



Protect Nature
for Sustainable Future



Harden Bricks Pvt. Ltd.

An ISO 9001: 2015 Company

Registered Office:

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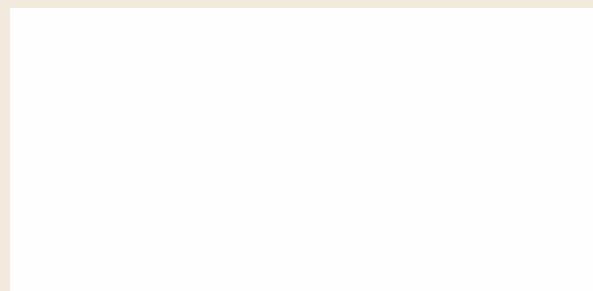
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An ISO 9001 : 2015 Company



We are a Credible Green Manufacturer

Zero discharge plant
Utilizing more than 15,00,000 kg of ash every month
Rain water harvesting

The constant commitment to a Greener Future

It is no child's play, when it comes to the task of turning industrial wastes into sustainable eco-friendly construction products. Yet, progressing onwards with the professional values of serious determination and total commitment, Harden Bricks has succeeded in making a name of its own. Uniform upkeep of excellence and quality in products has served as the foundation of Harden Bricks's repute.

The concern that stems up readily with the vast scales of urbanization is the total ransacks of the environment through the use of alluvial soil for the making of traditional construction bricks. Harden Bricks has taken to this global concern by providing the solution of manufacturing fly ash bricks. Starting off in 2013, the company now successfully stands as the leading manufacturer of fly ash bricks, pavers and allied precast products in the state of West Bengal.

Harden Bricks caters with an expansive radius of service, ranging from products for residential projects to that of big commercial ventures. The customer experience counts heavily for Harden Bricks and every care is taken to provide the same of the highest possible standard.

Spread over 3 acres of land, the company has its production capacity going upto one lakh bricks per day. This apart, Harden Bricks also manufactures other cement products like Pavers, Kerb Stone, Concrete Blocks and more. It is mentionable, in 2020, Harden Bricks took over the Lafarge Unit of Bricks & Blocks manufacturing at Kharda, Kalyani Expressway. The installed machine at the manufacturing site is a Hess RH500, which is Eastern India's one & only and spread over 1.5 acres of land. Presently the company manufactures 1.2 million bricks a month and the combined capacity yields more than 3 million bricks per month.

The reputation of Harden Bricks is a hard earned one that has been made possible with the strict lookout to maintain excellence in quality, total immersion in commitment and service.

Harden Bricks is the member of Indian Green Building Council. The manufacturing facility has earned ISO 9001:2015 certification in producing 'Green' building construction materials. The company is also the founding member of All India Association of Fly Ash Products Manufacturer and Pavers and Block Manufacturers Association.

The products manufactured comply with

- Fly Ash Bricks: **BIS Code 16720:2018**
- Hollow Block & Solid Block: **BIS Code 2185:2005**
- Pavers: **BIS Code 15658:2021**
- Kerb Stones: **BIS Code 5758:2005**

Making a Green Impact

with eco-friendly bricks

"We Need to Save Our only Home, Our Planet."

It is a complete waste and a major environmental damage as rich cultivable top soil gets randomly used to make bricks. Surely such action has direct ramifications with the crop and food production of the country. Fly Ash Bricks on the contrary are Eco-Friendly and uses the waste of thermal power plants thus becoming cost effective solutions to this problem.





Controlled Procedure of manufacturing

The Big Four Hardening Tests

- 1** First, the raw material has to be right. Fly Ash, Aggregate Dust, Sand, Cement and Water is mixed in the right quantity to form a composite mortar in an automatic mixing machine.
- 2** Then a fully automated machine is deployed to manufacture the products.
- 3** The products are then dried under covered shade. When dry to the specifications, they are laid out in stacks and cured for a minimum of 21 days.
- 4** After 7 days of sun drying the products are tested for strength and ready for dispatch.

Production

Control Mechanism

- Ensuring quality consistency by mixing sand and other raw materials in real time
- Monitoring the exact moisture content and control the water addition to the mixture
- Using moisture measurement sensor Hydronix to get accurate moisture level in the mixture of water/cement ratios

This modern moisture sensor technology helps to make sure the perfect manufacturing process



Economical Construction Material



Advantages

of Harden Bricks



Cost Saving

Faster | Less of mortar |
Timely delivery



Ease of Working

Smooth and uniform size



Better Thermal Property



**Higher Compressive
Strength**

>80kg per sq/cm



Fire Resistant



Pest Resistant



Higher Carpet Area



**Resistance to Salinity
and Water Seepage**



Better Acoustic Properties

Esteemed Clients

Client speak

We have known M/s Harden bricks Pvt. Ltd. from its very inception as they have been supplying its products - fly ash bricks - to our various building projects. We are very pleased with the uncompromising quality of its products and schedule of delivery. We sincerely appreciate its responsiveness and the way they conduct business. We have no doubt whatsoever in recommending their product to others because of our satisfaction of their service and we look forward to doing business with them for all our on-going and future projects.

Mr. Jugal Khetawat
Chairman, Rameswara Group
South City Projects

Abhishek Agrawal
★★★★★

Good quality bricks.
Much much better then rubber moulded bricks

Dev Sharma
★★★★★

The company deals with superior quality products.

Anupam Bajoria
★★★★★

Durable and best quality bricks and pavers.

Indranil Roy
★★★★★

Ordered 5000 pieces of ash bricks on 23.05.23, delivery made on the same date as well. Good quality of commodities alongwith secured form of transportation.

*Source-Google Reviews

This is to certify that we have used the fly ash bricks manufactured & supplied by M/s Harden Bricks Pvt. Ltd. for our various projects and we are very satisfied with their quality, performance, service & price.

Ahluwalia Contracts India Ltd.

We have used the fly ash bricks manufactured & supplied by M/s Harden Bricks Pvt. Ltd. for our project site and we are satisfied with their quality performance.

Parijat Mukhopadhyay
Manager - Materials
for ITD Cementation India Limited

Koustav Kundu
★★★★★

Brick mfg

Isaac Mangalaraj
★★★★★

Timely delivery

Dharm Prakash
★★★★★

Best quality, delivery as per commitment

Wasim Ali Mondal
★★★★★

Good to work with harden bricks. Commitment level, pricing and quality of products are really fantastic....



Our Esteemed Clients



...many more

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Specifications of

Cement Bricks

	Technical Evaluation	Fly Ash Brick
1	Colour	Grey
2	Basic Ingredient	Fly Ash + Cement + Sand + Stone Dust + Water
3	Density (kg/cubic meter)	1600 - 1700
4	Compressive Strength (Kg/Cm ²)	80 - 100*
5	Water Absorption	<15%
6	Drying Shrinkage	0.03%
7	Breakage in Transit	Less than 2%
8	Efflorescence	Nil
9	Eco-friendly	Yes
10	Mortar Saving - During laying	10 - 15%
	During Plaster	10 - 15%

*Compressive strength can be increased as per customers requirement.

Technical Evaluation Bricks

Technical Evaluation		Clay Brick	Auto Claved Brick	Fly Ash Brick
Porosity (Vacuum Process)	(%)	35.84	73.92	28.56
Density (gm/cc)		1.90	0.60	1.7
Thermal Conductivity (W/mK)	at 40°C	1.50	0.24	0.22
Cracking Test at elevated temp	at 200°C	No crack	No crack	No crack
	at 400°C	No crack	No crack	No crack
	at 600°C	No crack	No crack	No crack
	at 800°C	No crack	No crack	No crack
	at 1000°C	Bulged e-shaped	No future test after 800.c since brick cracked	No crack
Acid resistant test (%) loss		21.53	20.51	8.38



Hollow Blocks



Hollow blocks are made of concrete and have hollows in the middle. Eco-friendly hollow blocks are great for their durability, construction speed and cost-effectiveness.

Advantages

- Highly Durable
- Good Resistance to Fire
- Low Maintenance
- Thermal and Sound Insulation
- Environment Friendly
- Cost Savings of Upto 20%

Size (Inch)	Length (mm)	Height (mm)	Thickness (mm)	Strength (N/mm.sq)	Weight (Kg)
4"	390	190	90	7	12
6"	390	190	150	7	15
8"	390	190	190	7	17

* Weight Approximate

Solid Blocks



Size (Inch)	Length (mm)	Height (mm)	Thickness (mm)	Strength (N/mm.sq)	Weight (Kg)
4"	390	200	90	10	14
6"	400	200	150	10	25
8"	400	200	200	10	34

* Weight Approximate

Bricks



190 X90 X90



230 X110 X70



190 X 190 X 90



250 X120 X70



250 X 120 X 70





Hydraulic Pavers

Hydraulic Pavers are consisting of solid concrete blocks that are laid on a bedding material bound by kerb stones. These look much better than normal concrete slabs.

Advantages

- Highest strength density
- Lowest water absorption
- Cost-effective
- Available in various patterns & colours
- Roads made of pavers are highly durable
- Zero maintenance



I Shape Paver
60 mm
3.10 Pcs / Sq.ft



Half Uni Paver
60 / 80 mm
3.44 Pcs / Sq.ft



Uni Paver
60 / 80 / 100 / 120 mm
3.44 Pcs / Sq.ft



Square Paver
60 mm
2.25 Pc / Sq.ft

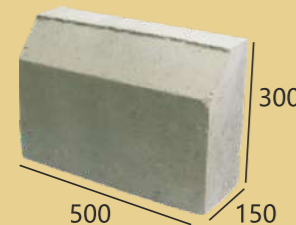


Mini Square
60 / 80 mm
4.46 Pcs / Sq.ft



Brick Paver
60 / 80 / 100 mm
4.46 Pcs / Sq.ft

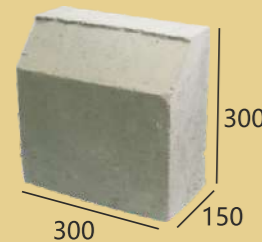
Kerb Stones & Water Channel



Length = 500
Height = 300
Thickness = 150



500 X 300 X 100
390 X 200 X 90



Length = 300
Height = 300
Thickness = 150



Length = 200
Height = 410
Thickness = 125

Kerb Stones are concrete solid that is fixed end to end with other solids to form a Kerb. They are generally used for forming curves, corners and transition without cutting.

Advantages

- Highest strength & density
- Available in various sizes and patterns
- Available in various colours
- Protects path from roads and other external surfaces
- Provides attractive look to gardens

Grass Pavers

Grass pavers use interlocking grids that evenly distribute vehicle weight and other loads. These pavers can allow rainwater to infiltrate the ground. They also make pavements attractive.

Advantages

- Hard Standing
- Erosion Control
- Ground Armoring
- Access Paths and Parking in Environmentally Sensitive Areas
- Ground water recharge
- Can bear the load of fire tenders



400 X 400 X 80 mm



300 X 300 X 80 mm
1 Pc / Sq.ft



300 X 300 X 120 mm
1 Pc / Sq.ft

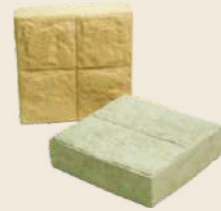
Pavers



Zig-zag
60 / 80mm 2.88 Pcs / Sq.ft



Square
2.25 Pcs / Sq.Ft



Cobble
60mm 2.25 Pcs / Sq.ft



Rectangle
60 mm Block 4.46 Pcs / Sq.ft



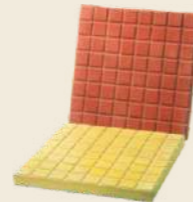
Cosmic
60mm 1.85 Pcs / Sq.ft



Dumbbell
60mm 2.4 Pcs / Sq.ft



Earth Pie
25mm 1Pc/Sq.ft



Checker Tile
25mm 1Pc/Sq.ft

Shot Blast Pavex



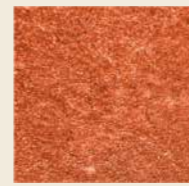
Yellow



Deep Red



Black



Red



Grey

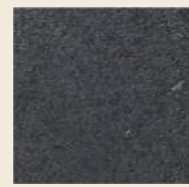
Plain Pavex



Yellow



Brown



Black



Red



Grey

Cover Block



20 X 25 X 40 X 50 mm



75 mm Footing Pyramid



150 mm Round

Cover block is a spacer that is used to lift the rebar matrix off the ground so that concrete may flow under the rebar.

Advantages

- Maintains distance between the rebar & shuttering
- Protects steel bars from corrosion
- Provides thermal insulation
- Enhances the life of the structure
- Cost-effective

Readymade Precast Boundary Wall



Precast Boundary wall from Harden Bricks are of high density and durable compared to traditional brick work. These precast walls are faster to construct, require no plasters and cost effective.

Dimension:

Height: 5ft to 10ft
Length: 7ft X 1ft
Thickness: 50mm

How to Install

- Finalise the wall design
- After the design is approved the production of moulds will start
- The moulds are formed, rebar and other reinforcing are added and the concrete poured
- The expert technician check the quality
- Fence footing will be installed on the location
- The concrete walls will be shipped to the project site
- Install wall sections to the exact spot along with the fence line