

EMMAY GREENS

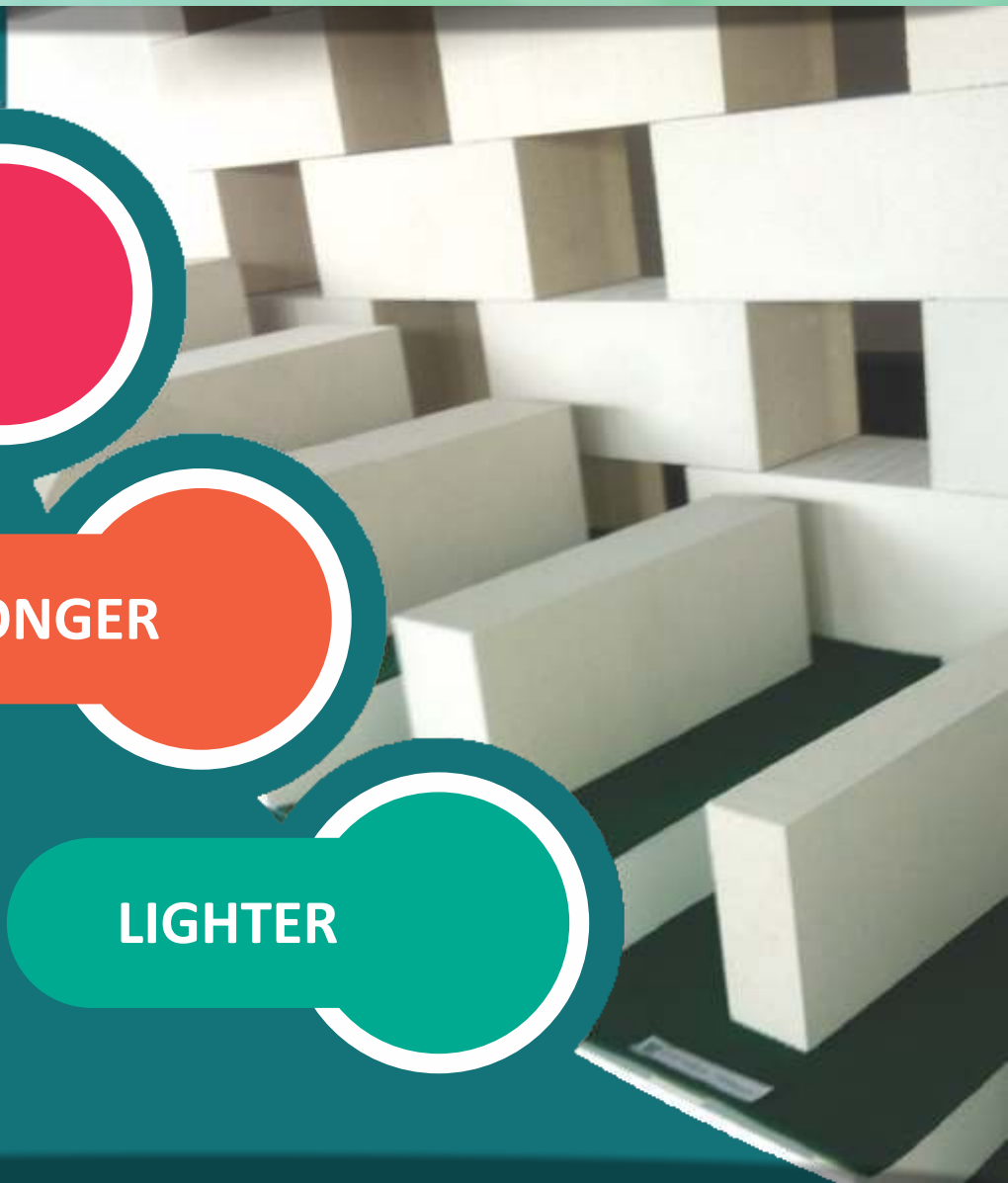
AAC BLOCKS
(Autoclaved Aerated Concrete Blocks)

BETTER

STRONGER

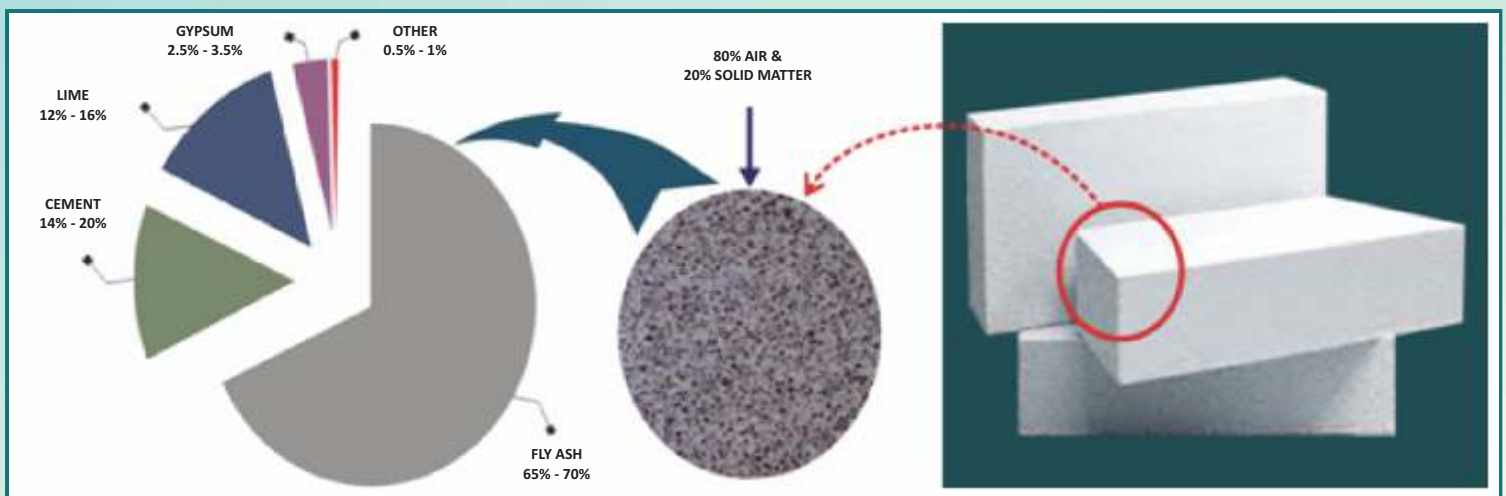
LIGHTER

**AUTOCLAVED
AERATED
CONCRETE**



Introduction of AAC Blocks

AAC Blocks was developed by Swedish architect in mid 1920. This technology (Aerating) is caused by a reaction of a mix of various material like as Fly ash, Cement, Gypsum, Aluminum and others. AAC Blocks consist of 70-80% air processed through autoclaving which entail high pressurized curing (10-12 hrs) of aerated materials formed in cellular shapes ,which are known as AAC Blocks (Autoclave Aerated Concrete Blocks)



About Us

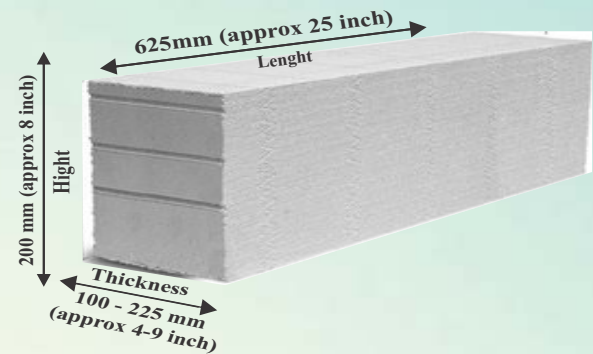
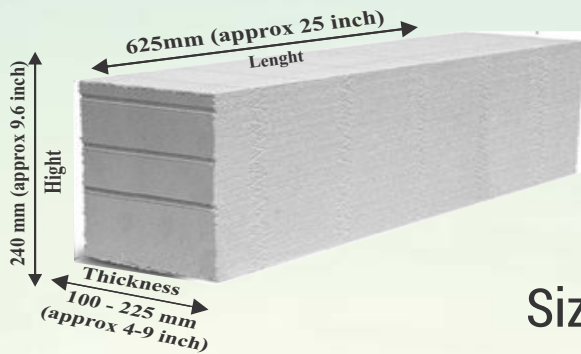
EMM KAY Green AAC Blocks are manufactured with state of art technology in automatic plant as per Indian standards IS:2185 (Part-3)-1984 with all modern facilities. It is a eco-friendly, lightweight , high strength and a substitute of traditional Bricks made of natural raw materials for the benefit of society and the Earth. EMM KAY Greens AAC Blocks are used in a wide range of commercial, residential and industrial buildings as a different applications such as external , internal walls and roofs.

The facility is located at Paonta Sahib ,Distr-Sirmour (H.P) near Chandigarh to Dehradun Highway,easy connectivity to deliver material in Pan north India mainly Himachal Pradesh, Utrakhand, Punjab , Chandigarh Haryana, J&K and U.P.



AAC Blocks Technical Specifications (as Per IS:2185 Part -3)



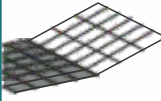






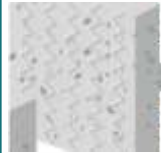

| SL. NO. | Parameters | Unit | Value |
|---------|-----------------------------------|---------------------------|-----------------------|
| 01. | Desnity (Oven Dry) | kg/m ² | 551-650 |
| 02. | Compressive Strength | (MPa) | >4N/mm ² |
| 03. | Shear Strength | | 0.6 |
| 04. | Modulus of Elasticity | Mps | 2040 |
| 05. | Water Absorption (at Equilibrium) | kg/m ² X h 0.5 | 4-6 |
| 06. | Thermal Conductivity | w/mk | 0.16 |
| 07. | Thermal Resistance ® Value) | k/w | 0.46m |
| 08. | Drying Shrinkage | mm/m | max 0.20 (0.04%) |
| 09. | Fire Resistance | Hrs | 4 (for 200 mm wall) |
| 10. | Sound Transmission Class Ratin | db | 44 |



Sizes & Coverage

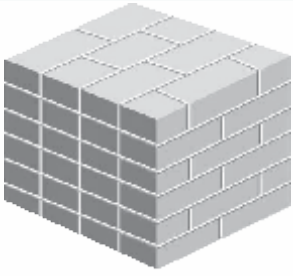
| SL. NO. | Dimension of AAC Blocks (L X H X B) | No. Pieces In One Cubic Meter | Wall Area Cover Per Cubic Meter (In Foot Approx) |
|---------|---------------------------------------|-------------------------------|---|
| 01. | 625 X 240 X 100 | 66.6 | 107.6 |
| 02. | 625 X 240 X 125 | 53.4 | 86 |
| 03. | 625 X 240 X 150 | 44.4 | 71.7 |
| 04. | 625 X 240 X 200 | 33.3 | 53.8 |
| 05. | 625 X 240 X 225 | 29.6 | 47.8 |
| 06. | 625 X 200 X 100 | 80 | 107.6 |
| 07. | 625 X 200 X 125 | 64 | 86 |
| 08. | 625 X 200 X 150 | 53.3 | 71.7 |
| 09. | 625 X 200 X 200 | 40 | 53.8 |
| 10. | 625 X 200 X 225 | 35.5 | 47.8 |

EMM KAY Greens AAC BLOCKS

| Features | | Advantages | Benefits |
|--|------------------------------------|---|--|
|  | Bigger in size | <ul style="list-style-type: none"> • Reduces Mortar requirement by over 66% • Decreases lead time as well as installation time | <ul style="list-style-type: none"> • Reduces cost of construction of wall |
|  | Lightweight | <ul style="list-style-type: none"> • Leads to lighter dead load on the building structure • Easy application | <ul style="list-style-type: none"> • Reduces requirement for steel & cement • Facilitates ease of work to the mason & increases productivity of the labour |
|  | Dimensional size accuracy | <ul style="list-style-type: none"> • Need for plaster is reduced • Reduces the time spent on levelling of blocks | <ul style="list-style-type: none"> • Results in cost and time savings |
|  | Thermal insulation | <ul style="list-style-type: none"> • Maintains the internal temperature of room for longer period | <ul style="list-style-type: none"> • Saves electricity costs |
|  | Fire Resistant | <ul style="list-style-type: none"> • It provides fire safety to the building as the material is fire resistant and has low thermal conductivity (Refer: Fire Test Report)temperature of room for | <ul style="list-style-type: none"> • Reduces the spread of fire by 2 to 6 hours depending on the thickness of the wall |
|  | Made of inorganic materials | <ul style="list-style-type: none"> • Pest resistant | <ul style="list-style-type: none"> • Avoids damages and losses to furniture, paint surface etc. |
|  | Sound insulation | <ul style="list-style-type: none"> • Has a commendable Sound Transmission Class rating | <ul style="list-style-type: none"> • Maintains privacy |
|  | Autoclaved | <ul style="list-style-type: none"> • Blocks are pre cured and do not require any further water curing to gain compressive strength | <ul style="list-style-type: none"> • Results in savings of water at site |
|  | Better compressive strength | <ul style="list-style-type: none"> • Our blocks have required compressive strength as per mentioned in Indian Standard | <ul style="list-style-type: none"> • Stronger walls assured |
|  | Rough surface | <ul style="list-style-type: none"> • Provide better adhesion in plastering mortar etc. | <ul style="list-style-type: none"> • Reduction in rebound loss and better strength and durability of plastered wall |
|  | Technical assistance | <ul style="list-style-type: none"> • Our technical representatives provide you with services like sampling of products, doing site audits and are available for technical assistance | <ul style="list-style-type: none"> • Higher construction efficiency |

AAC Blocks Masonry Guidelines As Per IS 6041 (1985)

Stacking



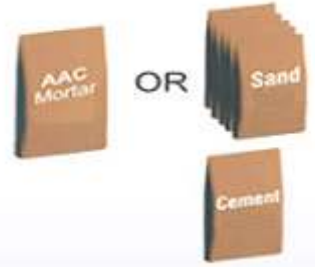
On dry and even surface to avoid contact with moisture

Cutting of Blocks



Use tools like handsaw or rotary cutter

Mortar For Masonry



Use AAC Mortar or cement sand (1:6)

Wetting of Blocks Before Application



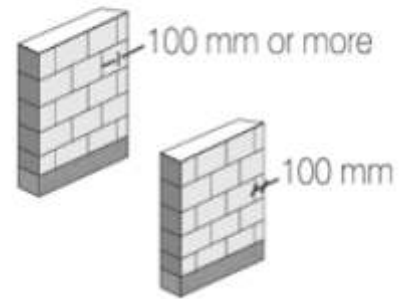
Dip in water & lift immediately

Mortar Thickness

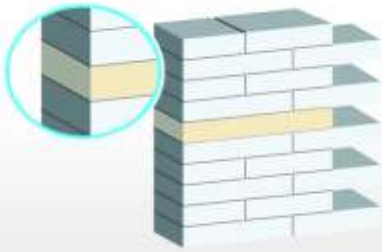


AAC Mortar Thickness 3-4mm, Cement & Sand Thickness 10-12mm

Bond Pattern

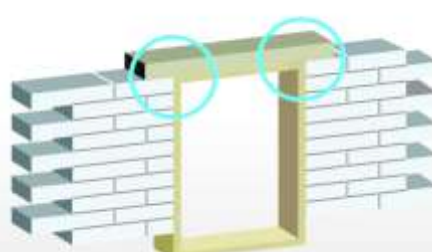


Coping Beam



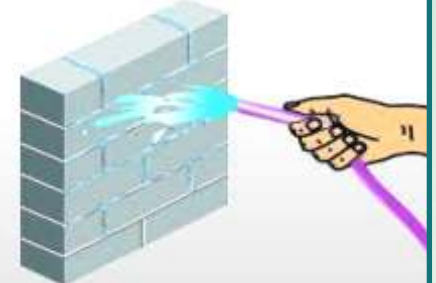
Coping beam with 6mm/8mm reinforcement after every 1.2m height

Lintel Support



Lintel support on full block

Curing



Curing required only for Mortar (Cement + Sand) joints

Electric & Sanitary Chases



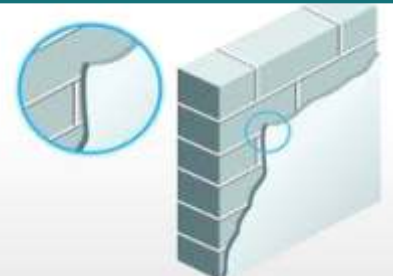
Chases to be grooved before plaster on wall

Beam & Column Junctions



Wire mesh & chemical grout to be provided, if required

Plaster



Minimum external plaster

EMM KAY Greens BLOCKFIX





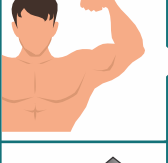
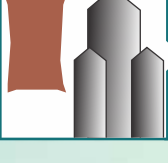
EMM KAY Greens BLOCKFIX is a semi premix high quality mortar for jointing and bonding of AAC Blocks, concrete blocks, hollow blocks, clay bricks and fly ash bricks. EMM KAY Greens BLOCKFIX semi premix consists of cement, graded sand and specialised polymers EMM KAY Greens BLOCKFIX which requires a 3-4mm thickness and having no curing required only addition of water before application to prepare the product for use,



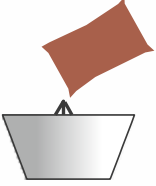
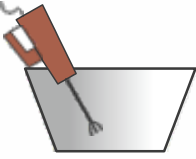
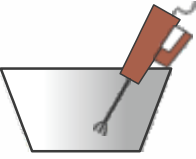
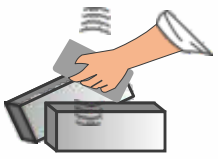

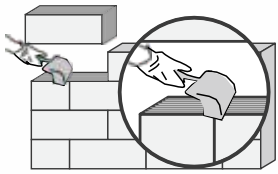
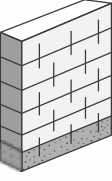
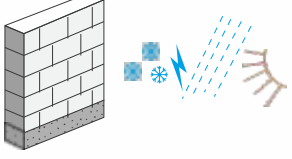
Product Specifications

| Parameter | Specifications |
|----------------------------|---------------------------------------|
| Appearance | Grey Powder |
| Pack Size | 30 kag |
| Coverage (3-4mm Thickness) | Approx 110 sq feet (For 4" Thik Wall) |
| Water Required | 30-35 % |
| Curing | No required |
| Pot Life | 60-75minuts |



| Features | | Advantages | Benefits |
|---|---|--|---|
|  | Thin joints | <ul style="list-style-type: none"> • Reduces overall jointing material requirement • Reduces storage requirement • Reduced seepage in comparison to conventional method | <ul style="list-style-type: none"> • Cost is reduced • Results in savings on site storage space and handling • Protects valuable paints on walls |
|  | Semi-premix | <ul style="list-style-type: none"> • Only water needs to be added before application • Easy application | <ul style="list-style-type: none"> • No need to procure different materials • No need to maintain ratio of entire mix |
|  | Self-curing properties | <ul style="list-style-type: none"> • Water curing is not required after application | <ul style="list-style-type: none"> • Saves water • Saves time • Save labour cost |
|  | Slow initial setting mortar | <ul style="list-style-type: none"> • More time for block levelling • Low initial heat of hydration | <ul style="list-style-type: none"> • Better workmanship is possible |
|  | Strength designed to suit Fly Ash Blocks (Aerated Autoclaved) | <ul style="list-style-type: none"> • Reduces overall material requirement • Increased work output | <ul style="list-style-type: none"> • Cost and time savings |
|  | Higher coverage in comparison to conventional mortar | <ul style="list-style-type: none"> • Provides higher Compressive and Tensile Adhesion strength | <ul style="list-style-type: none"> • Avoids damages and losses to furniture, paint surface etc. |

EMM KAY Greens BLOCKFIX Preparation & Application

| | | | |
|--|--|---|--|
| <p>Mortar Mixing</p>  <p>In a clean bucket, mix EMM KAY Greens BLOCKFIX in 25-30 % of water.</p> | <p>Mixing by Mixer or Tool</p>  <p>Mix first for 5-10 minutes by electrical mixer or hand tool mix homogeneously</p> | <p>Mortar Remixing</p>  <p>Mix again for 2-3 minutes. Now thin bed mortar is ready to use.</p> | <p>Clean Surface</p>  <p>Before application clean the surface of blocks using suitable tools like brush so that any foreign materia is not held on the blocks.</p> |
| <p>Wet Surface</p>  <p>Wet the surface of blocks before applying mortar</p> | <p>Mortar Spread</p>  <p>should be spread EMMKAY Greens BLOCKFIX with 3-4 mm thickness</p> | <p>DND</p>  <p>Do not disturb the wall after application of mortar for at least 24 hours.</p> | <p>Setting Time</p>  <p>The setting time is affected by climatic conditions, allow stand-alone time accordingly</p> |

Cost Analysis over Conventional Bricks*

| PARAMETERS | EMM KAY Greens AAC Blocks | CONVENTIONAL BRICKS |
|--------------------------------------|--|---|
| Savings in Steel | 15-20 % due to lower dead-weight/load | No Saving |
| Savings in Wastage | 2-3% Breakage /bare minimum | Upto 15-18% |
| Savings in Mortar | 60-70% saving Due to bigger size(9 time bigger than clay bricks) ,&Less joints required lesser quantity of mortar/cement | No Saving |
| Savings in Plaster | 60%-70% reduction in the cost of plastering, due to uniforms shape and texture, which gives even surface to the walls. | No Saving |
| Savings in Labor | 25%-35% saving in Labour cost | More Labour required |
| Savings in Operational Cost | 25% saving in Operation cost due to speedy construction | No Saving |
| Savings in Construction Time | Construction time 2 to 3 times faster. due to bigger size | Slow construction due to small size |
| Savings in Energy | Approx 30% Air-condition load, both heating and cooling will come down | No Saving |
| Savings in Carpet Area | More Carpet area is available due to uniform shapes of Blocks and less thickness of walling | Less carpet area available due to un even sizes of bricks & more thickness of walling |
| Savings in Pre-Cast Element | Block can be cut, nails & drill easily | Easily Not Done |
| Savings transportation & environment | Easy to transport due to light weight pollution free, normal energy required to produce | Create pollution/smoke use high energy |

* Based on general calculation & it may be vary location wise/sitewise

EMM KAY Greens AAC BLOCKS

Manufacturer By : Kansal Building Solutions Pvt. Ltd.

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