

IS-2185(3)
CML-5400040888



GREEN
AAC BLOCK

Build Strong, Last Long





Build Strong, Last Long





Welcome to the Green Block Catalogue

The fact that you are leafing through this booklet shows that you are a smart entrepreneur! Thank you for contemplating Green Block for your varied construction needs.

In today's competitive, tough economic climate, every business or construction company is compelled to optimize costs without compromising on quality, efficiency and speed in their projects. Towards this end, Green Block turns out to be the best material of choice endowed with many superlative properties. It is an economical, eco-friendly, reliable and long-lasting option that adds value to the construction in several ways.

Green Block is available in multiple configurations of dimensions, thickness and strength. Kindly review the Technical Chart to select the best option for your construction activity.

Just in case you need any assistance, our friendly experts are available to guide you with your selection.



Company Profile

**The passion to excel,
The vision to lead, and
The desire to make a
positive difference...**

This is the philosophy that is steering the K D Group towards a new horizon of success.

The KD Group of Industries prides to be a major enterprise in the North Eastern region of India. It is a growing conglomerate with a deep footprint in the Cement, Steel, Metallurgical Coke and Real Estate verticals.

The Group aims to be at the leading edge of growth in the NE region; it is a consortium backed by state-of-the-art production units, a strong dealer network and a loyal customer base.

Leveraging our extensive expertise in the building material industry, the Group has launched a new line of Autoclaved Aerated Blocks (AAC) by the brand name Green Block.

The launch of Green Block symbolizes a positive step in the direction of sustainable development. By bringing this brand into the market, we seek to give a boost to eco-sensitive, green construction practices.

Our Vision and Mission



To enrich our market dominance through strategic acquisitions and expansions.



To give best value for money to customers by nurturing a culture of quality, reliability and commitment.





Peeping into the past

The history of AAC Blocks

AAC Block is produced from inorganic materials – lime, sand, cement and water and offers multiple benefits over conventional building materials. To list out only a few advantages, it has excellent thermal and acoustic insulation and great workability.

Autoclaved Aerated Concrete (AAC) is a lightweight, precast building material that simultaneously provides structure, insulation, and fire- and mold-resistance. AAC products include blocks, wall panels, floor and roof panels, cladding (facade) panels and lintels.

It is indeed interesting to understand AAC Blocks from a historical perspective.

AAC was perfected in the mid-1920s by the Swedish architect Dr. Johan Axel Eriksson, working with Professor Henrik Kreüger at the Royal Institute of Technology. Eriksson was searching for material with the properties of wood – good thermal insulation, solid structure, easy to work with & handle – but without the disadvantages of combustibility, decay and termite damage. After much experimenting, Eriksson succeeded in developing AAC, which went into commercial production in a factory in Sweden in 1929 and gained popularity over the decades.

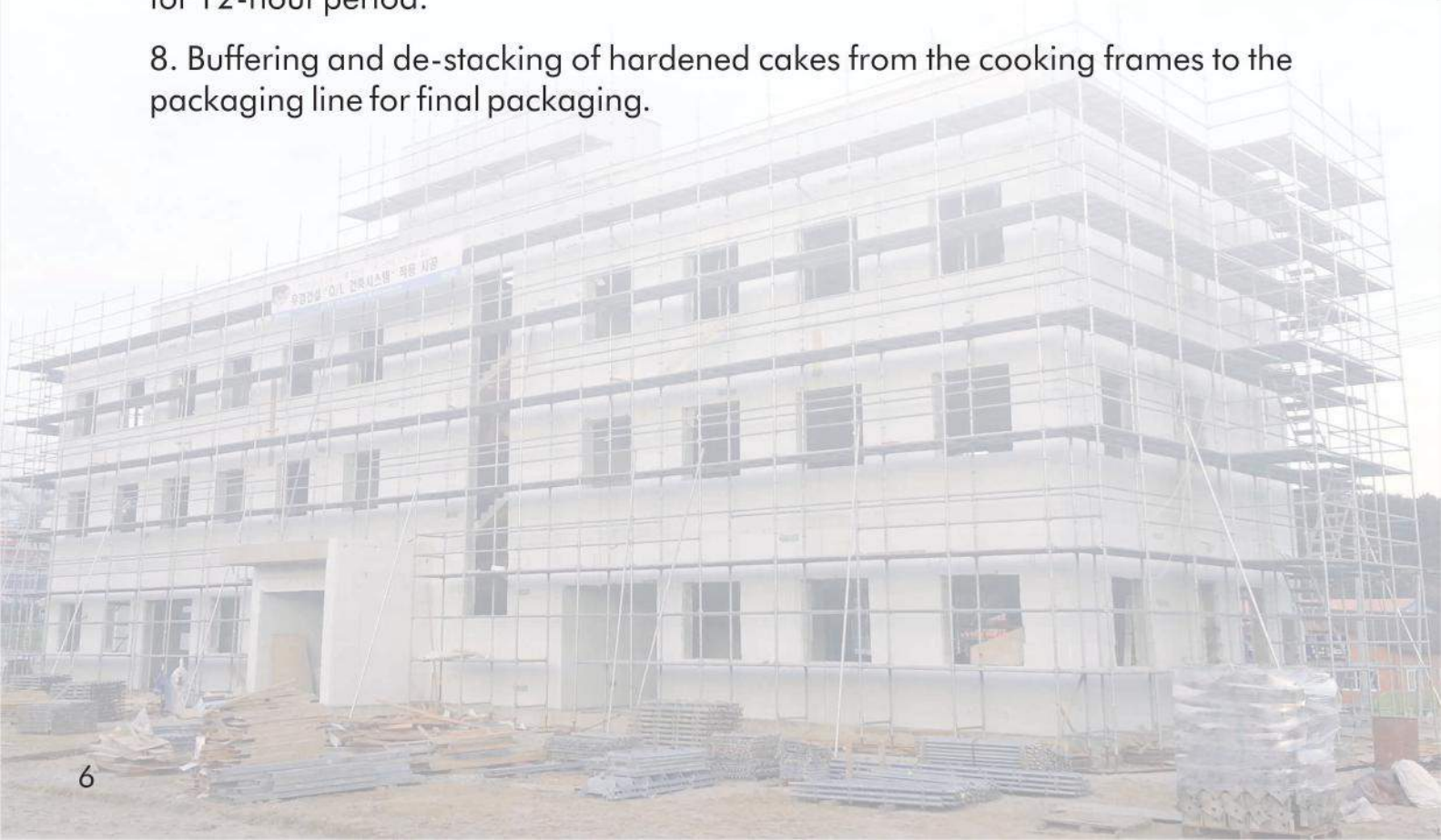
Today, AAC is manufactured by about 1000 plants in 35 countries and is extensively used in residential, commercial and industrial construction for more than 70 years.



Engineered for perfection

The step-wise making of AAC Blocks

1. Dosing and mixing of fly ash with lime, Ordinary Portland Cement (OPC), stabilizers and gypsum at a high dosing speed at very high accuracy.
2. Casting and rising/pre-curing of the mixture to enable the fresh mix to rise and harden to a firm green cake with the volume of the mould.
3. Tilting mould cakes with the tilt manipulator on to a cutter machine and oiling to prevent the sticking of the green cakes for reuse.
4. Horizontal and cross-cutting the cakes by cutter which are equipped with broken-wire-detection system.
5. Milling and back tilting onto a cooking frame.
6. Green separation of cut cakes by passing through the green separator to avoid sticking of cut layers during autoclaving and eliminating further mechanical separation in white state.
7. Curing with a steam at pressure of approximately 12 Bar in autoclave system for 12-hour period.
8. Buffering and de-stacking of hardened cakes from the cooking frames to the packaging line for final packaging.



Our state-of-the-art set up



GREEN BLOCK FOR THE HOUSEHOLD SEGMENT

More safety, better comfort and greater elegance

Minimizing Earthquake Damage

AAC Blocks are the ideal building material for constructing earthquake-resistant, steady & safe buildings. Owing to their excellent load-bearing capacity, compressive strength and high ductility, such structures can better withstand tremors and shocks.

Green Block confirms to Seismic Zone IV & V statutory requirements.

Generally speaking, the seismic performance of AAC Blocks was clearly demonstrated when a major earthquake hit the Kobe region of Japan in 1995; buildings made out of AAC Blocks suffered minimal damage and also did not allow fire to spread rapidly.

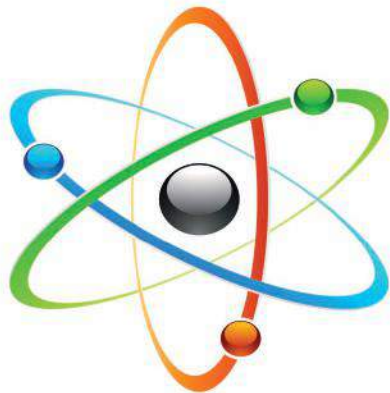


Superb thermal efficiency

As Green Block is characterized by superior thermal insulation, these blocks enable to maintain optimal ambient temperature; the air inside is warm during winters and cool during summers. Residents end up with around 30% saving in AC costs.

Key highlights

- No need for insulation
- Low heat transfer rate
- Superior to traditional wood & masonry structures



Low Water Penetration

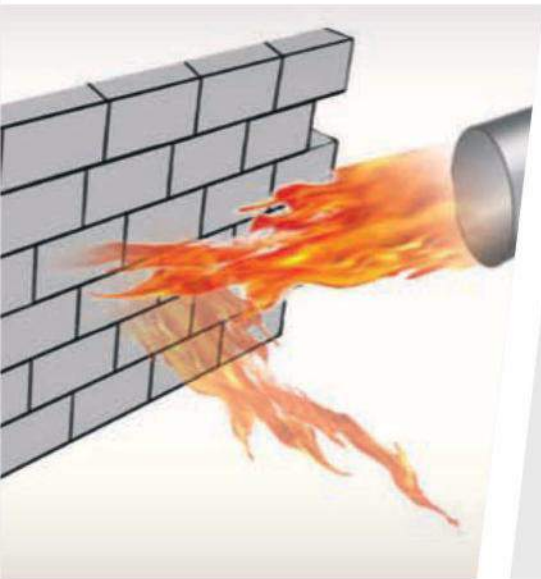
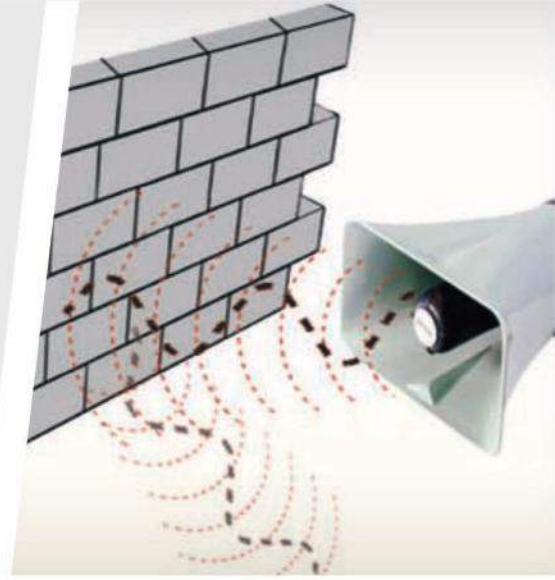
Compared to conventional clay bricks, Green Block has lesser capillary action resulting in lower water retention. Hence rainwater water/ dampness from the outside does not seep inside. They are ideally suited for areas with heavy rainfall and high humidity.

Higher Acoustic Insulation

Green Block is endowed with amazing sound insulation properties because of their inherent porous structure. This makes them the ideal building material for residential construction as well as silence zones, such as hospitals, schools, auditoriums, studios, etc.

Key highlights

- Excellent sound shielding at no extra cost
- Shields external irritable sounds, such as machinery & equipment
- Offers more privacy & peace for residents



When safety is an issue, Green Block takes the heat

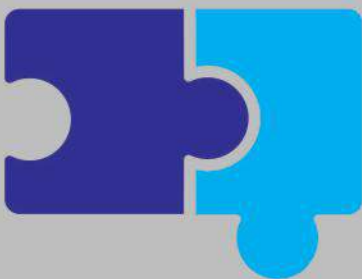
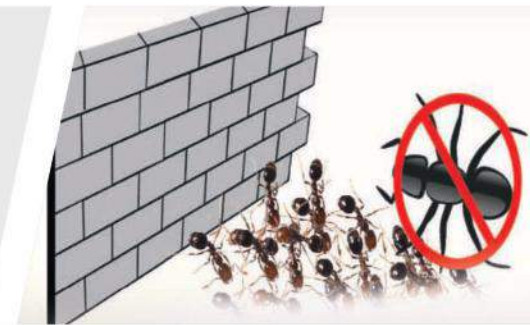
A unique property of Green Block is that it contains water in crystalline form, which acts as a heat sink, absorbing heat and converting it into steam. The Green Block structure allows this steam to escape without causing surface spalling.

Key highlights

- Excellent fire-resistance
- Ability to withstand fire from 2 hours up to 6 hours
- No toxins/harmful gases emitted when fire breaks out

Better Pest Resistance:

Green Block is made from inorganic, non-biodegradable materials that do not allow termites/pests to inhabit or grow within its structure.



Amazing Adaptability

Owing to its inherent nature and structure, Green Block brings incredible flexibility to the design of a building, which is simply not possible with traditional materials.








Key highlights

- Practically infinite workability
- Hassle-free manipulation (sawing, drilling, etc.)
- Amenable to quick & easy field adjustments
- Blocks available without or without handholds
- Ideal for all terrains & climatic conditions – humid, dry, wet and cold



GREEN BLOCK FOR THE CONSTRUCTION COMMUNITY

Style, speed, convenience and cost control

-  **Workability:**
Green Block units can be handled with greater ease and comfort, making them more convenient than regular clay bricks.
 -  **Speedy construction:**
Green Block units enable rapid construction owing to their large size, fewer joints, hassle-free handling and easy manipulation (such as cutting & sawing).
Due to reduced turnaround time, construction companies can take up and complete more projects, resulting in improved business.
 -  **Superior finish:**
Perfect shape & size of Green Block and better surface smoothness lead to well-aligned walls along with a pleasant finish to the building.
 -  **Higher carpet area:**
Attributes of Green Block such as high dimensional accuracy and reduced plaster thickness result in an increase of 2% carpet area.
 -  **Greater material efficiency:**
Being lightweight than conventional clay bricks, Green Block significantly lowers the dead weight of the structure by 50%, which leads to lesser consumption of cement & steel (15 to 20%).
 -  **Quicker application of finishes:**
Since AAC compatible finishes can usually be directly applied with spray equipment in a one-coat application, the time associated with finishing the building is minimized. Many products can also be specified with integral colour, eliminating the costs and time associated with painting.
- 



Substantial cost savings:

Green Block results in cost-optimized, high quality construction due to:

1. Lower Logistics Costs

Due to the low weight of ACC products, the capacity for transporting the material is maximized and related freight costs reduced.

3. Reduce Finish Material Costs

Because of the fire, thermal, acoustic, and surface properties, finish materials such as insulation are not needed, Smaller AC Systems are usually possible when using AAC material.

5. Lower Life cycle Cost

The durability of the AAC Block minimizes ongoing maintenance and repair costs normally associated with conventional construction.

7. Reduced mortar Use/Low Cement Consumption

This sheet is part of a series highlighting alternative design details which use less materials or result in less waste being created than 'standard' details used in construction. The benefits provided by the alternative design detail are quantified, and technical considerations presented.

70% lighter than standard concrete blocks.

- Up to 80% less mortar - sets within 20 minutes.
- Construction times can be equivalent to off site methods.
- Modest extra cost of materials is off set by low waste and waste disposal.
- 21% less embodied carbon than standard blocks of the same size.

2. Quicker Construction

The large size of the block allows much higher productivity than most materials. Construction crews can complete their work and move to the next project.

4. Quicker Application of Finishes

Since AAC compatible finishes can usually be directly applied with spray equipment in a one-coat application, the time associated with finishing the building is minimized. Many products can also be specified with integral color, eliminating the costs and time associated with painting.

6. Lesser structural steel requirement

Due to light weight and low density, overall dead load reduces, thus saving structural steel consumption compared to conventional masonry.

8. Reduce Internal Plaster Cost

AAC blocks are factory finished with precise edges & shapes, this result in economical POP or Putty finish and much reduced plaster cost.

9. Enhanced Labor Output

If you are using the AAC blocks for construction then you can make your home within a short time. These blocks can reduce the project time to almost 40%, and you can save the labor cost in the same way.



Energy conservation – higher energy efficiency & lesser carbon emission:

AAC Block has excellent thermal insulation and thermal storage capacity. These properties reduce energy requirement for both heating and cooling. In locations where off-peak energy rates are high, the thermal mass characteristics allow more of the air conditioning load to take place in lower cost periods of the day. It is fire and pest resistant, while still being environmentally responsible – real peace of mind for your customers and you.



Maintenance & Operations:

AAC material is inorganic and resistant to insect damage or infiltration. Since AAC is a solid material, there are no voids in the construction that present an opportunity for insects and pest inhabitation. Hence costs for pest control & treatment can be substantially reduced, if not eliminated.



GREEN BLOCK FOR THE SOCIETY AT LARGE

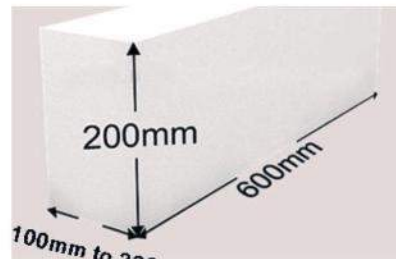
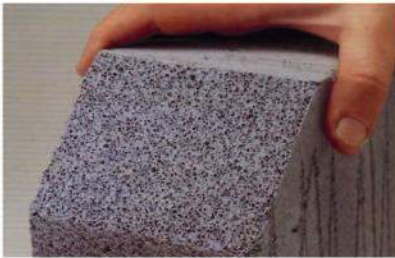
Enables soil conservation, reduces pollution, optimizes logistic cost and effectively increases carpet area

-  **Saves fertile land:** Fly ash waste generated in thermal power plants is used in making Green AAC Block. Unlike red brick manufacturing, it does not require fertile clay; it thus helps in conserving soil and safeguarding the environment.
Also, we dig up sand from the Brahmaputra River and use it in the manufacturing of AAC Block. Due to this the depth of the River increases and it stays its course, preventing from spilling over and causing floods in adjoining areas.
-  **Recycling fly ash waste:**
After hydro power, we are still largely dependent on thermal power, which presents a huge challenge of effectively disposing fly ash waste, which is precisely the major raw material for AAC Blocks.
-  **Energy efficient- reduces carbon emission:**
The manufacturing of Green AAC Block is a highly energy efficient process compared to the production of other walling material, which again helps to reduce carbon emission.
-  **Saves fuel for transportation – lowers transportation cost:**
Green AAC Blocks being lightweight, more volume of walling material (almost 3 times higher) can be transported in the same carrier, thus saving fuel for transportation by a staggering 66%.
-  **Green Building Certificates:**
Because of the above social and environmental benefits, it is the material of choice for green building certifying organizations such as LEED, IGBC, BREEAM, DGNB, CASBEE, etc.



Technical Parameter

Parameters	Unit	Value Block	Value Brick
Size: Length x Height	mm	600 x 200 or 625 x 240	225 x 75
Size: Thickness	mm	50,75,100,150,200,225,300	105
Dry Density	Kg/M3	550-650	1900-2000
Compressive Strength	Kg/cm2	<3	<3
Thermal Conductivity	W/KOM	0.16 to 0.18	0.81 to 0.96
Size variation	mm	+1mm	+10mm



Project Impact

Cost Element	(X)Saving Element	(X)Projected Impact
Steel & Concrete	10	5
carpet Area	1.5	3
Plastering Mortar	35	2
Joining Mortar	60	1
Wastages	10	0.5
Capex of HVAC System	30	0.3
Project Saving		11.8

Comparison

Comparison between AAC Blocks, Clay Bricks		
Parameters	AAC Block	Clay Bricks
Size	625 mm x 240 mm x 50-300 mm	230 mm x 115 mm x 75 mm
Precision in Size	Variation 1.5 mm \pm	Variation 5 mm \pm
Compressive Strength	30 - 40 kg/cm ²	25 - 30 kg/cm ²
Dry density	551-650 kg/M ³ (oven dry)	1950 kg/M ³
Wet density	Approx 800-900kg/M ³	Approx 2400kg/M ³
Wastage	upto 5%	upto 20%
Baking	Done in Autoclaves with high pressure steam ready in 12 hours	Done in clay kilns
Fire Resistance	upto 6 hours for 200 mm thickness	2 hour
Sound Reduction (DB)	upto 45 for 200 mm thick wall	50 for 230 mm thick wall
Thermal conductivity	Approx 0.16-0.25	Approx 0.81
Surface quality (fungus problems)	None, Smooth clean finish with no fungus	Fungus and salinity problems on the surface
Adaption to various surface finishes	Smoother surface results in better coating application	Inconsistent surface
Mortar consumption	0.018 per M ² with 1.6/0.5% Bag of cement	0.1 per M ² with 1.6/1.35% Bag of cement
Consumption Time	Reduced by upto 50% compared to clay bricks	Double AAC Blocks
Energy Saving	32% (App.) Air-Condition load heating and cooling come down	No Saving
Cost benefit factor	dead load reduce structural cost	No Saving
Contribution to Carpet area	2-3%	No Saving
Chemical Composition	Fly Ash used in 50% which reacts with (Lime & Cement) to form AAC which is an inert material	Soil is used which contains many inorganic impurities like sulphates etc. which results in Efflorescence

Technical Specification

Technical Specification			
Property	Units	AAC Block	Clay Brick
Size	mm	600 x 200 x (75 to 300)	230 x 75 x 110
Size Tolerance	mm	± 5mm in length* ± 3mm in width & height	± 05 to 15
Compressive Strength	N/mm ²	Min 4.0*	2.5 to 3.5
Normal Dry (Oven Dry) Density	Kg/m ³	551 to 650*	1800
Normal Conductivity "K"	W/m-k	Max 0.24*	0.81
Drying Shrinkage	%	Max 0.05*	-
Fire Resistance	Hrs.	2 to 6 (Depending on thickness)	2
Sound Reduction Index	Db	45 for 200 mm thick wall	-

* As per IS2185 Part 3

Comparison between AAC Block and Clay Brick		
Parameter	AAC Block	Clay Brick
Structural Cost	Steel saving upto 15%	No saving
Cement Mortar for Plaster & Masonry	Required Less due to flat even surface and less number of joints	Requires more due to Irregular surface and more number of joints
Breakage	Less than 2%	Average 10 to 12%
Construction Speed	Speedy construction due to its big size light weight and easy to cut in any size or shape	Comparatively slow
Quality	Uniform & Consistent	Normally varies
Fitting & Chasing	All kind of fitting and chasing possible	All kind of fitting and chasing possible
Carpet Area	More due to less thickness of walling material	Comparatively Less
Energy Saving	Approx. 30% reduction in air-conditioned Load	No such saving
Chemical Composition	Flyash used around: 65 to 68% which reacts with lime and cement to form AAC	Soil used contains many inorganic impurities like sulphate etc. resulting in efflorescence

Calculation Sheet				
Length (mm)	Height (mm)	Width (mm)	No of Pcs (per m ³)	Work in Sq.ft.** (per m ²)
600	200	100	83.33	116.33
600	200	125	66.67	93.07
600	200	150	55.56	77.56
600	200	200	41.67	58.17
600	200	230	36.33	50.58

** Assumption: 12 mm Mortar Thickness

B.R.METALLICS

6th Floor, Sri Kamakhya Tower,
Behind Sohum Soppe, Christian Basti,
G. S. Road, Guwahati (Assam), Pin: 781005.
info.aacblock@kdindia.com, www.kdindia.com

BARAK VALLEY INFRASTRUCTURE

555/1, Ward No.10 Hospital Road, Silchar
Cachar, Assam-788001
info@greenaac.com www.greenaac.com



भारतीय मानक ब्यूरो

उपभोक्ता मामले, खाद्य और सार्वजनिक वितरण मंत्रालय, भारत सरकार
BUREAU OF INDIAN STANDARDS
Ministry of Consumer Affairs, Food & Public Distribution
Government of India

गुवाहाटी शाखा कार्यालय :
द्वितीय तल, वेस्ट एण्ड बिल्डिंग ब्लॉक, हाउसफेड कॉम्प्लेक्स
बेलतला-बशिष्ठ रोड, दिसपुर, गुवाहाटी-781 006, असम
दूरभाष : 0361-2224670, 2226508, 2221622
ई-मेल : ghbo@bis.gov.in, Web : www.bis.gov.in

Guwahati Branch Office:
2nd Floor, West End Building Block HOUSEFED Complex
Beltola-Basistha Road, Dispur, Guwahati-781006, Assam
Phones : 0361-2224670, 2226508, 2221622
E-mail : ghbo@bis.gov.in, Web : www.bis.gov.in

लाइसेंस संख्या सी एम/एल- 5400060389 की संलग्नी Attachment to Licence No. CM/L-5400060389

सी एम/एल संख्या CM/L-	लाइसेंसधारी का पता सहित नाम Name of the Licensee with the Factory Address	उत्पाद का नाम Name of the Product	भा मा संख्या Indian Standard No.
5400060389	Barak Valley Infrastructure Vill – Rampur PO – Porgona-Borkhola Lumding Road, Silchar Distt: Cachar Assam -788 111	Autoclaved Cellular (Acrated) Concrete Blocks Grade:1, Density: 551 to 650 kg / Cubic meter Sizes: Lenght: 600mm, Height: 200mm Width: 75mm, 100mm, 125mm, 150mm, 175mm, 200mm, 225mm & 250mm	IS 2185: Part 3 : 1984

पृष्ठांकन संख्या / Endorsement No. 1

दिनांक/ Dated 18/01/2021


जबकि, लाइसेंस 02/01/2021 तक वैध था,
Whereas, the licence was valid upto 02/01/2021,

And, whereas the renewal was deferred till 17/01/2021 and licence was not allowed to use or apply
the Standard Mark from 03/01/2021 to 17/01/2021.

अब, नवीकरण के परिणामस्वरूप, मूल लाइसेंस की पहली अनुसूची में दी गई लाइसेंस की वैधता
03/01/2021 से बढ़ाकर 02/01/2022 कर दी गई है।

Now, consequent upon renewal, the validity of the licence given in first schedule of the original
licence has been extended from 03/01/2021 to 02/01/2022.

लाइसेंस की अन्य निबन्धन व शर्तें यथावत हैं।
Other conditions of the licence remain the same.


18/01/2021
(पी. के. कंदोई / P. K. Kandoi)
वैज्ञानिक- एफ एवं प्रमुख
Scientist- F & Head



འབྲུག་གི་གནས་ཚུན་ལས་ཁང་།
BHUTAN STANDARDS BUREAU
The National Standards Body of Bhutan



Certificate No: CPC- R01 (81)/2020/0195

Certificate of Product Conformity

This is to certify that the quality of the following product(s) has been approved.

BRAND NAME : **GREEN BLOCKS**

PRODUCTCATEGORY : **AUTOCLAVED AERATED CONCRETE BLOCKS (AAC)**

PRODUCT STANDARDS : **IS 2185 (Part 3):1984**

MANUFACTURER : **B. R. METALLICS,
VILL:- BORSHIL SOTSHIL,
P.O.:- MORANJANA
DIST:- KAMRUP, GUWAHATI, ASSAM, INDIA**

This certificate is valid from **20 FEBRUARY 2020** till **19 FEBRUARY 2022**

Head
(Certification Division)

Director General
(Bhutan Standards Bureau)



Certification & Inspection



Certificate of Registration

This is to certify that the
Quality Management System
of

B.R. METALLICS (UNIT- AAC BLOCK)

at

Borshil, Shotshil, Maranajana Rangia- 781354, Assam, India

has been independently assessed and is
compliant with the requirements of:

ISO 9001:2015

For the following scope of activities:

**Manufacture and Supply of Autoclaved Aerated Concrete
(AAC) Block, Mortar & Plaster**

Certificate Number: UQ-2020102345

Validity of this certificate can be verified at www.ukcertifications.org.uk/verify

Date of Initial Registration	23 rd October 2020
Date of this Certificate	23 rd October 2020
Certificate Expiry	22 nd October 2021
Recertification Due (subject to the company maintaining its system to the required standard)	22 nd October 2023

Daniel..

Authorised Signatory



This certificate is the property of UK Certification & Inspection Limited and shall be returned immediately on request.

71-75 Shelton Street, Covent Garden, London, WC2H 9JQ, United Kingdom

Website:- www.ukcertifications.org.uk, email:- info@ukcertifications.org.uk

Company No. 11847851



Certification & Inspection



Certificate of Registration

This is to certify that the
Environment Management System
of

B.R. METALLICS (UNIT- AAC BLOCK)
at

Borshil, Shotshil, Maranajana Rangia- 781354, Assam India

has been independently assessed and is
compliant with the requirements of:

ISO 14001:2015

For the following scope of activities:

**Manufacture and Supply of Autoclaved Aerated Concrete
(AAC) Block, Mortar & Plaster**

Certificate Number: UQ-2020102346

Validity of this certificate can be verified at www.ukcertifications.org.uk/verify

Date of Initial Registration	23 rd October 2020
Date of this Certificate	23 rd October 2020
Certificate Expiry	22 nd October 2021
Recertification Due (subject to the company maintaining its system to the required standard)	22 nd October 2023

Daniel..

Authorised Signatory





GRIHA Council

This is to certify that the product

“B R Metallics (Unit AAC Block)” **Green AAC Block**

have been included in the GRIHA Product Catalogue
under the following categories:

GRIHA V.3 criterion: 15 & 16;

GRIHA V.2015 criterion: 19 & 20;

&

SVAGRIHA criterion: 11

These products can be used in GRIHA & SVAGRIHA registered projects to meet the GRIHA & SVAGRIHA norms, respectively. This is valid only for the products which have been mentioned above.

The certificate for the above mentioned products is valid from
15th December 2020 – 14th December 2022

Sanjay Seth
Chief Executive Officer

Note: This evaluation has been done based on the documentation - in the form of 3rd party test results and/or declarations - submitted by the manufacturer to GRIHA Council.

GRIHA Council is a joint initiative of Ministry of New and Renewable Energy, Government of India and The Energy and Resources Institute (TERI) to implement GRIHA (Green Rating for Integrated Habitat Assessment), India's National Rating System for Sustainable Habitats.

www.grihaindia.org



GUWAHATI BEST BRAND LEADERSHIP AWARDS 2018. (IN REAL ESTATE SECTOR)

BRAND LEADERSHIP AWARD

Presented to



B.R. Metallics, Guwahati
Manufactures (GREEN AAC BLOCKS)

Excellence Partner



14th December, 2018

Vivanta By Taj, Guwahati

R. L. Bhatia

Dr. R. L. Bhatia

Founder, World CSR Day &
World Sustainability

Media Partner



Endorsed By



Tele: (033) 22625368 (Civ)
6647 (Army)

REGD BY SDS / POST
Headquarters
Eastern Command
Engrs Branch
PIN-908542
C/o 99 APO

136001/31/Gen/ ¹⁸⁵³ /Engrs/E2W

15 Nov 2018

ADG (NEI), C/o CCE (Army) No 3, Narangi

CE Kolkata Zone

CCE (Army) No 1, Dinjan

CE Siliguri Zone

CCE (Army) No 2, Misamari

CE Shillong Zone

CCE (Army) No 3, Narangi

CE (Navy) Vizag

CCE (NEP) (AF) Chabua

APPROVAL OF PRODUCT

1. **M/s B R Metallics** had approached this HQ for approval of their product i.e. **AAC Block (GREEN BLOCKS)**.
2. Approval of CMPT Committee-II constituted at this HQ in terms of E-in-C's Branch policy letter No A/37696/12-114/Pol/E2W (PPC) dated 05 Jun 15 and A/37696/12-114/Pol/E2W (PPC) dt 11 Sep 18 is hereby accorded for use of the following products in MES works for period of two years i.e. upto 14 Nov 2020:-
 - (a) AAC Block (GREEN BLOCKS) - Group - I
3. Further continuation of the product will be decided thereafter, on the basis of the mandatory feedback / performance report submitted by Zonal Chief Engineers and CMPT-I Proceedings. In case anyone using the product notices any defect / discrepancy, the same will be reported immediately without waiting for the expiry of the period of two years.
4. The approval does not absolve the executive / supervisory staff from their responsibility for using correct quality product. It is only after they are satisfied about the quality and the performance, the product will be used. Mandatory checks about the quality will be carried out as laid down and the records of the same maintained.
5. Specification / details of the product like drawings, samples etc. can be obtained from the manufacturer at the address given below. **Zonal CEs are requested to ensure that only approved product by CMPT - II and CMPT - III are included in tender documents / zonal specifications.**
6. The firm is required to give feedback on sales / supply of approved items to MES contractors / formation / units on six monthly basis as per format below:-

S No	Name of Product	Supply to MES Contractors / Formations / Units	Location / Station	Date of Supply	Quantity Supplied	Amount (₹)	Supply Order No	Remarks
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)

Regd Office:-

M/s B R Metallics
6th Floor, Sri Kamakhya Tower
Behind Sohum Shoppe
Christian Basti, G.S.Road
Guwahati (Assam) -781005
Tele: 0361-2344212

Contact Persons

Mr. Binod Kumar Goenka (0361-2340222)



(Handwritten signature)

(SK Singh)
Col
Col (Wks)
For Chief Engineer

Copy to:-

E2W (Design) Sub Dte
Dte of Wks, E-in-C's Branch
IHQ of MoD (Army)
Kahsmir House, Rajaji Marg
New Delhi – 110 011

M/s B R Metallics
6th Floor, Sri Kamakhya Tower
Behind Sohum Shoppe
Christian Basti, G.S.Road
Guwahati (Assam) -781005

GOVT. OF ASSAM

OFFICE OF THE CHIEF ENGINEER PWD BUILDING ASSAM: CHANDMARI: GUWAHATI-3

No. GMC 1/2018/3


Dated Guwahati the 30th January/2018

To whom it may concern

Based on the recommendation of the Committee constituted vide this office letter no. GMC.1/2018/1, Dated: 16-01-2018 the following products under brand name "**Green AAC Block**" (Trade Mark No. 3494259) along with its **Block Joining Mortar (Green Bond)** (Trade Mark No. 3385317) and **Plastering Mortar (Green Plast)** (Trade Mark No. 3385318) from B.R.Metallics, IID Centre, Vill. Borshil, P.O. Moranjana, Rangia-781354, Dist: Kamrup, for information has been provisionally allowed to be used in building projects under P.W.D.(Building) Assam, subject to satisfactory performance.

Periodic checks on quality of the product shall be ensured by the Engineers/Officers/Staff and in case the quality & performance of the product is found to be unsatisfactory, this shall be reported to the Chief Engineer P.W.D.(Building), Assam immediately and on receipt of poor quality & performance report this provisional approval is liable to be withdrawn.

In case of any change of the company location/profile, the same should be informed to this office immediately by the manufacturer.



Chief Engineer, P.W.D. (Bldg), Assam
Chandmari, Guwahati-3.

Dated Guwahati the 30th January/2018

Memo No. 1/2018/3 -A

Copy to:-


1. The Commissioner and Special Secy. to the Govt. of Assam P.W. (Bldg. & NH) Department, Dispur, Guwahati-6 for favour of kind information.
2. The Superintending Engineer, P.W.D Building Circle, for information.
3. The Executive Engineer, PWD, Building Divisionfor information.
- ✓ 4. B.R.Metallics, IID Centre, Vill. Borshil, P.O. Moranjana, Rangia-781354, Dist: Kamrup, for information.


Chief Engineer, P.W.D. (Bldg), Assam
Chandmari, Guwahati-3.

Corrigemndum for APWD SOR 2013-14 (Civil Part)

It is for information to all concerned that some modifications have been made in the item no. 4.4.1 & 4.4.2 of Chapter-4, of the APWD SOR 2013-14 as below. The Unit, Rate and other descriptions will remain unaltered.

SOR No.	Printed	To be read as
4.4.1	Superlight Weight Autoclaved Aerated concrete Block work using Grade-I AAC block of compressive strength 40Kg/cm ² having dry density 550 to 650 Kg /Cum conforming to IS-2185 Pt-3 or pt-4 in cement mortar of prop 1:4 including racking out joints and curing complete as specified & directed.	Autoclaved Aerated concrete Block work using Grade-I AAC block of compressive strength 40Kg/cm ² having dry density 550 to 650 Kg /Cum conforming to IS-2185 Pt-3 or pt-4 in cement mortar of prop 1:4 including racking out joints and curing complete as specified & directed. (Superlite/BrikOlite/Green AAC Block)
4.4.2	Superlight Weight Autoclaved Aerated concrete Block work using Grade-I AAC block of Size 625x240mm of different thickness of compressive strength 40Kg/cm ² having dry density 550 to 650 Kg /Cum conforming to IS-2185 Pt-3 or pt-4 in cement mortar of prop 1:4 including racking out joints and curing complete as specified & directed. (protruding rod is to be provided at every 3 course interval and will be measured and paid separately)	Autoclaved Aerated concrete Block work using Grade-I AAC block of Size 625x240mm of different thickness of compressive strength 40Kg/cm ² having dry density 550 to 650 Kg /Cum conforming to IS-2185 Pt-3 or pt-4 in cement mortar of prop 1:4 including racking out joints and curing complete as specified & directed. (protruding rod is to be provided at every 3 course interval and will be measured and paid separately) (Superlite/BrikOlite/Green AAC Block)


Chief Engineer, P.W.D. (Bldg), Assam
Chandmari, Guwahati-3.

Dated Guwahati the 13th Aug/2018

Memo No. 1/2018/10-A

Copy to:-

1. The Commissioner and Special Secy. to the Govt. of Assam P.W. (Bldg. & NH) Department, Dispur, Guwahati-6 for favour of kind information.
2. The Superintending Engineer, P.W.D. Building Circle, for information.
3. The Executive Engineer, PWD, Building Division for information.


Chief Engineer, P.W.D. (Bldg), Assam
Chandmari, Guwahati-3.

o/c

**GOVERNMENT OF MANIPUR
PUBLIC WORKS DEPARTMENT**

No: 15/CE(Bldg)/Miscellaneous/2018/23

Dated, Imphal, the 24th May, 2018.

To

**The President,
B.R. Metallics,
6th Floor, Sri Kamakhya Tower,
Christian Basti, G.S Road, Guwahati,
Assam – 781 005**

Subject: Approval of **GREEN – AAC BLOCK** with PWD, Imphal, Manipur
- Provisional approval regarding.

Dear Sir,

Kindly refer to your application dated 05.04.2018 submitted to PWD, Manipur regarding the subject captioned above. After going through the enclosures furnished along with your application, the undersigned hereby endorse the PROVISIONAL PERMISSION for using your AAC block Brand "**GREEN – AAC BLOCK**" of **B.R. Metallics, GUWAHATI** with PWD, Manipur for the works of the Circles and Divisional Offices under the jurisdiction of the undersigned subject to the fulfilment of all requirements of relevant IS Codes of Practice/International Standards and satisfactory performance and specifications in the MSR, PWD, Manipur published from time to time. The quality of your products shall be checked periodically by the concerned officers and in case their qualities and performance are found to be unsatisfactory at any time, then this PROVISIONAL PERMISSION shall be cancelled without any prejudice to this office and without any further notice.

Yours faithfully,



(N. Noren Singh)
Chief Engineer (Buildings),
PWD, Govt. of Manipur.

GOVERNMENT OF MIZORAM
OFFICE OF THE ENGINEER-IN-CHIEF:PWD
MIZORAM : AIZAWL

No.B-17011/36/16/EC (P)-PWD/71

:


Dated Aizawl the 28th June, 2018

To : (1) The Chief Engineer, Roads,
(2) The Chief Engineer, Highways,
(3) The Chief Engineer, Buildings,
Public Works Department,
Mizoram : Aizawl.

Subj: Approval of 'GREEN AAC Block' and 'XTECH TMT Rebar'.

With reference to the above, a copy of Quality Test Results on '**GREEN AAC Block**'
and X-TECH STEEL/TMT Rebar for your kind information and ready reference.

Encl: As above.


(R.VANLAL LUANGA)
Engineer-In-Chief, PWD.,
Mizoram : Aizawl

P. MALLANA GOUD, IPS



D.O. No. 1/PF/PMG/MD MPHC/2016/
*Director General of Police &
Managing Director,
Manipur Police Housing Corporation Ltd.
Manipur, Imphal - 795001*

Tele : 0385-2422167 (Office)
0385-2427388 (Residence)
+919436203341 (Mobile)
e mail : mallanagouda1@yahoo.co.in



Imphal, the 24th May, 2018

To

The President,
B.R. Metallics,
Sri Kamakhya Tower,
G.S. Road
Christian Basti,
Guwahati – 781005

Attention Mr. A.K. Sharma

Subject:- Approval of "GREEN AAC BLOCKS"

Dear Sir,

This refers to your letter dated 5th April, 2018 on the above subject.

After thoroughly going through your broacher and samples submitted by you, it has been approved for use for civil construction works of Manipur Police Housing Corporation Ltd, Imphal provisionally subject to following required coda / formalities and meeting all the desired specifications / criteria.

(P. Mallana Goud)

VIII.11014/834/63/Agency/Engr-2019

17 May 2019

M/s B R Metallics

6th Floor, Sri Kamakhya Tower
Behind Sohum Shoppe
Cristian Basti
GS Road, Guwahati – 781 005

PRODUCT APPROVAL

1. With reference to your application dated 02 May 2019 for renewal of your products i.e "GREEN AAC BLOCKS".
2. Renewal of the competent authority is hereby accorded for use of above mentioned products "GREEN AAC BLOCKS" in construction works undertaken/supervised by Assam Rifles for a further period of 03 (three) years i.e upto May 2022.
3. Further continuation of the product will be decided thereafter, on the basis of the mandatory feedback / performance report submitted by SO-1 (Works) of respective formation Headquarters.
4. The approval does not absolve the executive/supervisory staff from their responsibility for using correct quality of GREEN AAC BLOCKS and getting the product tested as per specification. This applies to all new works being sanctioned and executed wef May 2019, and is valid for a period of 03 (three) years.
5. This issue with the approval of the competent authority.




(Johnson Thomas)
Lt Col
SO-1 (Wks)
For Chief Engineer

Copy to :-

All IGs HQ, All Sector HQs, ARTC & S & ARC & MC

The Zonal Manager
National Project Construction
Corporation Ltd
NEZ (C), Band Stand
PO:- Madanriting
Shillong-21

The General Manager
Engineering Project (India) Ltd
Hindustan Tower
4th Floor, Beltola
Guwahati (Assam)

The Deputy General Manager
Hindustan Prefab Limited
North Eastern Region, UNB Road
Silpukhuri, Guwahati – 781003
(Assam)

Office of the Project Manager
Construction & Design Services
Uttar Pradesh Jal Nigam
(An Uttar Pradesh Government Undertaking)
A-60, Ground Floor, Sector-70, Noida
Gautam Buddh Nagar
Pin-201301

13

AAI

LIST OF APPROVED MAKES OF MATERIALS

S. No.	Description of Material	Approved Make / Manufacturers
1.	Cement	<p>Jaypee Sector-128, Noida - 201304 Uttar Pradesh, India Ph No: (120) 4609000, 2470800 E: jaypee@jalindia.co.in</p> <p>or</p> <p>JK Cement P.S. PACE, Unit No 901, 1/1A, Mahendra Roy Lane, Park Circus (Near Tapsiya Crossing) Kolkata - 700046 Phone: 09836771313 /033 - 22136129/30</p> <p>or</p> <p>Birla Corporation Limited 1, Shakespeare Sarani (2nd Floor) Kolkata - 700 071 Phone: (91) (33) 6603 3300 to 3302 Fax: (91) (33) 2288 4426 E-mail: bmatilal@birlacorp.com</p> <p>or</p> <p>Ambuja Indicon Viva 6th floor, 53A Leela Roy Sarani Kolkata - 700019 P: +91-33-44033900</p> <p>or</p> <p>Ultra Tech "B" Wing, 2nd floor, Ahura Centre Mahakali Caves Road Andheri (East) Mumbai 400 093, India Tel: +91-22-66917800</p>

		<p>Website: www.ultratechcement.com</p> <p>or</p> <p>Star Cement Lumshnong, P.O. Khaliehriat, Distt. Jantia Hills, Meghalaya Ph: 03655-278215/16/18, Fax: 03655-278217 Website: www.starcement.co.in</p> <p>Or</p> <p>Taj Cement Shivam Complex, Bharalumukh AT Road, Guwahati, Assam 781009</p> <p>Or</p> <p>Dalmia Bharat Cement 11th & 12th Floor, Hansalaya Building 15, Raod, Barakhamba, New Delhi, Delhi 110001 Phone: 011 2346 5100 Website: www.dalmiabharat.com</p>
2.	<p>Reinforcement Steel TMT Bars (Fe 500 grade) and Reinforcement Steel TMT Bars (Fe 500 grade) CRS</p>	<p>SAIL IspatBhawan, Lodi Road, New Delhi – 110003 Tel: 011-24367481-86 Fax: 011-24367015 Email: sailco@vsnl.com Web: www.sail.co.in</p> <p>Or</p> <p>Rashtriyalspat Nigam Ltd. (RINL) Vizag Steel Administrative building Visakhapatnam Steel Plant Visakhapatnam – 530031, Andhra Pradesh, India Tel: +91-891-2518431, Fax: +91-891-2518237</p> <p>or</p> <p>TISCO (Tata Steel) Jeevan Tara building (1st floor) 5, SansadMarg, New Delhi – 110001 Ph: 011 (D) 66248503, 23748169, 66248531,</p>

		<p>66248500 Email: vsaraf@tatasteel.com Web: tatasteel.com</p> <p>or</p> <p>JSW Steel BandraKurla Complex, Near MMRDA Grounds, Bandra East, Mumbai 400 051 T: +912242861000, contact@jsw.in</p> <p>or</p> <p><u>JSPL</u> Jindal centre 12, Bhikaji Cama Place, New Delhi -110066 T : 011-26188340 , 50 E : info@jindalsteel.com</p> <p>or</p> <p><u>IISCO steel plant,</u> Corp. office : Ispatbhawan, Lodi road, New Delhi – 110003 T : 03412240295</p>
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3.	Autoclaved Aerated Cement Blocks	<p><u>Bilt Technologies Ltd.</u> Office No. 4 A, 4th Floor, Poonam Building, 5/2, Russel Street, Kolkata - 700071 Phone: +91-33-40086716 Email: sales@bilt.com Web: www.bilt.com</p> <p>Or</p> <p><u>Finecrete Eco-Blocks Pvt. Ltd</u> Unit-3B Anuj Chambers, 24, Park Street, Kolkata – 700016 Email: info@finecrete.in Web: www.bilt.com</p> <p>or</p> <p><u>Magicrete Building Solutions</u> 264-B, IDA, Behind Lanco Company Kondapalli, IbrahimpattanamMandal, Krishna District Andhra Pradesh-521228. Tel No: 0866-2872957 E-Mail: info@magicrete.in</p> <p>or</p> <p><u>Superlite AAC Blocks</u> Ulubari, Guwahati, Assam 781007</p> <p>Or</p> <p><u>Green AAC Block</u> 6th Floor, Sri Kamakhya Tower Behind Sohum Shoppe Christian Basti, GS road Guwahati (Assam) 781005</p>
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4.	Paint & Distemper	<p><u>Oikos India Pvt. Ltd.</u> Warden House, 1st Floor Sir P.M. Road, Fort Mumbai – 400001 Tel: +91 22 22872295 Fax: +91 22 22873475 Email: info@oikosindia.com Web: www.oikosindia.com</p> <p>or</p> <p><u>Jenson & Nicholson</u> 107 Udyogvihar Phase 4 Gurgaon 122016 Tel: 0124-4017406, 4017407 Fax: 0124-4017413 Email: info@jnpaints.com Web: www.jensonnicholson.com</p> <p>or</p> <p><u>Berger Paints India Limited</u> Berger House 129 park Street, Kolkata 700017 Tel: +91 33 22299724 / 22296005 / 06 / 16 Fax: +91 33 22499009 / 9729 Email: consumerfeedback@bergerindia.com Web: www.bergerpaints.com</p> <p>or</p> <p><u>Asian Paints Ltd.</u> Asian paints house 6A, Shantinagar, Santacruz (E) Mumbai – 400055 Tel: 022-39818000 Fax: 022-39818888 Email: customercare@asianpaints.com Web: www.asianpaints.com</p> <p>or</p> <p><u>Acro paints Limited</u> 'Acro House' 5/3, Kirti Nagar Industrial Area New Delhi – 110015 Tel: +91 011 25451118, 25451119 Fax: +91 011 25419683, 25410464</p>
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		Email: support@acropaints.net Web: www.acropaints.net Or <u>Akzo Nobel India Pvt.Ltd.</u> 804, Bhandari House 91 Nehru Place New Delhi-110019 Web: www.akzonobel.com
5.	Self-adhesive Glass Fiber reinforcement	Techfab (India) Industries Ltd, Or Meccaferrri Environmental Solution Pvt. Ltd Or Ooms Avenhorn Holding India Pvt. Ltd

Note:

1. In case of non-availability of any specialized agencies/fabricator/vendor as listed in approved list of makes the agencies shall be got approved from Engineer-in-charge, having experience in similar works by submitting, experience certificates and other relevant documents as per AAI norms i.e. of having executed any similar work of 80% value of particular works or two works of 50% value. In case of non-government works TDS certificate for entire value, client certificate & performance certificates will be required to be submitted.

2. Equivalent makes shall only be considered on non-availability of approved specified makes and cost adjustment shall be done as per actual as approved by Engineer in Charge. Country of origin for supply of material shall be strictly as specified above.

HINDUSTAN STEELWORKS CONSTRUCTION LIMITED

APPROVED MAKES

NAME OF PROJECT –CONSTRUCTION OF PROPOSED BUILDINGS of NATIONAL SPORTS UNIVERSITY PH-2, MANIPUR

CIVIL WORKS

SL. NO.	DESCRIPTION	APPROVED MAKE
1.	CEMENT	ACC /LAFARGE/ BIRLA / ULTRATECH/ DALMIA
2.	WHITE CEMENT	BIRLA WHITE / J.K. WHITE
3.	REINFORCEMENT STEEL	SAIL/ RINL / TATA/ SHYAM STEEL / XTECH TMT REBAR
4.	STRUCTURAL STEEL	SAIL/ RINIL. / TATA /APL APOLLO/ JINDAL STEEL
5.	CONCRETE ADHESIVE	NUSHAR INDIA /ULTRACON/ PIDILITE
6.	FLUSH DOOR, BLOCK BOARD, PLYWOOD	CENTURY/GREEN PLY/ DURO/ MODIPLY/ ARCHIDPLY
7.	a) PRIMER, PAINT b) WATER PROOFING CEMENT PAINT	ASIAN/ BERGER/ ULTRATECH ASIAN / BERGER / SNOWCEM / DUROCEM
8.	PRESSED GI DOOR/WINDOW FRAME STEEL	PURBANCHAL INDUSTRIES/ APL APOLLO/ ASHWANI& SONS
9.	PLASTER OF PARIS	LAFARGE / JK / SRI RAM
10.	CEMENT PUTTY	BIRLA / J K WHITE/BERGER/ASIAN
11.	CERAMIC TILES ADHESIVE	CICO TECH LTD /PIDILITE/BAL ENDURA/SIKA
12.	CLEAR / FLOAT GLASS	MODI/ SAINT GOBAIN (SG)/ ASAHI INDIA / GSC/
13.	HARDWARE A. MORTICE LOCK, MULTIPURPOSE LOCK B. HANDLES, TOWER BOLTS, HINGES & CP FITTINGS FOR DOORS/ WINDOWS C.	GODREJ / HINDUSTAN / DORMA DOORKING / GARNISH / WURTH / HARDWYN / ARKAY
14.	CERAMIC TILES, GLAZED TILES / VITRIFIED TILES	KAJARIA / JOHNSON / SOMANY /NITCO / ORIENT BELL/VARMORA
15.	ADHESIVE FOR DOOR WORK	FEVICOL/VAMICOL/DUNLOP



16.	DASH FASTENERS	HILTI/ FAISCHER/ BOSCH
SL. NO.	DESCRIPTION	APPROVED MAKE
17.	BRASS HARDWARES	JARODS / PALLIDIUM / PARMAR
18.	EPOXY GROUT, TILE ADHESIVES, SILICONE SEALANT, SILICON SPRAY, POLYSULPHINDE SEALANT	LATICRETE/NUSHAR INDIA F.T.P LTD/ PIDILITE/ CICO
19.	PLASTIC EMULSION, SYNTHETIC ENAMEL, OBD AND OTHER PAINTS	ASIAN/ NEROLAC/ BERGER
20.	STAINLESS STEEL FRICTION STAY	EARL BIHARI/ NEEL KANTH/ ARKAY
21.	LAMINATE	MERINO/GREENLAM/CENTURY/ARCHIDLAM
22.	TEXTURE PAINTS	ASIAN/DULUX/BERGER/DUROCEM
23.	ANCHOR/ BOLTS/ PLUGS/ DASH FASTENER	HILTI/BOSCH/FISCHER
24.	WATER PROOFING COMPOUND	DR.FIXIT/ACRO/NUSHAR INDIA F. TECH. /CHOWGULE/ CICO //KRYTON
25.	ZINC CHROMATIC PRIMER	ASIAN / ICI DULUX / BERGER
26.	ALUMINIUM EXTRUSIONS	HINDALCO/ JINDAL/ALOM/ NARMADA/ BHARUKA / INDAL/MAHAVIR
27.	PRELAMINATED PARTICLE / MDF BOARD	GREENPLY/ DURO/CENTURY/ARCHID PLY
28.	READY MIX CONCRETE	ACC/ UNITECH/RMC LTD./ L&T / COROMANDAL
29.	STAINLESS STEEL RAILING	METALLICA INDIA/ D- LINE INTERNATION DENMARK /STEEL ARTS/RAVINDRAM INDUSTRIES.
30.	PATCH LOCK, PLATE ARTICUTURE BOLT, TOP, BOTTOM PATCH	OZONE/ DORMA/ HARDWYN/ ARKAY
31.	FALSE CEILING	ARMSTRONG/DURLUM/HUNTER DOUGLAS/ CREDENCE/UNIMET
32.	E.P.D.M. GASKETS	ANAND REDDIPLEX/ ENVIRO SEALS
33.	EPS CORE WALL PANEL	BEARD SELL/BRAJ GREEN PRODUCT PVT. LTD./MODIFOAM
34.	AAC BLOCKS	SHREE CEMENTS/KJS CONCRETE/ GREEN AAC BLOCK
35.	MODULAR KITCHEN	EVOK (HINDWARE) / GODREJ / ICE CUBES / JINDAL



36	EPOXY FLOORING	FOSROC/CHOWGULE/BASF
37	WOODEN FLOORING	PERQUET/PERGO/NOTION/GREEN FLOOR MAX
38	CARPET FLOORING	HERITAGE, KANAK, LG, CREDESCENCE
39	GRC JALI	UNISTONE/MRK GRC/ECOSTE
40	TOUGHENED GLASS	SAINT GOBAIN/FUSU/MODIGUARD
41	VINYL FLOORING	TERKETT/EBACO/WONDERFLOOR
42	ACOUSTICAL TREATMENT	ARMSTRONG/ CREDESCENCE/ HUNTER DOUGLAS/ DECOSONIC/EARCONS
43	BLINDS	WINTREE/ ELEGANT DÉCOR/ VISTA LEVOLOR
44	GALVANIZED SHEETS	DYNAROOFF/TATA BLUE SCOPE/INTERARCH/ EVEREST
45	PVC DOORS	SINTEX/ ADOPEN INDIA/ DUROPLAST

NOTE: Cement manufacture and brand / make shall be approved by the Engineer in Charge as per GCC

1. Steel manufacture and brand / make shall be approved by the Engineer in Charge as per GCC
2. The other item shall be as per CPWD specification or ISI mark.



Government of India
Ministry of Home Affairs
HQ Guwahati frontier, BSF
(Engineering Branch)

Patgaon, Guwahati-17(Assam)

No. 7381/BSF/Ghty/Engg/2019-20/ 1066-69

Dated, the 16 Mar'2020

To

Sector Headquarters,
Border Security Force
Dhubri/Coochbehar/Gopalpur

Subject :- APPROVAL OF GREEN AAC BLOCKS IN BSF PROJECTS

It is well known that the Govt. is encouraging environment-friendly green building concepts. Accordingly, usage of AAC blocks instead of clay bricks in construction of housing/infrastructure projects, more especially in seismic zone-V is recommended and in comparison to clay bricks the product is also economical. The item has also been included in DSR-2018 and available as schedule item.

2. Among the other manufacturers of AAC blocks, a catalogue showing various sizes of AAC block provided by manufacturer of Green AAC blocks i.e M/s B.R Metallics which is major manufacturer in the region which has also been approved by the CPWD alongwith their office circular, approximate cost of AAC blocks upto various locations under this Frontier for preparation of analysis is enclosed herewith, with the direction to adopt the items while preparing the estimates as well as to incorporate in the NIT being called by your headquarters please.

Encl : As above (20 Pages)

(R K Kanda)

Executive Engineer(Civil)/DC(Works)
Guwahati Ftr HQ BSF

অ্যেক্সিকিউটিভ এঞ্জিনিয়ার (সিভিল)
Executive Engineer (Civil)
শ্রীমান্ত মুখ্যালয় সী. সু. বল. গুৱাহাটী
Ftr HQ BSF Guwahati

Copy to :-

1. Mr A K Sharma, President
M/s B.R Metallics,
6th Floor, Sri Kamakhya Tower,
Christian Basti, G.S Road,
Guwahati (Assam) PIN - 781005

: For your kind information with
reference to your L/No,Nil dated
03/03/2020 please.

Govt of India, Ministry of Home Affairs
Headquarters, Meghalaya Frontier
Border Security Force
(Engg Branch)

Umpling, Shillong-06 (Meghalaya)

No. 16/Misc/19-20/Engg/SHG/BSF / 245-48

Dated, the 14 Mar'2020.

To,

The President
B R METALLICS
6th Floor Sri Kamakhya Tower
Christian Basti, G.S. Road
Guwahati-781005

Sub :- APPROVAL OF GREEN AAC BLOCKS IN BSF PROJECTS.

With ref to your application letter dated 21/01/2020 & of 11/03/2020, submitting therewith Approval letter of CPWD Guwahati bearing reference 24/1/CE-Guwahati/Material/2020/285 (H) dated 28/02/2020, this office is pleased to grant its Approval for use of GREEN AAC BLOCKS in projects under jurisdiction of this office and areas i.e BSF Meghalaya Frontier.

2. However, this approval is subject to quality assessment by our Sectors Project-in-charges. Any discrepancy or inferior quality if ever, will subject this approval to revocation and/or withdrawal forthwith.

3. This is not an exclusive approval of your product regarding the compulsion of execution. Work/ Procurement shall be executed as per the provisions of Tenders and in respect with other comparative offers.



Yours faithfully

(ARUN KUMAR SHARMA)
DC (WORKS)/EE
FTR HQ BSF MEGHALAYA

Copy to :-

1. SHQ BSF Shillong/ Jowai/ Tura

:-

For info alongwith the copy of CPWD letter under reference to adhere with the provision in the letter under reference.

2. Guard file

भारत सरकार, गृह मंत्रालय
GOI, Ministry of Home Affairs
मुख्यालय मिजोरम एवं कछार फ्रंटियर, सीमा सुरक्षा बल
HQ M&C Frontier BSF
(अभियांत्रिकी शाखा)

No. Policy/ अभि० /सी०मु० मि० व क० /2020/351-55

मासिमपुर, सिलचर (आसाम)
दिनांक 18 मार्च, 2020

प्रेषित,

क्षेत्रीय मुख्यालय सीसुबल
सिलचर/विद्रोह रोधी (संकिया) मणिपुर/आईजॉल
सहायक प्रशिक्षण केन्द्र चूड़ाचौदपुर

Sub:- APPROVAL OF GREEN AAC BLOCKS IN BSF PROJECTS

It is well known that the Govt is encouraging environment friendly green building concepts. Accordingly, usage of AAC blocks instead of clay bricks in construction of housing/infrastructure projects, more especially in seismic zone-V is recommended and in comparison to clay bricks the product is also economical. The item has also been included in DSR- 2018 and available as schedule item.

2. Among the other manufactures of AAC blocks, various sizes of AAC block provided by manufacturer of Green AAC blocks i.e. M/s B R Metallics which is major manufacturer in the region which has also been approved by the CPWD.

3. You are requested to incorporate this particular building material in fresh proposals.


18/03/20

(ई० मोहन चन्द्र पांडे)

उप० कमा० (वर्क्स)/कार्य० अभि०
सीमान्त मुख्यालय मिजो० एवं क०

Copy to:-

Mr. A K Sharma, President
M/s Barak Valley Infrastructure,
2nd Floor, House No. 555/1,
Ward No. 10, Hospital road,
Silchar, Cachar, Assam- 788001

- For info w.r.t your L/No.
Nil dated 16/03/2020.



16th March, 2020

The Dy. Commandant /EE(W),
Frontier HQ-(M&C),
BORDER SECURITY FORCE,
Masimpur-SILCHAR

Kind Favour of : SHRI M.C.PANDEY

Dear Sir,

**Approval Letter for use of hi-quality Gr-1 "GREEN AAC BLOCKS" in
Civil Projects of BSF under M&C Sector HQs under your jurisdiction**

With further reference to our application dated 6th January'20 and subsequent discussions we with your officials during Jan/Feb'20, we have to appraise you of the following facts. **GREEN AAC BLOCKS** are the pioneer & leading Brands in North-East. In fact, our Group chairman/Mg. Partner Shri Dilip Goenka has the credit of bringing in the concept of AAC Blocks in North East for the first time in 2011-12. As on date, we happen to be the largest manufacturers of AAC Blocks in entire North East with combined installed capacity of 3 Lac M³/annum at our 2 Units located at Rangia (Kamrup) & at Silchar.

In fact, with the poor road conditions ,especially from Kalain onwards to Cachar & other southern States of NE & exorbitantly high logistic costs made the end-users foot undue high cost of their Civil constructions in these regions. This led us to consider setting up of our 2nd Unit of GREEN AAC Blocks at Silchar to serve all the southern areas of NE at considerably reduced cost, compared to serving from our Rangia Unit. This has enabled to deliver **GREEN AAC BLOCKS** in intact/undamaged condition at comparatively much lower cost, much to the relief of various end-users/Projects proponents..

Accordingly, **GREEN AAC BLOCKS** are manufactured under the technical guidance/top Management of seasoned technocrats under the names –i) **B.R. METALLICS** from our Rangia (Dist:Kamrup); and
ii) **BARAK VALLEY INFRASTRUCTURE** from Borkhola, **SILCHAR**. Accordingly, all supplies of our superior quality **GREEN AAC BLOCKS** in southern States of NE, covering the areas of Cachar, Mizoram, Tripura and others are being done under the name -**BARAK VALLEY INFRASTRUCTURE**.

You would be delighted to know that CPWD has granted its Approval of GREEN AAC BLOCKS vide their letter dated 28/02/2020 (copy enclosed). Besides, Sir, Frontier HQs –Guwahati & Shillong, BSF have also issued **Letters of Approvals** & directed the Sectors' HQs under those offices, to incorporate GREEN AAC BLOCKS in the NIT/schedule of Approved makes. (Copies enclosed).

This is to request your good-self to kindly grant your APPROVAL under advice to concerned Sector HQs under your jurisdiction & oblige.

Thanking you,
For **BARAK VALLEY INFRASTRUCTURE**
B, R, METALLICS

Shillong

(A. K. SHARMA)
PRESIDENT

Encl: Approval letters of CPWD/BSF-Ghy &



भारत सरकार
Government of India

कार्यालय मुख्य अभियन्ता, गुवाहाटी
के.ए.ए.डी.ओ. गार्चुक, गुवाहाटी- 781035

Office of the Chief Engineer, Guwahati
C.P.W.D., Garchuk, Guwahati - 781035

E-mail ID : ceghycpwd@gmail.com

पत्र संख्या: 24/1/CE-Guwahati/Material/2020 285 (18)

दिनांक: 28/02/2020

कार्यालय ज्ञापन

विषय: Inclusion of product in approved list of materials under Chief Engineer, Guwahati, CPWD.

M/s B.R. Metallics के पत्रांक शून्य दिनांक 03.01.2020 द्वारा उनके अनुरोध को स्वीकार करते हुए मुख्य अभियन्ता महोदय द्वारा निम्नलिखित उत्पादों का अंचल में चल रही विभिन्न परियोजनाओं/कार्यों में प्रयोग हेतु अनुमोदन प्रदान किया जाता है।

क्र.सं	उत्पाद का विवरण	उत्पाद का ब्रांड	टिप्पणी
1.	Autoclaved Aerated Concrete (AAC) Blocks	GREEN AAC BLOCKS	IS 2185(Part 3) : 1984 CM/L-5400040888

यह अनुमोदन निम्न शर्तों के साथ किया गया है।

- यह अनुमोदन 31.03.2021 तकके लिये वैध है, यदि इसका पुनः नवीनीकरण नही कराया गया तो अनुमोदन वैध तिथी के पश्चात्स्वतः समाप्त हो जायेगा।
- जिन BIS उत्पादों की BIS मान्यता 22.06.2020से पहले समाप्त हो रही है, उन उत्पादों की मान्यता का BISपुनर्वाधिकरण प्रमाणपत्र समय रहते फर्म द्वारा इस कार्यालय में प्रस्तुत करना होगा अन्यथा यह अनुमोदन अमान्य हो जायेगा।
- यह अनुमोदन कार्यपालक/ प्रयवेक्षक/ निरीक्षक तथा संबंधित अधिकारी को उनके जांच जैसे गुणवत्ता/ दर व उत्पाद की दक्षता के उत्तरदायित्व से मुक्त नही करता। यदि कार्य में प्रयोग के दौरान कोई गंभीर त्रुटि या कमी दृष्टिगोचर होती है तो इस कार्यालय को तुरंत सूचित किया जाये।
- इस अनुमोदन का यह कतई अभिप्राय नही है कि अनुमोदित कम्पनी को ही कार्य करने का अधिकार है या इस कम्पनी के उत्पादों को ही प्रयुक्त किया जायेगा। कार्य/ प्रकुरमेंट, अन्य कम्पनी के प्रतिस्पर्धात्मक दरों के अनुसार जो कि निविदा आमंत्रण सूचना में सम्मिलित हैं पर निर्भर करेगा।
- फर्म के प्रदर्शन की निगरानी कार्यस्थल इकाई (Field Unit)द्वारा की जायेगी तथा रिपोर्ट इस कार्यालय को समय-समय पर प्रेषित की जायेगी।

कार्यपालक अभियन्ता(सि.)
कार्यालय मुख्य अभियन्ता, गुवाहाटी

प्रतिलिपि:

- अधीक्षण अभियन्ता एवम परियोजना निदेशक, के.लो.नि.वि. बामुनीमैदान, गुवाहाटी-२१।
- कार्यपालक अभियन्ता, गु.के.मं., अ.वि.मंडल/ परियोजना मंडल, के.लो.नि.वि., गुवाहाटी।
- The President, B R Metallics, 6thFloor, Sri Kamakhya Tower, Christian Basti, G.S. Road, Guwahati (Assam) Pin:781005.

कार्यपालक अभियन्ता(सि.)

ANNEXURE -B


LIST OF MATERIALS OF PREFERRED MAKE

The materials of first/standard quality from the following preferred makes are to be used. In case it is established that the brands specified below are not available in the market, contractor shall submit alternative proposal to Engineer-in-Charge for the approval of NIT approving authority.

SI No.	Materials	Brand / Manufacturer Name
1	Ordinary Portland cement	A.C.C., Ultratech, Vikram, Ambuja, Jaypee Cement, Dalmia Cement and J.K. Cement
2	Steel Reinforcement (TMT bars)	SAIL, Tata Steel Ltd., RINL, Jindal Steel and Power Ltd., JSW Steel Ltd.
3	AAC Block	GREEN AAC BLOCKS / BRIKO-O-LITE
4	CGI Sheet	Tata Shakti, Jindal, JSQ/JSQ Steel Coated Products Lmt.
5	All Paint Items	Berger, Asian Paints, Nerolac, ICICI
6	Mortice Latch	Godrej, Harrison
7	White Cement	Birla white, J.K. white.
8	Ceramic tiles	Somani, Kajaria, Orient bell, Nitco, Rak
9	Aluminium sections	Hindalco, Jindal, Bhagwati sai, Omalco
10	Water proofing compound	Cico, Fosroc, Pidilite, Asian, Dr.Fixit,
11	Drapery rod	Vista, Mac,
12	Flush Door Shutters	Duro, Green ply, Century
13	Vitreous China Sanitary Ware	Parryware, Hindware, Kerovit, Cera
14	All C.P. fittings	Jaquar, Grohe, Kolhar, Prayag
15	Stainless Steel Sink	Jayana, Neelkant,
16	Bevelled edge mirror	Atul, Jolly, Modiguard
17	UPVC Soil, Waste and Vent pipes and fittings	Supreme, Prince, Finolex,
18	G.I. Pipes & fittings	Tata, Jindal (Hissar), UNIK,
19	G.I. Fittings	"R" Brand, Unik and Zoloto
20	C.I. Class LA Pipes	Electro Steel, Kesoram
21	Cpvc pipes and fittings	Supreme, Prince, SFMC
22	Valves	Zoloto, SCUD

Note:

Correction.. Nil Deletion.. Nil Insertion.. Nil Overwriting.. Nil AE(E)

AE(C)  AE(C)

Government of India
Ministry of Home Affairs
Office of the Inspector General
Sashastra Seema Bal
Frontier Hqrs SSB 345, Nikita Complex,
Khanapara, G,S Road Guwahati-22

No.IX/FTRG/MISC/Engg/2018-19/ 722

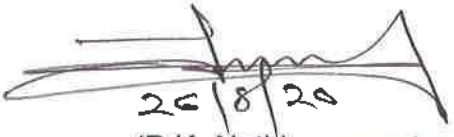
Dated 26-08-2020

To

Mr A K Sharma, President
M/s B.R Metallics,
6th Floor, Sri Kamakhya Tower,
Christian Basti, G.S Road,
Guwahati (Assam) PIN-781005

Subject :- APPROVAL OF GREEN AAC BLOCK IN SSB PROJECTS

1. With reference to your application dated 11/08/2020 for approval of your products i.e "GREEN AAC BLOCKS".
2. It is hereby recommended for use of above mentioned products "GREEN AAC BLOCKS" in construction works undertaken/supervised by the SSB as per approval of item in DSR only.
3. Further continuation of the product will be decided thereafter on the basis of the mandatory feedback/performance report submitted by Assistant Engineers of respective formations/Headquarters.


26/8/20
(P.K. Nath)
अधिसास्त्री अभियंता/Executive Engineer
सीमान्त मुख्यालय, (असम) (Frontier Hqrs SSB Guwahati)
गुवाहाटी (असम)/Guwahati (Assam)- 781022

**GOVERNMENT OF MIZORAM
OFFICE OF THE ENGINEER-IN-CHIEF:PWD
MIZORAM : AIZAWL**

No.B-17011/36/16/EC (P)-PWD/73

Dated Aizawl the 28th June, 2018

To : ✓ The President,
Messrs. B.R.METALLICS,
6th Floor, Sri Kamakhya Tower,
Christian Basti, G.S. Road,
Guwahati (Assam)
Pin No: 781005

Subj: PROVISIONAL Approval of "GREEN AAC Block"

Ref: Your letter No.Nil dt.05.05.2018

Sir,

With reference to your application dated 05.05.2018, I am to inform you that the sample materials submitted by your representative were tested at the Departmental Laboratory at Zuangtui, Aizawl.

The test Results of the sample materials viz., AAC (Autoclave Aerated Concrete) Block (Green) are found to satisfy specific requirements as stipulated in the relevant clauses of IS 2185 (P-III): 1984, copies of which were enclosed herewith.

After going through the Test Results alongwith your application, the undersigned hereby endorsed the **PROVISIONAL PERMISSION** for using **GREEN AAC BLOCK** of **B.R. Metallics, Guwahati** with PWD, Mizoram for the works under the jurisdiction of the undersigned subject to the fulfillment of all requirements of relevant IS Codes of Practice/International Standards and satisfactory performance and specifications in the Mizoram Schedule of Rates, PWD, Mizoram published from time to time. The quality of your products shall be checked periodically by the concerned officers and in case their qualities and performance are found to be unsatisfactory at any time, then this **PROVISIONAL PERMISSION** shall be cancelled without any prejudice to this office and without any further notice.

Yours faithfully,




(R.VANLAL LUANGA)
Engineer-In-Chief, PWD.,
Mizoram : Aizawl

Memo No.B-17011/36/16/EC (P)-PWD/73 'A'

Dated Aizawl the 28th June, 2018

Copy to:-

All Chief Engineers under PWD, Aizawl, Mizoram for information and necessary action.


Engineer-In-Chief, PWD.,
Mizoram : Aizawl

OFFICE OF THE EXECUTIVE ENGINEER, PWD.,
QUALITY CONTROL DIVISION, ZUANGTUI; AIZAWL
QAZB/ AAC BLOCK TEST REPORT
(IS : 2185 Part III 1984, 6441 Part I&V 1972)

Name of Sample : AAC (Autoclave Aerated Concrete) Block(Green)

Sample Submitted By : BR Metallic Guwahati


Date of Sampling : 18.6.2018


Date of Testing : 22.6.2018

Cl. 8.3	Block Density Kg/m ³									
	Test Method : IS 6441 (P-1): 1972 (RA-2012)									
Moisture Content %	Sample-1	Sample-2	Sample-3	Sample-4	Sample-5	Sample-6	Sample-7	Sample-8	Sample-9	AVG
Individual Readings ✓	17.85	17.09	11.11	12.38	9.12	8.01	7.84	4.44	9.70	
Average (Test series)	15.35									10.84
Block Density Kg/m ³	Sample-1	Sample-2	Sample-3	Sample-4	Sample-5	Sample-6	Sample-7	Sample-8	Sample-9	AVG (✓)
Individual Readings	575.835	554.502	619.047	563.541	592.857	565.979	564.948	585.416	558.333	
Average (Test series)	583.128									574.126
Specific Requirements as per Cl.8.3 of IS 2185 (P-3) :1984										551-650
Criteria of conformity as per Cl.11.2 of IS 2185 (P-3) : 1984										Y within a range of 551-650

CI.8.4										Compressive Strength N/mm ²									
										Test Method : IS 6441 (P-5) : 1972 (RA-2012)									
Sample No.	Sample-1	Sample-2	Sample-3	Sample-4	Sample-5	Sample-6	Sample-7	Sample-8	Sample-9	Avg									
Compressive Strength (Individual Readings) N/mm ²	5.629	5.155	5.401	3.877	3.64	4.242	3.03	4.489	2.857										
Average Compressive Strength (Test series) N/mm ²	5.395									3.918	3.459	4.257							
Average Moisture Content, %										10.84									
Average Bulk Density, Kg/m ³										575.606									
Average Compressive Strength, N/mm ²										4.257									
Average Compressive Strength as per Cl. 8.4 of IS 2185 (P-3) : 1984										4.00 Minimum									
Criteria of conformity as per Cl. 11.3 of IS 2185 (P-3) : 1984										X-0.6R >4.00									


 Lab. Technician, P.W.L.
 Quality Control Division
 Zuangtui, Aizawl


 Sub-Divisional Officer, P.W.D.
 Quality Control Sub-Division-II
 Aizawl, Mizoram


 Sub-Divisional Officer, P.W.D.
 Quality Control Sub-Division-III
 Aizawl, Mizoram


 Executive Engineer, P.W.L.
 Quality Control Division
 Aizawl, Mizoram



INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

Guwahati - 781 039, Assam

Phone : (0361) 2582061, 2582065 Fax : (0361) 2692774

Ref: IITG/ENGG/EE(C)/15/03/437

Date: 03.08.17

To,

M/s B.R Metallics
6th Floor, Sri Kamakhya Tower
Behind Sohum Shoppe
Christian Basti
G.S Road, Guwahati-781005

E-MAIL: info@kdindia.com

Sub : Approval of AAC Blocks " GREEN BLOCKS" in IITG work.

Ref: Your letter no. BRM 05/17-18

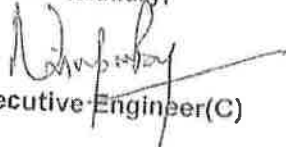
Dear Sir,

With reference to the above, this is to convey the approval of the competent authority for use of "GREEN BLOCKS" in the works of the Institute.

However, routine testing of the blocks will be done at site and if the performance of the product is found unsatisfactory, the brand will be discontinued in the projects of the Institute.

Thanking you,

Yours faithfully,


Executive Engineer(C)

Copy to:

(1) Dean (IPM) for favour of information please.

HINDUSTAN PREFAB LIMITED

REGIONAL OFFICE (NER), GUWAHATI

Date: - 19-05-2017

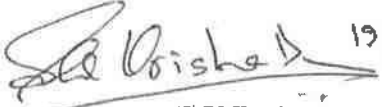
1. **M/s Arunoday Construction Co. (P) Ltd,**
"Pallavi House," House No.-614, G.S. Road,
Bhangagarh, Guwahati-781005, Assam.
2. **M/s Shree Gautam Construction Co. Ltd.**
4th Floor, Amaze Tower, A.T. Road,
Opp. Pan Bazar Over Bridge, Paltan Bazar,
Guwahati-781001
3. **M/s Tribeni Construction Limited**
Tribeni's Commercial Complex,
2nd Floor, G.S. Road,
Ulubari, Guwahati-781007
4. **M/s M.P.Khaitan**
15, Ganesh Chandra Avenue
7th Floor, Kolkata-700013
5. **M/s Shambhala Trader**
Old Bazar Line Tawang
P.O./Dist.- Tawang, Arunachal Pradesh,
790104.

Approval of Additional brand of AAC Blocks.

This is for information to all concerned that the client has approved the Additional brand of AAC Blocks.

1. **GREEN AAC Block** manufactured by M/s B R Metallics, 6th floor, Sri Kamakhya Tower, Behind Sohum Shoppe, Christian Basti, G.S. Road, Guwahati (Assam), Pin. 781005 for use in the IITG buildings for a period of Six month subject to periodical review on getting feedback from environment about the performance of the product. Further continuous of the product will be decided thereafter, on the basis of the feedback/performance report submitted by the respective agencies.

Accordingly you are requested to arrange the said materials for execution of the work. However before placing order for the said materials you are requested to confirm the dimensional details and compressive strength for the AAC blocks as per the approved drawing against the works.

 19/05

(S.K.Das)
DGM (Engg.)
RO, Guwahati

Copy to;

1. M/s B R Metallics.



OMEGA

Consultant Services
Testing Laboratory

A Govt. Regd. Test House

www.omegaconsultantservices.com

Laboratory Accredited By :
NABL, A constituent Board of Quality Council
of India, Govt. of India
Management System : As per An ISO/IEC 17025:2017
and ISO: 9001-2015 Certified Company



TC - 6809

HEAD OFFICE & LABORATORY

256A, M. G. Road, Purbasan, Thakurpukur, Haridevpur, Kolkata - 700063
Phone : (033) 2497 1903, 2438 1677, M. 9830020628 / 9432219707
E-mail : omegalabinfo98@gmail.com, omegalabinfo@gmail.com

ULR No. TC680921000003738F		Format No.OCS/QR/133	
TEST REPORT			
JOB ID No.: OCSK/JN/2021/11R-00028-01/01		Date: 01.12.2021	Page: 1 of 2
Ref. No. : BVI/HO/2021-22/0010 Date: 20.11.2021	Product Specification : IS:2185 (part-3)-1984		
Issued To : M/s -Barak Valley Infrastructure 6th floor Sri Kamakhya Tower, Christian Basti, G.S Road Guwahati - 781005	Test Specification : IS:6441 (relevant Parts)		
Description of Sample(s) : 1 set AAC Block (Size-600x200x250 mm) Sample for the following test. Brand: Green Sub: Testing of AAC Block.	Seal / Stamp / Mark (if any) : Marked		
Test Parameters : Compressive Strength, Density & Thermal Conductivity.	Sample received on : 22.11.2021		
	Sample tested on : 22.11.2021 to 30.11.2021		

This is to certify that the above sample (S) has/have been tested with the following results:

TEST RESULTS

1. Building Materials - Bricks & Precast Blocks:

A) COMPRESSIVE STRENGTH:

Sl. No.	Sample Mark	Dimension (Length x Breath x Height) mm	Compressive Load (N)	Compressive strength (N/mm ²)	
				Findings	Average
1.	1/1	150x150x150	95900	4.26	4.5
2.	1/2	150x150x150	97900	4.35	
3.	1/3	150x150x150	106900	4.75	
4.	2/1	150x150x150	94300	4.19	4.4
5.	2/2	150x150x150	104900	4.66	
6.	2/3	150x150x150	97700	4.34	
7.	3/1	150x150x150	96500	4.29	4.5
8.	3/2	150x150x150	105800	4.70	
9.	3/3	150x150x150	101900	4.53	
10.	4/1	150x150x150	91800	4.08	4.3
11.	4/2	150x150x150	102800	4.57	
12.	4/3	150x150x150	97200	4.32	
13.	5/1	150x150x150	108200	4.81	4.7
14.	5/2	150x150x150	101900	4.53	
15.	5/3	150x150x150	104900	4.66	
16.	6/1	150x150x150	106900	4.75	4.3
17.	6/2	150x150x150	92000	4.09	
18.	6/3	150x150x150	92500	4.11	
19.	7/1	150x150x150	96500	4.29	4.4
20.	7/2	150x150x150	97400	4.33	
21.	7/3	150x150x150	102300	4.55	
22.	8/1	150x150x150	97200	4.32	4.4
23.	8/2	150x150x150	99900	4.44	
24.	8/3	150x150x150	102600	4.56	
25.	9/1	150x150x150	97400	4.33	4.3
26.	9/2	150x150x150	94100	4.18	
27.	9/3	150x150x150	101000	4.49	
28.	10/1	150x150x150	102600	4.56	4.7
29.	10/2	150x150x150	107300	4.77	
30.	10/3	150x150x150	104900	4.66	
31.	11/1	150x150x150	92500	4.11	4.3
32.	11/2	150x150x150	93600	4.16	
33.	11/3	150x150x150	106900	4.75	
34.	12/1	150x150x150	105300	4.68	4.7
35.	12/2	150x150x150	104900	4.66	
36.	12/3	150x150x150	105800	4.70	
Average of 12 Nos. blocks					4.5
Req. as per IS: 2185 (Part-3) -1984, Gr.1					4.00 Min.

- Note :
- ★ The test report relates to the Sample(s) submitted by Customer.
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- Odisha :** Plot No.- 1122, Word No. 23, Vill.- Ghatikai (Opposite CET College), P.S.- Khandagiri, Odisha, Pin - 751003
- Jharkhand :** Hill View (Near Rahat Nursing Home), Hill View Road, Bariatu, Ranchi, Pin - 834009
- Tripura :** C/O.: Dharendra Chandra Das, East Side of Central Jail, P.O.- Dhaleswar, P.S.- East Agartala, Dist.- West Agartala, Pin - 799007
- Meghalaya :** C/O.: Doyantis Lyngdoh, Ward no.: 23, House No.: 390, Kench's Trace Road, Shillong, Meghalaya, Pin - 793004

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ULR No. TC680921000003738F	Format No.OCS/QR/133
TEST REPORT	
JOB ID No.: OCSK/JN/2021/11R-00028-01/01	Date: 01.12.2021 Page: 2 of 2

B) DENSITY:

Sl. No.	Sample Mark	Oven Dry weight (Kg)	Volume (m ³)	Density(kg/m ³)	
				Findings	Average
1.	13/1	0.5983	0.001	598	600
2.	13/2	0.5975	0.001	598	
3.	13/3	0.5904	0.001	590	
4.	14/1	0.5883	0.001	588	590
5.	14/2	0.5864	0.001	586	
6.	14/3	0.5914	0.001	591	
7.	15/1	0.5933	0.001	593	590
8.	15/2	0.5916	0.001	592	
9.	15/3	0.5908	0.001	591	
Average of 03 Nos. of blocks					590
Req. as per IS: 2185 (Part-3) -1984, Gr.1					551-650

C) THERMAL CONDUCTIVITY:

Sl. No.	Sample Mark	Thermal Conductivity (W/ m.k)	
1.	16	0.1682	AVG. 0.1578
2.	17	0.1554	
3.	18	0.1498	
Req. as per IS: 2185 (Part-3) -1984, Gr.1			0.24 Max

REMARKS: The above submitted sample was duly tested as per relevant specification and found Satisfactory with respect to the above test parameters.

R.B.

Prepared By

For OMEGA CONSULTANT SERVICES

S. K. CHATTERJEE
LAB. IN-CHARGE (MECH-BM/SR)
(AUTHORISED SIGNATORY)

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- Tripura :** C/O.: Dharendra Chandra Das, East Side of Central Jail, P.O.- Dhaleswar, P.S.- East Agartala, Dist.- West Agartala, Pin - 799007
- Meghalaya :** C/O.: Doyantis Lyngdoh, Ward no.: 23, House No.: 390, Kench's Trace Road, Shillong, Meghalaya, Pin - 793004

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TEST REPORT

JOB ID No.: OCSK/JN/2021/11R-00028-01/02		Date: 14.12.2021	Page: 1 of 1
Ref. No. : BVI/HO/2021-22/0010 Date: 20.11.2021	Issued To : M/s -Barak Valley Infrastructure 6th floor Sri Kamakhya Tower, Christian Basti, G.S Road Guwahati - 781005	Product Specification : IS:2185 (part-3)- 1984	Test Specification : IS:6441 (Part-2)
Description of Sample(s) : 3 nos. AAC Block (Size-600x200x250 mm) Sample for the following test. Brand: Green Sub: Testing of AAC Block.	Test Parameters : Drying Shrinkage	Seal / Stamp / Mark : Marked (if any)	Sample received on : 22.11.2021 Sample tested on : 22.11.2021 to 13.12.2021

This is to certify that the above sample (S) has/have been tested with the following results:

TEST RESULTS

1. Building Materials - Bricks & Precast Blocks:

A) DRYING SHRINKAGE:

Sl. No.	Sample Mark	Drying Shrinkage (%)		
		Findings	Avg.	Avg. of 03 Nos. of Blocks
1.	19/1	0.022	0.021	0.022
2.	19/2	0.018		
3.	19/3	0.024		
4.	20/1	0.022	0.022	
5.	20/2	0.026		
6.	20/3	0.019		
7.	21/1	0.025	0.023	
8.	21/2	0.023		
9.	21/3	0.022		
Req. as per IS: 2185 (Part-3) -1984, Gr.1				0.05 Max.

REMARKS: The above submitted sample was duly tested as per relevant specification and found satisfactory with respect to the above test parameters.

Prepared By

For OMEGA CONSULTANT SERVICES

Authorised Signatory

- Note :
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- Jharkhand :** Hill View (Near Rahat Nursing Home), Hill View Road, Bariatu, Ranchi, Pin - 834009
- Tripura :** C/O.: Dharendra Chandra Das, East Side of Central Jail, P.O.- Dhaleswar, P.S.- East Agartala, Dist.- West Agartala, Pin - 799007
- Meghalaya :** C/O.: Doyantis Lyngdoh, Ward no.: 23, House No.: 390, Kench's Trace Road, Shillong, Meghalaya, Pin - 793004



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ULR No. TC680921000003738F		Format No.OCS/QR/133	
TEST REPORT			
JOB ID No.: OCSK/JN/2021/11R-00028-02/01		Date: 01.12.2021	Page: 1 of 2
Ref. No. : BVI/HO/2021-22/0010 Date: 20.11.2021	Product Specification : IS:2185 (part-3)-1984		
Issued To : M/s -Barak Valley Infrastructure 6th floor Sri Kamakhya Tower, Christian Basti, G.S Road Guwahati - 781005	Test Specification : IS:6441 (relevant Parts)		
Description of Sample(s) : 1 set AAC Block (Size-600x200x150 mm) Sample for the following test. Brand: Green Sub: Testing of AAC Block.	Seal / Stamp / Mark (if any) : Marked		
Test Parameters : Compressive Strength, Density & Thermal Conductivity.	Sample received on : 22.11.2021		
	Sample tested on : 22.11.2021 to 30.11.2021		

This is to certify that the above sample (S) has/have been tested with the following results:

TEST RESULTS

1. Building Materials - Bricks & Precast Blocks:
A) COMPRESSIVE STRENGTH:

Sl. No.	Sample Mark	Dimension (Length x Breadth x Height) mm	Compressive Load (N)	Compressive strength (N/mm ²)	
				Findings	Average
1.	1/1	150x150x150	100300	4.46	4.6
2.	1/2	150x150x150	98300	4.37	
3.	1/3	150x150x150	108200	4.81	
4.	2/1	150x150x150	104900	4.66	4.4
5.	2/2	150x150x150	94500	4.20	
6.	2/3	150x150x150	98300	4.37	
7.	3/1	150x150x150	91800	4.08	4.2
8.	3/2	150x150x150	94100	4.18	
9.	3/3	150x150x150	95200	4.23	
10.	4/1	150x150x150	110500	4.91	4.8
11.	4/2	150x150x150	105300	4.68	
12.	4/3	150x150x150	105800	4.70	
13.	5/1	150x150x150	97400	4.33	4.6
14.	5/2	150x150x150	104600	4.65	
15.	5/3	150x150x150	106900	4.75	
16.	6/1	150x150x150	103100	4.58	4.6
17.	6/2	150x150x150	103500	4.60	
18.	6/3	150x150x150	100800	4.48	
19.	7/1	150x150x150	97200	4.32	4.6
20.	7/2	150x150x150	109800	4.88	
21.	7/3	150x150x150	105300	4.68	
22.	8/1	150x150x150	96900	4.31	4.5
23.	8/2	150x150x150	97200	4.32	
24.	8/3	150x150x150	106400	4.73	
25.	9/1	150x150x150	100800	4.48	4.6
26.	9/2	150x150x150	101500	4.51	
27.	9/3	150x150x150	105300	4.68	
28.	10/1	150x150x150	98300	4.37	4.5
29.	10/2	150x150x150	96500	4.29	
30.	10/3	150x150x150	108000	4.80	
31.	11/1	150x150x150	108200	4.81	4.6
32.	11/2	150x150x150	96100	4.27	
33.	11/3	150x150x150	103500	4.60	
34.	12/1	150x150x150	103100	4.58	4.5
35.	12/2	150x150x150	101200	4.50	
36.	12/3	150x150x150	98300	4.37	
Average of 12 Nos. blocks					4.5
Req. as per IS: 2185 (Part-3) -1984, Gr.1					4.00 Min.

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ULR No. TC680921000003738F	Format No.OCS/QR/133
TEST REPORT	
JOB ID No.: OCSK/JN/2021/11R-00028-02/01	Date: 01.12.2021
	Page: 2 of 2

B) DENSITY:

Sl. No.	Sample Mark	Oven Dry weight (Kg)	Volume (m ³)	Density(kg/m ³)	
				Findings	Average
1.	13/1	0.5887	0.001	589	600
2.	13/2	0.6083	0.001	608	
3.	13/3	0.5917	0.001	592	
4.	14/1	0.5890	0.001	589	590
5.	14/2	0.5817	0.001	582	
6.	14/3	0.5933	0.001	593	
7.	15/1	0.5908	0.001	591	600
8.	15/2	0.6007	0.001	601	
9.	15/3	0.6032	0.001	603	
Average of 03 Nos. of blocks					600
Req. as per IS: 2185 (Part-3) -1984, Gr.1					551-650

C) THERMAL CONDUCTIVITY:

Sl. No.	Sample Mark	Thermal Conductivity (W/ m.k)	
1.	16	0.1398	AVG. 0.1454
2.	17	0.1476	
3.	18	0.1488	
Req. as per IS: 2185 (Part-3) -1984, Gr.1			0.24 Max

REMARKS: The above submitted sample was duly tested as per relevant specification and found Satisfactory with respect to the above test parameters.

R.B.

Prepared By

For OMEGA CONSULTANT SERVICES

S.K. Chatterjee

S. K. CHATTERJEE
LAB. IN-CHARGE (MECH-BM/SR)
(AUTHORISED SIGNATORY)

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TEST REPORT

JOB ID No.: OCSK/JN/2021/11R-00028-02/02		Date: 14.12.2021	Page: 1 of 1
Ref. No. : BVI/HO/2021-22/0010 Date: 20.11.2021	Issued To : M/s -Barak Valley Infrastructure 6th floor Sri Kamakhya Tower, Christian Basti, G.S Road Guwahati - 781005	Product Specification : IS:2185 (part-3)- 1984	Test Specification : IS:6441 (Part-2)
Description of Sample(s) : 3 nos. AAC Block (Size-600x200x150 mm) Sample for the following test. Brand: Green Sub: Testing of AAC Block.	Test Parameters : Drying Shrinkage	Seal / Stamp / Mark : Marked (if any)	Sample received on : 22.11.2021
		Sample tested on : 22.11.2021 to 13.12.2021	

This is to certify that the above sample (S) has/have been tested with the following results:

TEST RESULTS

1. Building Materials - Bricks & Precast Blocks:

A) DRYING SHRINKAGE:

Sl. No.	Sample Mark	Drying Shrinkage (%)		
		Findings	Avg.	Avg. of 03 Nos. of Blocks
1.	19/1	0.018	0.021	0.021
2.	19/2	0.026		
3.	19/3	0.020		
4.	20/1	0.021	0.021	
5.	20/2	0.023		
6.	20/3	0.019		
7.	21/1	0.019	0.020	
8.	21/2	0.022		
9.	21/3	0.020		
Req. as per IS: 2185 (Part-3) -1984, Gr.1				0.05 Max.

REMARKS: The above submitted sample was duly tested as per relevant specification and found satisfactory with respect to the above test parameters.

R.B.
Prepared By

For OMEGA CONSULTANT SERVICES

Authorised Signatory

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ULR No. TC680921000003738F		Format No. OCS/QR/133	
TEST REPORT			
JOB ID No.: OCSK/JN/2021/11R-00028-03/01		Date: 01.12.2021	Page: 1 of 2
Ref. No. : BVI/HO/2021-22/0010 Date: 20.11.2021	Product Specification : IS:2185 (part-3)-1984		
Issued To : M/s -Barak Valley Infrastructure 6th floor Sri Kamakhya Tower, Christian Basti, G.S Road Guwahati - 781005	Test Specification : IS:6441 (relevant Parts)		
Description of Sample(s) : 1 set AAC Block (Size-600x200x125 mm) Sample for the following test. Brand: Green Sub: Testing of AAC Block.	Seal / Stamp / Mark (if any) : Marked		
Test Parameters : Compressive Strength, Density & Thermal Conductivity.	Sample received on : 22.11.2021		
	Sample tested on : 22.11.2021 to 30.11.2021		

This is to certify that the above sample (S) has/have been tested with the following results:

TEST RESULTS

1. Building Materials - Bricks & Precast Blocks:

A) COMPRESSIVE STRENGTH:

Sl. No.	Sample Mark	Dimension (Length x Breath x Height) mm	Compressive Load (N)	Compressive strength (N/mm ²)	
				Findings	Average
1.	1/1	150x150x150	97400	4.33	4.4
2.	1/2	150x150x150	105300	4.68	
3.	1/3	150x150x150	92300	4.10	
4.	2/1	150x150x150	93800	4.17	4.4
5.	2/2	150x150x150	104600	4.65	
6.	2/3	150x150x150	97200	4.32	
7.	3/1	150x150x150	99200	4.41	4.6
8.	3/2	150x150x150	104600	4.65	
9.	3/3	150x150x150	105800	4.70	
10.	4/1	150x150x150	97200	4.32	4.7
11.	4/2	150x150x150	108200	4.81	
12.	4/3	150x150x150	110500	4.91	
13.	5/1	150x150x150	107100	4.76	4.4
14.	5/2	150x150x150	90700	4.03	
15.	5/3	150x150x150	97400	4.33	
16.	6/1	150x150x150	106900	4.75	4.3
17.	6/2	150x150x150	91800	4.08	
18.	6/3	150x150x150	90000	4.00	
19.	7/1	150x150x150	99900	4.44	4.5
20.	7/2	150x150x150	108200	4.81	
21.	7/3	150x150x150	94100	4.18	
22.	8/1	150x150x150	97200	4.32	4.5
23.	8/2	150x150x150	102400	4.55	
24.	8/3	150x150x150	100800	4.48	
25.	9/1	150x150x150	107100	4.76	4.7
26.	9/2	150x150x150	104900	4.66	
27.	9/3	150x150x150	103100	4.58	
28.	10/1	150x150x150	96300	4.28	4.4
29.	10/2	150x150x150	97400	4.33	
30.	10/3	150x150x150	105300	4.68	
31.	11/1	150x150x150	106900	4.75	4.6
32.	11/2	150x150x150	104900	4.66	
33.	11/3	150x150x150	98300	4.37	
34.	12/1	150x150x150	109800	4.88	4.6
35.	12/2	150x150x150	93100	4.14	
36.	12/3	150x150x150	104900	4.66	
Average of 12 Nos. blocks					4.5
Req. as per IS: 2185 (Part-3) -1984, Gr.1					4.00 Min.

Note :

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- ★ The Test Report without Embossing is INVALID.

Branche Offices & Sample Collection Centres :-

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Jharkhand : Hill View (Near Rahat Nursing Home), Hill View Road, Bariatu, Ranchi, Pin - 834009

Tripura : C/O.: Dharendra Chandra Das, East Side of Central Jail, P.O.- Dhaleswar, P.S.- East Agartala, Dist.- West Agartala, Pin - 799007

Meghalaya : C/O.: Doyantis Lyngdoh, Ward no.: 23, House No.: 390, Kench's Trace Road, Shillong, Meghalaya, Pin - 793004

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Management System : As per An ISO/IEC 17025:2017
and ISO: 9001-2015 Certified Company



TC - 6809

A Govt. Regd. Test House

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256A, M. G. Road, Purbasan, Thakurpukur, Haridevpur, Kolkata - 700063
Phone : (033) 2497 1903, 2438 1677, M. 9830020628 / 9432219707
E-mail : omegalabinfo98@gmail.com, omegalabinfo@gmail.com

ULR No. TC680921000003738F	Format No.OCS/QF/133
TEST REPORT	
JOB ID No.: OCSK/JN/2021/11R-00028-03/01	Date: 01.12.2021
Page: 2 of 2	

B) DENSITY:

Sl. No.	Sample Mark	Oven Dry weight (Kg)	Volume (m ³)	Density(kg/m ³)	
				Findings	Average
1.	13/1	0.5732	0.001	573	580
2.	13/2	0.5811	0.001	581	
3.	13/3	0.5932	0.001	593	
4.	14/1	0.5917	0.001	592	580
5.	14/2	0.5817	0.001	582	
6.	14/3	0.5903	0.001	590	
7.	15/1	0.5837	0.001	584	580
8.	15/2	0.5881	0.001	588	
9.	15/3	0.5817	0.001	582	
Average of 03 Nos. of blocks					580
Req. as per IS: 2185 (Part-3) -1984, Gr.1					551-650

C) THERMAL CONDUCTIVITY:

Sl. No.	Sample Mark	Thermal Conductivity (W/ m.k)	
1.	16	0.1532	AVG. 0.1569
2.	17	0.1632	
3.	18	0.1544	
Req. as per IS: 2185 (Part-3) -1984, Gr.1			0.24 Max

REMARKS: The above submitted sample was duly tested as per relevant specification and found Satisfactory with respect to the above test parameters.

R.B.

Prepared By

For OMEGA CONSULTANT SERVICES

S.K. Chatterjee

S. K. CHATTERJEE
LAB. IN-CHARGE (MECH-BM/SR)
(AUTHORISED SIGNATORY)

- Note :
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Tripura : C/O.: Dharendra Chandra Das, East Side of Central Jail, P.O.- Dhaleswar, P.S.- East Agartala, Dist.- West Agartala, Pin - 799007

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E-mail : omegalabinfo98@gmail.com, omegalabinfo@gmail.com

TEST REPORT

JOB ID No.: OCSK/JN/2021/11R-00028-03/02		Date: 14.12.2021	Page: 1 of 1
Ref. No. : BVI/HO/2021-22/0010 Date: 20.11.2021	Product Specification : IS:2185 (part-3)-1984		
Issued To : M/s -Barak Valley Infrastructure 6th floor Sri Kamakhya Tower, Christian Basti, G.S Road Guwahati - 781005	Test Specification : IS:6441 (Part-2)		
Description of Sample(s) : 3 nos. AAC Block (Size-600x200x125 mm) Sample for the following test. Brand: Green Sub: Testing of AAC Block.	Seal / Stamp / Mark : Marked (if any)		
Test Parameters : Drying Shrinkage	Sample received on : 22.11.2021		
	Sample tested on : 22.11.2021 to 13.12.2021		

This is to certify that the above sample (S) has/have been tested with the following results:

TEST RESULTS

1. Building Materials - Bricks & Precast Blocks:

A) DRYING SHRINKAGE:

Sl. No.	Sample Mark	Drying Shrinkage (%)		
		Findings	Avg.	Avg. of 03 Nos. of Blocks
1.	19/1	0.016	0.017	0.020
2.	19/2	0.017		
3.	19/3	0.019		
4.	20/1	0.023	0.023	
5.	20/2	0.020		
6.	20/3	0.026		
7.	21/1	0.022	0.021	
8.	21/2	0.021		
9.	21/3	0.019		
Req. as per IS: 2185 (Part-3) -1984, Gr.1				0.05 Max.

REMARKS: The above submitted sample was duly tested as per relevant specification and found satisfactory with respect to the above test parameters.

R.B.

Prepared By

For OMEGA CONSULTANT SERVICES

[Signature]

Authorised Signatory

- Note :
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Tripura : C/O.: Dharendra Chandra Das, East Side of Central Jail, P.O.- Dhaleswar, P.S.- East Agartala, Dist.- West Agartala, Pin - 799007

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Department of Civil Engineering, NIT, Silchar

No. CECON/2020/42/F-2/52

Dated Silchar 4.2.2020

TEST REPORT OF AAC LIGHT WEIGHT BLOCK
(Samples Supplied by the Client)

Client:- Hasan Ahmed Mazumdar
Barak Valley Infrastructure
Borkhola, Bonorampur

Ref.: Letter No. Nil Date Nil

Size: 60cm x 20cm x 10cm

Sl No.	Date of Testing	Compressive Strength (N/mm ²)	Average Strength (N/mm ²)
1.	31.1.20	4.75	
2.	Do	5.0	5.0
3.	Do	5.0	

Dry Density = 0.583 g/cm³

Consultant:

S. Choudhury

Dr. S. Choudhury
Professor
Department of Civil Engineering
National Institute of Technology
NIT, Silchar
Silchar-788010

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TEST-REPORT

Issued to:
Barak Valley Infrastructure,
Borkhola, Silchar -Lumding Road,
Silchar-788111(Assam)

ULR No. : TC719819000000372F
Report No. : 190907GEN00002000
Report Date : 13/09/2019
Your Ref. No. : BV/HO/19-20/0032
Date of Receipt : 07/09/2019

Sample Description : Construction Water

S. No.	Test	Units	Test Method	Results	Requirement IS 456:2000 (Clause 5.4)	Conformity
1.	Alkalinity as (Amount of 0.02N H ₂ SO ₄ required to neutralize 100ml sample of water using mixed indicator)	ml	IS 3025(Pt-23):1986 (Reaff.: 2009)	13.5	25.0 Max.	Yes
2.	Acidity as (Amount of 0.02N NaOH required to neutralize 100ml sample of water using Phenolphthalein as indicator)	ml	IS 3025(Pt-22):1986 (Reaff.: 2009)	1.0	5.0 Max.	Yes
3.	Total Dissolved Solid	mg/l	IS 3025(Pt-16):1986 (Reaff. 2012)			
	Organic Matter		Is 3025(Pt-18):1984 (Reaff.:2012)	48.0	200 Max.	
	Inorganic Matter	mg/l	IS 3025(Pt-18):1984 (Reaff.:2012)	100.0	3000 Max.	Yes
4.	Total Suspended Solid	mg/l	IS 3025(Pt-17):1984 (Reaff.:2012)	12.50	2000 Max.	Yes
5.	pH	-	IS 3025(Pt-11):1983 (Reaff. 2012)	6.79	6.0 Min.	Yes
6.	Chloride	mg/l	IS 3025(Pt-32):1983 (Reaff. 2012)	43.0	500/2000 Max. (RCC/PCC)	Yes
7.	Sulphate (SO ₃)	-	IS 3025(Pt-24):1986 (Reaff. 2012)	18.18	400Max.	Yes

End of Reports

SJ

Lab Incharge

B. N. JHA
Quality Manager

Authorised Signatory

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- (2) Total liability of our Lab is limited to the invoiced amount.
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- (5) Report refer to the sample submitted to us and not drawn by us unless mentioned otherwise.

Page-1/1

TEST REPORT

ULR No. : TC532519200001484F
 Test Report No. : W-20190816036
 Issue Date : 16/08/19
 Issued To : M/s Barak Valley Infrastructure
 Rampur, Porgona-Borkhola,
 Lumding-Silchar Road, Assam-788111.

Ref. No. : BVI/HO/19-20/00052
 Date : 24/07/19
 Job Order No. : BTH-W/BM/190801/18
 Date of Sample Receipt : 01/08/19

Sample Deposited by : Party
 Sample Description : Said to be "Fine Aggregate, Qty: One Bag".
 Date of Starting : 02/08/19

Page : 1...of...2....
 Date of Completion : 14/08/19

I. Chemical Testing
1. Building Material

S.No.	Tests & Clause Reference	Requirements as per IS 383:2016 (With 1 Amendment)	Results
1.	Alkali Aggregate Reactivity (Chemical method) (Cl. 5.6, IS 2386-7:1963 RA 2016)	-----	Innocuous Aggregate
2.	Total Alkali content as Na ₂ O equivalent, % by mass (Cl. 5.7, Table 3 IS 4032:1985 RA 2014)	0.3 Max.	0.10
3.	Total Sulphate content as SO ₃ (Cl. 5.7, Table 3 IS 4032:1985 RA 2014)	0.5 Max.	0.038
4.	Water Soluble Chloride content, % by mass (Cl. 5.7, Table 3 IS 14959-1:2001 RA 2016)	0.04 Max.	0.002

II. Mechanical Testing
1. Building Material

S.No.	Tests & Clause Reference	Requirements as per IS 383:2016 (With 1 Amendment)	Results
1.	Deleterious Material (Cl. 5.2.1 & Table 2)		
1.1	Coal & lignite, % by mass (IS 2386-2:1963) (RA 2016)	1.0 % Max.	Nil
1.2	Clay & lumps, % by mass (IS 2386-2:1963) (RA 2016)	1.0 % Max.	0.2
1.3	Material finer than 75 μ IS Sieve, % by mass (IS 2386-1:1963) (RA 2016)	15.00 % Max. (for crushed sand)	9.3
1.4	Soft Fragment, % by mass (IS 2386-2:1963 RA 2016)	N.A. (for Fine Aggregate)	N.A.
1.5	Shale, % by mass	N.A. (for crushed)	N.A.
1.6	Total of % of all deleterious material (except mica) (IS 383:2016)	2.00 % Max. (for crushed sand)	0.2
1.7	Mica Content (Note 3 SP 23)	1.00 Max. (for no tests for strength and durability)	Nil


BHARAT TEST HOUSE

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Test Report No. : W-20190816036 Job Order No. : BTH-W/BM/190801/18 Page :2... of ...2....

S.No.	Tests & Clause Reference	Requirements as per IS 383:2016 (With 1 Amendment)				Results
1.8	Organic Impurities (Note 4, IS 2386-2:1963) (RA 2016)	Colour of final solution is lighter than that of original solution.				Satisfactory
1.9	Compressive Strength (Note 4)(IS 2386-6:1963) (RA 2016)	A Fine aggregate fail in Organic Impurities Test may be used, when				
	7 Days, % by standard sand	95 % Min.				N.A.
	28 Days, % by standard sand	95 % Min.				N.A.
2.	Mechanical Properties (Cl. 5.4 & IS 2386-4:1963) (RA 2016)					
2.1	Soundness of aggregate after 5 cycle (Cl. 5.5.1 IS 2386-5:1963 RA 2016)					
2.1.1	By Na ₂ SO ₄	10 % Max.				1.5
2.1.2	By MgSO ₄	15 % Max.				2.4
3.	Water absorption, % by mass (Cl. 5.7, Table 3 IS 2386-3:1963 RA 2016)	5 Max.				1.30
4.	Specific gravity (Cl. 5.7, Table 3 IS 2386-3:1963 RA 2016)	2.1 – 3.2				2.66
5.	Size and Grading of Aggregate (Cl. 6.3, Table 9)					---
	Sieve analysis (IS sieve) (IS 2386-1:1963 RA 2016)	% of passing				---
		Zone-I	Zone II	Zone-III	Zone-IV	
	10 mm	100	100	100	100	100
	4.75 mm	90 – 100	90 – 100	90 – 100	95 – 100	98
	2.36 mm	60 – 95	75 – 100	85 – 100	95 – 100	87
	1.18 mm	30 – 70	55 – 90	75 – 100	90 – 100	74
	600 µm	15 – 34	35 – 59	60 – 79	80 – 100	51
	300 µm	5 – 20	8 – 30	12 – 40	15 – 50	15
150 µm	0 – 10	0 – 10	0 – 10	0 – 15	4	

Remarks: - Nil.

Tested by 	Authorized Signatory  TM/QM/HOD
--	--

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TEST REPORT

ULR No. : TC532519200001483F
 Test Report No. : W-20190816035
 Issue Date : 16/08/19
 Issued To : M/s Barak Valley Infrastructure
 Rampur, Porgona-Borkhola,
 Lumding-Silchar Road, Assam-788111.
 Sample Deposited by : Party
 Sample Description : Said to be "Quick Lime, Class-C".
 Date of Starting : 02/08/19

Ref. No. : BVI/HO/19-20/00052
 Date : 24/07/19
 Job Order No. : BTH-W/BM/190801/17
 Date of Sample Receipt : 01/08/19
 Page : 1...Of...1....
 Date of Completion : 12/08/19

I. Chemical Testing

1. Building Material

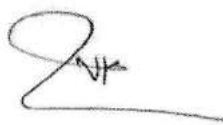


S.No	Tests & Clause Reference	Requirements as per IS 712:1984 (With 2 Amendments) for Class-C	Results
		Quick	
A.	Chemical Tests		
1.	Calcium and Magnesium oxide (on ignited basis) (IS 6932-1:1973)	85 % Min.	87.4
2.	Magnesium oxide (on ignited basis) (IS 6932-1:1973)	6 % Max.	3.0
3.	Insoluble residue in dilute acid and alkali, (On ignited basis) (IS 6932-1:1973)	2 % Max.	1.13
4.	Carbon dioxide, (On oven dry basis) (IS 6932-2:1973)	5 % Max.	1.10
5.	Available lime as CaO (IS 1514:1990)	75 % Min. (on dry basis)	78.4

II. Mechanical Testing

1. Building Material

A.	Physical Tests		
1.	Residue on slaking (IS 6932-3:1973)		
	Residue on 850 micron IS Sieve	5 % Max.	Nil
	Residue on 300 micron IS Sieve	5 % Max.	0.30
2.	Workability bumps (IS 6932-8:1973)	12 Max.	10
3.	Volume Yield (IS 6932-6:1973)	1.7 ml/g Min.	2.06

Remarks: Nil.

Tested by 	Authorized Signatory 
	 TM/QM/HOD

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TEST REPORT

Test Report Issued To:

BARAK VALLEY INFRASTRUCTURE

6TH FLOOR, SRI KAMAKHYA TOWER BEHIND, SOHUM SHOPPE, CHRISTIAN BASTI, G.S.ROAD, GUWAHATI, ASSAM, INDIA, 781005.

Test Report No: N190806021/N190806021-1

Date of Issue: 4-Sep-2019



Sample Booking/Receipt Date: 06-Aug-2019

Date of Start of Testing: 07-Aug-2019

Date of Completion of Test: 04-Sep-2019

Customer Relationship Number

55582

Sample Description :

AAC BLOCK



Customer Reference No :

Kind Attention : MS. PRARTHANA SHARMA

E-Mail: prarthana.sharma@kndia.com

Contact No: 8789708637

Sample Condition : NA

Sample Quantity (Approx) : NA

Sample Size (Approx) : NA

SAMPLE NOT DRAWN BY OUR LABORATORY. THE RESULTS RELATE ONLY TO THE ITEMS TESTED



Report Issued by

Authenticity of report can be verified by mail at verification@spectrolab.in

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TEST REPORT**ID: N 190806021-1****AAC BLOCK (Autoclave cellular Aerated concrete blocks)**

PARTICULARS OF THE SAMPLE SUBMITTED	AAC (AUTOCLAVED AERATED CONCRETE) BLOCKS
a) Nature of Sample	
b) Grade/Variety/Type/Class/Size etc.	Grade 1, Density: 551 to 650 kg/m ³
c) Declared values, if any	600 x 200 x 100 MM
d) Code No. / Make	---
e) Batch No. & Date of Manufacture	---
f) Quantity	24 Nos.
g) Date of Receipt in Lab	06.08.2019
j) Any other information/ Expiry date, if any	N/A
k) Date of start of testing	07.08.2019
l) Date of Completion of testing	29.08.2019

SUMMARY OF TESTING

S. No.	Measurement/ Testing	Total No of Tests	No. of tests Passed	Page No.
1.	Chemical Requirement	N/A	N/A	N/A
2.	Physical Requirement	7	7	3-7

Total No. of test to be conducted: 07

No. of test for which sample passed: 07

Abbreviations used: P = Pass, F = Fail, N/A = Not Applicable


 Analyst Signature


Authorised Signatory

Cl. 8.1	General	P
Test Method: IS 2185 (P-3):1984 Cl. 8.1 & 8.1.1		
General Observations	All the blocks are sound and free from cracks	
Specific Requirements as per Cl. 8.1 of IS 2185 (P-3): 1984	All units shall be sound and free of cracks or other defects which interfere with the proper placing of unit or impair the strength or performance of the construction. Minor chipping resulting from the customary methods of handling during delivery, shall not be deemed grounds for rejection.	
General Observation (Where units are to be used in exposed wall construction)	N/A	
Specific Requirements as per Cl. 8.1.1 of IS 2185 (P-3): 1984	Where units are to be used in exposed wall construction, the face or faces that are to be expelled shall be free of chips, cracks, or other imperfections, except that if not more than 5 percent of a consignment contains slight cracks or small chippings not larger than 25 mm, this shall not be deemed grounds for rejection.	

Cl. 3.3	Observation	P
Test Method: IS 2185 (P-3):1984 Cl. 3.3		
Observations	The faces of the AAC blocks are flat and rectangular, opposite faces are parallel and all arises are square. The bedding surfaces are at right angles to the faces of the blocks.	
Specific Requirements as per Cl. 3.3 of IS 2185 (P-3): 1984	The faces of masonry units shall be flat and rectangular, opposite faces shall be parallel, and all arises shall be square. The bedding surfaces shall be at right angles to the faces of the blocks.	



Analyst Signature




Digitally signed
by ANSHUL
KUMAR
Date: 2019.08.29
14:17:54 +05:30

Authorised Signatory

TEST REPORT

Cl. 8.2	Dimensions, mm								P
	Test Method: IS 2185 (P-3):1984 (Cl. 3.2.1 & 3.2.3)								
Length, mm	Sam-1	Sam-2	Sam-3	Sam-4	Sam-5	Sam-6	Sam-7	Sam-8	Avg.
	600.3	600.8	600.8	600.8	600.8	600.5	600.8	600.8	
	Sam-9	Sam-10	Sam-11	Sam-12	Sam-13	Sam-14	Sam-15	Sam-16	
	600.5	600.5	600.5	600.5	600.3	600.3	600.8	600.5	
	Sam-17	Sam-18	Sam-19	Sam-20	Sam-21	Sam-22	Sam-23	Sam-24	
	600.5	601.0	600.8	600.8	600.5	600.3	600.0	600.5	601
Specific Requirements as per Cl. 3.2.1 of IS 2185 (P-3): 1984								600	
Specific Tolerance as per Cl. 3.2.3 of IS 2185 (P-3):1984								± 5 mm	
Height, mm	Sam-1	Sam-2	Sam-3	Sam-4	Sam-5	Sam-6	Sam-7	Sam-8	Avg.
	200.2	199.8	200.0	200.8	200.2	200.2	200.5	200.2	
	Sam-9	Sam-10	Sam-11	Sam-12	Sam-13	Sam-14	Sam-15	Sam-16	
	200.5	200.7	200.7	200.2	200.8	200.2	200.5	200.7	
	Sam-17	Sam-18	Sam-19	Sam-20	Sam-21	Sam-22	Sam-23	Sam-24	
	200.3	200.7	200.3	200.5	200.2	200.5	200.0	200.3	200
Specific Requirements as per Cl. 3.2.1 of IS 2185 (P-3): 1984								200	
Specific Tolerance as per Cl. 3.2.3 of IS 2185 (P-3):1984								± 3 mm	
Width, mm	Sam-1	Sam-2	Sam-3	Sam-4	Sam-5	Sam-6	Sam-7	Sam-8	Avg.
	99.7	99.7	99.7	99.4	99.4	99.6	99.7	99.6	
	Sam-9	Sam-10	Sam-11	Sam-12	Sam-13	Sam-14	Sam-15	Sam-16	
	99.7	99.4	99.1	99.7	99.6	99.9	99.9	99.9	
	Sam-17	Sam-18	Sam-19	Sam-20	Sam-21	Sam-22	Sam-23	Sam-24	
	99.9	100.0	99.7	99.4	99.7	99.6	99.9	99.7	100
Specific Requirements as per Cl. 3.2.1 of IS 2185 (P-3): 1984								100	
Specific Tolerance as per Cl. 3.2.3 of IS 2185 (P-3):1984								± 3 mm	

Analyst Signature



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TEST REPORT

Cl. 8.3	Block Density, kg/m³									P
Test Method: IS 6441 (P-1):1972 (RA-2012)										
Moisture Content %	Sam-1	Sam-2	Sam-3	Sam-4	Sam-5	Sam-6	Sam-7	Sam-8	Sam-9	Avg (Ȳ)
Individual Readings	26.93	23.11	24.27	25.80	22.13	23.14	22.47	25.71	26.70	—
Average (Test Series)	24.77			23.69			23.07			24.5
Block Density, kg/m³	Sam-1	Sam-2	Sam-3	Sam-4	Sam-5	Sam-6	Sam-7	Sam-8	Sam-9	Avg (Ȳ)
Individual Readings	600.78	631.41	621.01	613.37	624.34	595.57	594.48	630.20	627.47	—
Average (Test Series)	617.73			611.09			626.08			615
Specific Requirements as per Cl. 8.3 of IS 2185 (P-3): 1984									551-650	
Criteria of conformity as per Cl. 11.2 of IS 2185 (P-3): 1984									Ȳ within a range of 551-650	

Cl. 8.4	Compressive Strength, N/mm²									P
Test Method: IS 6441 (P-5):1972 (RA-2012)										
Sample No.	Sam-1	Sam-2	Sam-3	Sam-4	Sam-5	Sam-6	Sam-7	Sam-8	Sam-9	
Moisture Content, % (Individual Readings)	10.2	10.5	10.3	11.2	10.5	10.5	11.0	10.7	10.1	
Bulk Density, kg/m³ (Individual Readings)	618	616	616	622	621	621	618	615	618	
Compressive Strength, (Individual Readings)	4.17	4.65	4.34	4.35	4.39	4.39	4.12	4.18	4.42	
Average Compressive Strength (Test Series)	4.39			4.38			4.24			
Sample No.	Sam-10	Sam-11	Sam-12	Sam-13	Sam-14	Sam-15	Sam-16	Sam-17	Sam-18	
Moisture Content, % (Individual Readings)	10.2	9.9	10.1	10.3	10.5	10.9	10.1	11.1	11.1	
Bulk Density, kg/m³ (Individual Readings)	615	619	617	617	615	618	616	616	614	
Compressive Strength, (Individual Readings)	4.87	4.34	4.85	4.38	4.86	4.73	4.84	4.44	4.39	
Average Compressive Strength (Test Series)	4.69			4.66			4.56			

K. K. K.
Analyst Signature



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Cl. 8.4	Compressive Strength, N/mm²									P
	Test Method: IS 6441 (P-5):1972 (RA-2012)									
Sample No.	Sam-19	Sam-20	Sam-21	Sam-22	Sam-23	Sam-24	Sam-25	Sam-26	Sam-27	
Moisture Content, % (Individual Readings)	10.9	10.6	10.9	11.1	10.9	10.9	11.2	9.9	9.7	
Bulk Density, kg/m³ (Individual Readings)	615	617	616	622	616	614	617	616	618	
Compressive Strength, (Individual Readings)	4.43	4.14	4.56	4.25	4.56	4.42	4.62	4.13	4.17	
Average Compressive Strength (Test Series)	4.37			4.41			4.31			
Sample No.	Sam-28	Sam-29	Sam-30	Sam-31	Sam-32	Sam-33	Sam-34	Sam-35	Sam-36	
Moisture Content, % (Individual Readings)	9.6	10.9	10.5	10.7	10.6	10.8	10.5	10.3	10.1	
Bulk Density, kg/m³ (Individual Readings)	618	618	617	616	614	616	615	615	616	
Compressive Strength, (Individual Readings)	4.34	4.54	4.43	4.36	4.86	4.56	4.32	4.44	4.84	
Average Compressive Strength (Test Series)	4.43			4.59			4.53			
Average Moisture Content, %									10.5	
Average Bulk Density, kg/m³									617	
Average Compressive Strength, N/mm²									4.46	
Average Compressive Strength as per Cl. 8.4 of IS 2185 (P-3):1984							4.0 Min			
Criteria of conformity as per Cl. 11.3 of IS 2185 (P-3): 1984							X-0.6R ≥ 4.0			

Cl. 8.6	Drying Shrinkage, %									P
	Test Method: IS 6441 (P-2):1972 (RA-2012)									
Drying Shrinkage, %	Sam-1	Sam-2	Sam-3	Sam-4	Sam-5	Sam-6	Sam-7	Sam-8	Sam-9	Avg
	0.029	0.028	0.027	0.028	0.026	0.026	0.029	0.030	0.030	0.028
Specific Requirements as per Cl. 8.6 of IS 2185 (P-3): 1984								0.05		
Criteria of conformity as per Cl. 11.5 of IS 2185 (P-3): 1984								Yes		

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Analyst Signature




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ID-N190806021-1

Cl. 8.5	Thermal Conductivity in air dry condition, W/mK	P		
	Test Method: IS 3346:1980			
		Sample-1	Sample-2	Sample-3
	Thickness of the specimen tested (Mean of Two Specimens), mm	25	25	25
	Mass after drying of the two specimens used for the test (Total mass), gm	774	790	786
	Temperature of drying, °C (oven dry Method)	105	105	105
	Density, before test just after placing the samples in the apparatus, of the two specimens used for the test (mean for two specimens), kg/m ³	605	618	615
	Moisture as received, in the two specimens used for the test (mean for two specimens), %	10.3	10.1	10.2
	Moisture regain, during test, of the two specimens used for the test (mean for two specimens), %	1.0	0.98	1.08
	Hot face Temperature (mean for two specimens), °C	75	75	75
	Cold face temperature (mean for two cold faces), °C	25	25	25
	Mean temperature of the test (arithmetic mean of the hot and cold face temperature), °C	50	50	50
	Orientation of plane of specimen (Horizontal)	Horizontal	Horizontal	Horizontal
	Thermal Conductivity in air dry Condition, W/mK	0.20	0.20	0.21
	Average Thermal Conductivity in air dry Condition, W/mK	0.20		

-- End of Test Report --



Analyst Signature



Authorised Signatory

Spectro Analytical Labs Limited S-1, GNEPIP, Surajpur Industrial Area Phase-V, Kaska, Greater Noida-201308 (India)

Phone : +91-120-2341250, 2341251 || URL : www.spectro.in || Email : care@spectro.in

BIS & DDA Approved, ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Laboratory

PURCHASE ORDER



Larsen & Toubro Limited, Construction

PB No 979, Mount-Poonamallee Road,
Manapakkam, Chennai - 600089,
Tamilnadu, India
CIN - L99999MH1946PLC004768
Tel No. : 044-22526000
Fax No. : 044-22526059
Website : <https://eip4.Intecc.com>
Email :

ORDER NO. : LE/LE200202/POD/21/000168
PO DATE : 16-Dec-2021
LATEST AMENDMENT NO : -
AMENDMENT DATE : -
VALUE : 20,50,160.00 INR
STATUS : **AUTHORIZED**



Order Essentials

Job : LE200202 - TATA Cancer Care Hospitals - Silchar (L2)
Payment Centre : SZ000010 - Shared Services Centre - Accounting Center
Type : Revenue and Domestic
Purchase Group : Project
Delivery Period : 20-Nov-2021 to 30-Jan-2022
RFQ No. : LE/LE190206/RFQ/21/000403
BQ No. : 2

Vendor Details

Name : V0080952 - BARAK VALLEY INFRASTRUCTURE
Address : Ramupur, Porgona-Borkhola, Lumding-Silchar Road, Silchar, Cachar, Assam, 788111
Cachar
State : Assam - 0
Country : India
Mobile : 9920441783
Phone :
Email : harsh@greenaac.com
PO Accepted : No

Statutory Details - Job

GST : 18AAACL0140P3ZG
GST State : Assam
Vertical : Larsen & Toubro Limited, Construction

Statutory Details - Vendor

GST : 18AATFB2571N1ZS
GST State : Assam
Vertical :

Billing To

LE200202 - TATA Cancer Care Hospitals - Silchar (L2)
Ghungoor Road, Masimpur, Uttar Krishnapur

Not Available
Not Available
Assam
India - 788014 .

Shipping To

6305 - DESIGN & CONSTRUCTION OF CANCER CARE HOSPITALS SILCHER
Ghungoor Road, Masimpur, Uttar Krishnapur

-
-
Assam
India - 788014.

Refer Annexure Details

Delivery Schedule, Itemwise Tax Details

PURCHASE ORDER



**Larsen & Toubro Limited,
Construction**

PB No 979, Mount-Poonamallee Road,
Manapakkam, Chennai - 600089,
Tamilnadu, India
CIN - L99999MH1946PLC004768
Tel No. : 044-22526000
Fax No. : 044-22526059
Website : <https://eip4.lntec.com>
Email :

ORDER NO. : LE/LE200202/POD/21/000168
PO DATE : 16-Dec-2021
LATEST AMENDMENT NO : -
AMENDMENT DATE : -
VALUE : 20,50,160.00 INR
STATUS : **AUTHORIZED**



Material Abstract

Code - Description	Amend. No	Quantity	Basic Rate	Net Rate	Total Value
6CG1M004N000000 - AUTOCLAVED AERATED CONCRETE (AAC) BLOCK; LENGTH :- 625 mm; HEIGHT :- 250 mm; WIDTH :- 150 mm; DENSITY :- 551 kg/cum - 650 kg/cum; STRENGTH :- 4 N/sq. mm; DRYING SHRINKAGE (%) :- .05; GRADE 1;	0	500.0000	[REDACTED]		
HSN : 68029900-GST 12%	UOM : Cubic metre				

In Words : Twenty Lakh, Fifty Thousand, One Hundred Sixty Indian rupee and Zero Paise Only

Grand Total : 20,50,160.00

Payment Terms

- 100% After Receipt of Materials against MRN Value. with validity 0 Days from PO Delivery Date. Payment shall be made through Cheque , with 30 days of credit from MRN Date along with Invoice.

Essentials Details

Attribute Details	Attribute Value
Direct Supply to Client	No
Price Variation	Not Applicable
Transport - Work Order	Not Required
Order Expiry Date	31-Jan-2022
Delivery Terms	AT OUR SITE STORES
ASN	Not Applicable

Quotation Details

RFQ Number	BQ Number	PR Number
LE/LE190206/RFQ/21/000403	2	LE/LE200202/PRC/21/000034

PURCHASE ORDER



**Larsen & Toubro Limited,
Construction**

PB No 979, Mount-Poonamallee Road,
Manapakkam, Chennai - 600089,
Tamilnadu, India
CIN - L99999MH1946PLC004768
Tel No. : 044-22526000
Fax No. : 044-22526059
Website : <https://eip4.lntec.com>
Email :

ORDER NO. : LE/LE200202/POD/21/000168

PO DATE : 16-Dec-2021

LATEST AMENDMENT NO : -

AMENDMENT DATE : -

VALUE : 20,50,160.00 INR

STATUS : **AUTHORIZED**



ANNEXURE : Delivery Schedule

Code - Description	Quantity	UOM	Deliver Between
6CG1M004N000000 - AUTOCLAVED AERATED CONCRETE (AAC) BLOCK; LENGTH :- 625 mm; HEIGHT :- 250 mm; WIDTH :- 150 mm; DENSITY :- 551 kg/cum - 650 kg/cum; STRENGTH :- 4 N/sq. mm; DRYING SHRINKAGE (%) :- .05; GRADE 1;	500.00	Cubic metre	20-Nov-2021 to 30-Jan-2022

Schedule Number	Quantity	Deliver Between	Remarks
1	500.00	20-Nov-2021 to 30-Jan-2022	

PURCHASE ORDER



**Larsen & Toubro Limited,
Construction**

PB No 979, Mount-Poonamallee Road,
Manapakkam, Chennai - 600089,
Tamilnadu, India
CIN - L99999MH1946PLC004768
Tel No. : 044-22526000
Fax No. : 044-22526059
Website : <https://eip4.Intecc.com>
Email :

ORDER NO. : LE/LE200202/POD/21/000168
PO DATE : 16-Dec-2021
LATEST AMENDMENT NO : -
AMENDMENT DATE : -
VALUE : 20,50,160.00 INR
STATUS : **AUTHORIZED**



ANNEXURE : Materialwise Tax Details

Code - Description	Source	Destination	Tax Component	Tax Value
6CG1M004N000000 - AUTOCLAVED AERATED CONCRETE (AAC) BLOCK; LENGTH :- 625 mm; HEIGHT :- 250 mm; WIDTH :- 150 mm; DENSITY :- 551 kg/cum - 650 kg/cum; STRENGTH :- 4 N/sq. mm; DRYING SHRINKAGE (%) :- .05; GRADE 1;	Assam	Assam	CGST 6.0%	
			SGST 6.0%	
Total Tax Value:				

Note : The Purchase Order Shall be governed by the “General Conditions of Contract for Procurement of Materials / Equipment” until unless specified. it is important that seller confirms acceptance of this Purchase Order within 7 days of receipt. Failure to return the acceptance does not diminish the responsibilities as set forth herein, but may result in a delay to any payments that may be due and may be a cause of termination of this Purchase Order.

In case of any clarification required, please contact the Purchase Order Issuing Authority.

**ACC/2021-22/PO/D-419**
18/01/2022**Date:****To,**
Barak Valley Infrastructure
C/o Steel Traders, Hospital Road
Cachar, Assam**Subject:** Purchase order GREEN AAC BLOCK at site EKLAVYA MODEL RESIDENTIAL SCHOOL(EMRS)

As per provide quotation rate with you, we are placing the order item indicated below for Government Civil Works at EKLAVYA MODEL RESIDENTIAL SCHOOL details are as under:-

Kind attention: Vijay Sales

	Name of Goods	Qty.	Unit	Rate	Amount
1	GREEN AAC BLOCK 600MMX200MMX200MM	100	CUM		

Terms & Conditions:

1. GST included with the rate
2. FOR at site
3. Unloading Borne by us (ACC)

Billing address :

1. Firm Name : M/s-Aggarwal Construction Co.
2. GST No.: : **16AADPA0098D1ZB**
3. Bill Address : Pabiacherra, Kumarghat, Kuarghat Unakoti :
:Tripura -799264
4. Site Address : EKLAVYA MODEL RESIDENTIAL SCHOOL
:(EMRS) - PHASE-I AT BLOCK - MANU, DISTRICT -
: DHALAI, TRIPURA" Pin Code 799275,

Contact Person Name & Mobile No. : Manish Aggarwal 956601-68162
: accdelhi2019@gmail.com

Thanking you,

For M/s Aggarwal Construction Co.

Sanjeev Aggarwal
(Proprietor)

