Installation manual or Contact our Technical | | |
|-----------------------------------|--|---|--|
| Dimensions | services for requirements and guidelines) | | |
| Density | 551 to 650 kg/m ³ | 511163) | |
| Classification | Grade 1 and 2 (The autoclaved Cel | Jular Concrete blocks shall be | |
| Ciacomoation | available in two Grades) | | |
| General | The units shall be free from cracks | or other defects | |
| Shape | Shall be supplied in rectangular blo | | |
| Length (in mm) | 600 ± 2 | 0.10 | |
| Height (in mm) | 200 ± 2 | | |
| Width (in mm) | Available in various sizes (Eg.: 200 | ± 2) | |
| Faces and Arises | The Masonry units | | |
| | ♦ Shall be flat and rectangular opposite faces | | |
| | ♦ Shall be parallel | | |
| | ♦ All arises shall be square | | |
| | ◆Bedding Surfaces shall be at right angles to faces of blocks | | |
| Surface Texture and Finish | The Masonry Units | | |
| | ◆Can be ranging from a very fine close texture to Coarse open texture | | |
| | ♦ Shall have a sufficient rough surface to afford good key to plaster | | |
| Performance | | , , | |
| Parameters | Requirement | Typical Values | |
| Compressive strength (in N/mm²) | > 4.0 for Grade 1 and > 3.0 for | > 4.2 for Grade 1 and > 3.5 for | |
| | Grade 2 (for Density in oven dry | Grade 2 (for Density in oven dry | |
| | condition: 551 to 650 kg/m ³) | condition: 551 to 650 kg/m ³) | |
| Thermal Conductivity (W/mK) | Max 0.24 | 0.21 | |
| Drying Shrinkage (%) | > 0.05 for Grade 1 and > 0.10 for | 0.04 | |
| | Grade 2 | | |
| Classification as per Compressive | 348 psi for AC2; 580 psi for AC4 | > 590 psi | |
| Strength (ASTM C1691) | | | |
| Green Building points | Shall meet the requirements | Yes | |
| | | 1 | |
| Termites and Pest Resistance | NA | High | |
| | NA NA | Negligible | |

^{*}NA: Not applicable

| Size / | Renacon AAC Blocks are available in multi dimensions |
|------------|--|
| Dimensions | Colour: Off White |
| | Contact our Technical Services for specific and customised size needs. |

| Warning! | Product for Professional Use | |
|----------|--|--|
| | Handle with Care; Use PPEs Like safety helmet, Safety Boots, Wear gloves and other | |
| | protective clothing while handling AAC blocks | |
| | Wear Suitable protective clothing, gloves while handling | |
| | For Clarifications and Usage related queries, Contact our Technical Services | |



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Additional Information

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Renacon









The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. All the above information must in every case be taken as merely indicative and subject to confirmation after long time application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

The applicable version of the Technical Data Sheet for this product can be downloaded from our websites. Previous versions of the Technical Data Sheets are rendered void with the issue of a new one. Date of issue: 16.06.2022/O