

FREQUENTLY ASKED QUESTIONS (FAQ)

JK SMARTBLOX Autoclaved Aerated Concrete

A smart choice for smarter people

PRODUCT RELATED QUERIES

▶ **What are AAC blocks ?**

Autoclaved Aerated Concrete (AAC) block is a precast, lightweight and insulating green building product which is used as walling material and as replacement for bricks, CLC Blocks etc. Due to strong thermal insulation, *AAC blocks* also find use in specialty applications such as fire walls, sound walls, roof tiling etc. JK Lakshmi Cement manufactures these products at its state-of-the-art plant with latest innovations under German technology in Haryana under the Brand name "**JK SMARTBLOX**".

▶ **Is AAC block a new product ?**

AAC blocks are in use for more than 90 years across the Globe. Structures built over 85 years ago are still standing today. However for India, this is an evolving product.

▶ **When was AAC first developed ?**

AAC was developed in 1924 in Sweden by an architectural science lecturer who was looking for an alternate building material with properties similar to that of wood such as good thermal insulation, solid structure and easy to work etc. and having resistance against fire and termite.

▶ **What materials are used to make JK SMARTBLOX ?**

Cement, Fly ash and Lime are the key ingredients for making *JK SMARTBLOX*. They are cured under steam curing known as Autoclave. Due to sustainable material envelope, these products are certified under green rating system and helps builder to get credit points.

▶ **How durable is JK SMARTBLOX in various conditions?**

Durability of AAC has been proven in every type of climate in the world-from Northern Finland to the deserts of the Mid-East. *JK SMARTBLOX* has excellent resistance to fire, moisture, termite and seismic attacks. It has very high shelf life and does not decay like wood or bricks. Termites and other pests do not eat it. Millions of tiny cells in *JK SMARTBLOX* make them moisture resistant and also help increasing chance of survival during seismic attack.



Eco friendly

▶ **Is JK SMARTBLOX an environment friendly and certified green product ?**

Yes. JK SMARTBLOX is an environmental friendly construction material. JK SMARTBLOX products conserve and protect earth's precious natural resources unlike bricks which consume the top soil. JK SMARTBLOX is manufactured from fly ash an industrial waste from thermal power plant. During manufacturing, the energy consumed in the production process is only a fraction compared to the production of other materials. The manufacturing process emits no pollutants and creates no by-products or toxic waste products. During the installation of wall, there is virtually no waste generated and this product consumes very less amount of water. During disposal, JK SMARTBLOX being a non-toxic product does not pollute the air, land or water. Due to its resource efficiency and material envelope, one can earn good number of credits in green certification process such as LEED, GRIHA etc.

▶ **What is thermal insulation of JK SMARTBLOX ?**

K value for JK SMARTBLOX is around 0.16W/Mk and this results in strong thermal insulation of walls with energy saving upto 20%.

▶ **Is JK SMARTBLOX Wall resistant to Earthquake ?**

Yes, being lightweight it reduces the impact of earthquake forces on fixed structure and increases chances of survival.

▶ **What is the benefit of Handgrips and Tongue & Groove ?**

Hand Grips help in better handling and placing of blocks which result in reducing wastage and faster completion of work. Tongue & Groove provides automatic alignment of wall thus eliminating need to check plumb. It also reduces mortar consumption and provides accurate wall with savings of time and money.

▶ **How is JK SMARTBLOX different?**

JK SMARTBLOX are manufactured at state-of-the art plant with 100% automatic process under German Technology and is equipped with latest innovations, such as horizontal curing and Green separation. This ensures that users are able to get an accurate and consistent product. There is additional feature of Tongue & Groove and Hand Grips which ensures faster work and accurate alignment and savings of joining mortar.*

▶ **Is JK SMARTBLOX advisable to use in high rise buildings ?**

Being lightweight (1/3rd weight of clay bricks), JK SMARTBLOX are highly recommended for high rise buildings and help in reduction of total dead load of structure which directly helps in structural savings upto 20%.

▶ **Being light weight does JK SMARTBLOX have any strength issue for walls ?**

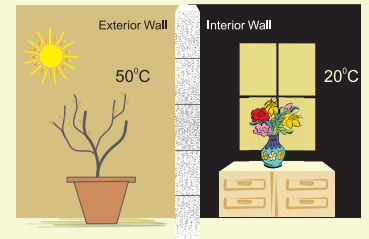
Strength of JK SMARTBLOX is as per IS:2185-Part III which is absolutely safe and strong enough to use for any non-load bearing walling applications.

* at select plant only.

PRODUCT COMPARISON RELATED QUERIES

▶ How JK SMARTBLOX is better than concrete blocks ?

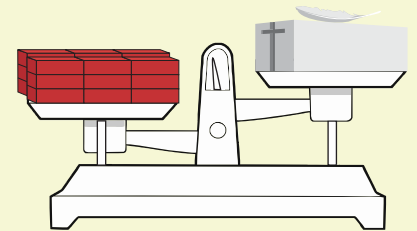
JK SMARTBLOX are better than concrete blocks as they are lighter in weight (1/5th weight) , have better thermal insulation (can save upto 20% energy) alongwith dimensional accuracy leading to smart wall and savings of cement. JK SMARTBLOX are much easier to work with as it can be sanded and cut easily. Due to autoclaving, JK SMARTBLOX is inert in nature.



Thermal Insulation

▶ How JK SMARTBLOX is better than clay bricks ?

JK SMARTBLOX offer immense smart benefits when compared to clay bricks. They are lighter in weight (1/3rd weight of clay bricks), have bigger smart size, have much better thermal insulation and are earthquake resistance. Walls built with JK SMARTBLOX are dimensionally accurate and help to save time, space, steel, cement, water, labour and above all it helps to save our Mother-earth. In totality, they are smart choice for smart people.



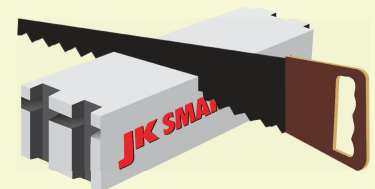
Smart Size & Smart Weight

▶ Is JK SMARTBLOX same as hollow block?

No, JK SMARTBLOX is much lighter than Hollow blocks and much more uniform and accurate. They do not have any through cavity.

▶ How is JK SMARTBLOX different from CLC blocks?

CLC Blocks has almost double the weight of JK SMARTBLOX . JK SMARTBLOX is much more accurate, durable, stronger and autoclaving helps to get a much more consistent product.



Can be cut like wood

APPLICATION RELATED QUERIES

▶ What exterior finishes are suitable for JK SMARTBLOX?

All kind of paints and putty can be applied on JK SMARTBLOX . Dimensional accuracy of JK SMARTBLOX helps to reduce thickness of Plaster by 50% . JK SMARTBLOX requires minimal pre-curing. All kind of cladding is possible on JK SMARTBLOX.

▶ What interior finishes are suitable for JK SMARTBLOX?

Inside, JK SMARTBLOX can be finished with plaster, POP or any other interior finish. They can be easily cut, chased, sawed and sanded. Hence there are unlimited design possibilities with JK SMARTBLOX.

▶ What special skills are required for installation of JK SMARTBLOX?

Regular masons and labour can work on JK SMARTBLOX with minimal training. Normal masonry practices, which adheres to IS:1905 (for Brick masonry) and IS:6041 (for AAC Block masonry),

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What special tools are required for installation of JK SMARTBLOX ?

AVAILABILITY AND SERVICE SUPPORT RELATED QUERIES

▶ **What is the delivery lead-time for JK SMARTBLOX ?**

JK SMARTBLOX is dispatched within 7 working days time after confirmation of order and there is no seasonal variation in supplies.

▶ **I find it difficult to get clay bricks during rainy season, will I also face same difficulty with your blocks?**

There is no seasonal impact on the manufacturing process throughout the year. Hence delivery is possible across the year.

▶ **Where can I place order for JK SMARTBLOX ?**

You can contact our marketing department at JK Lakshmi Cement marketing office (details are given below) or you can also post your enquiry at our website (www.Jklakshmicement.com).

▶ **What technical support does your company provide ?**

JK Lakshmi Cement has its own technical team, which provide technical support at site and demonstrate best practices for JK SMARTBLOX masonry work. We also provide specialty tools for application of JK SMARTBLOX . Our technical team can also co-partner with customers to support in designing stage.



Fire Resistant



Termite Resistant



Earthquake Safe



Noise Reduction

JK SMARTBLOX
Autoclaved Aerated Concrete

MARKETING OFFICES:

Delhi / NCR - Milap Niketan, 8A, Bahadur Shah Zafar Marg, New Delhi - 110002

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Ahmedabad - 304, Dev Arc, Iskon Circle, S.G. Highway, Satellite, Ahmedabad -380 015

Ph.: 079-6609 5100, 6609 5136, 6609 133 | e-mail :lc_ahd@lc.jkmail.com

Udaipur - 23A, Fatehapura Near Income Tax Office, Udaipur

Ph.: 0294-2560649, 2415781 | e-mail : lcudaipur@lc.jkmail.com

JK LAKSHMIPLAST
PLASTER OF PARIS

JK LAKSHMI
C E M E N T



JK LAKSHMI
Power Mix
READY MIX CONCRETE



Website: www.jklakshmicement.com

 Follow us on [facebook.com/JKLakshmiCementLtd](https://www.facebook.com/JKLakshmiCementLtd)

▶ **I want to add an additional floor on my house which is an old building, can I use these blocks for adding a floor to my house?**

JK SMARTBLOX surely helps in reduction of total dead load of structure and is a good choice to construct an additional floor. It is recommended to consult a structural consultant for load calculations.

▶ **Can I use these blocks in load bearing wall?**

JK SMARTBLOX is not recommended for load bearing walls.

▶ **What is the weight of JK SMARTBLOX ?**

JK SMARTBLOX are very light weight for example, 100 X 200 X 600 mm block will have around 7.2 Kgs of weight in comparison to brick with dimension of 75 X 115 X 230 mm which weighs around 3.57 Kgs.

▶ **Do I need to soak JK SMARTBLOX in water before use?**

JK SMARTBLOX need not be wetted before or during the laying of walls. In case the climatic conditions desire so, the top and the sides of the block may be moistened so as to prevent absorption of water from the mortar and ensure the development of the required bond with the mortar.

▶ **Do I need any special storage during rainy season?**

In rainy season, blocks should be covered to avoid extra absorption of water.

▶ **Do I need any waterproofing for JK SMARTBLOX ?**

Walls exposed constantly to water require water proofing, else there is no need.

▶ **How to do curing of JK SMARTBLOX Masonry?**

Water absorption coefficient of *JK SMARTBLOX* is very less, hence it is recommended to cure at the masonry joints only.

▶ **What should I do with the blocks that break during the use?**

Broken blocks can be easily cut to desired size and if there is rubble, those can be used for filling in sunken areas.

Does JK SMARTBLOX have salt leaching properties like in bricks?

NO! *JK SMARTBLOX* is free from salt leaching properties.

▶ **In which type of structures JK SMARTBLOX can be used ?**

JK SMARTBLOX can be used in large walling applications across various segments such as Residential Buildings, Commercial Complexes and Offices, Hotels and Hospitals, Educational Institutes, Industrial Buildings and infrastructures etc. Due to strong thermal insulation, *JK SMARTBLOX* also find use in specialty applications such as fire walls, sound walls, roof tiling etc.

▶ **Where can I know how to use JK SMARTBLOX ?**

You can refer to our application manual at our website (www.jklakshmicement.com).