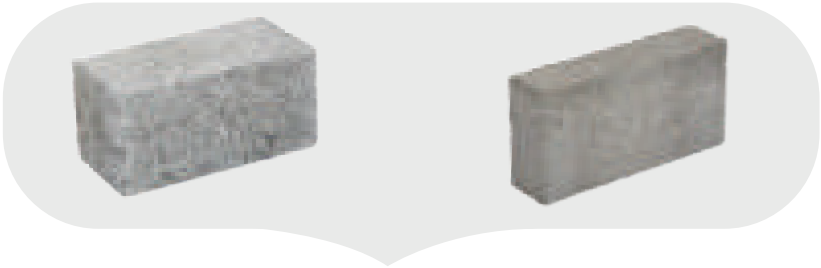
CHELSEA CONCRETE

THE RIGHT SOLUTION

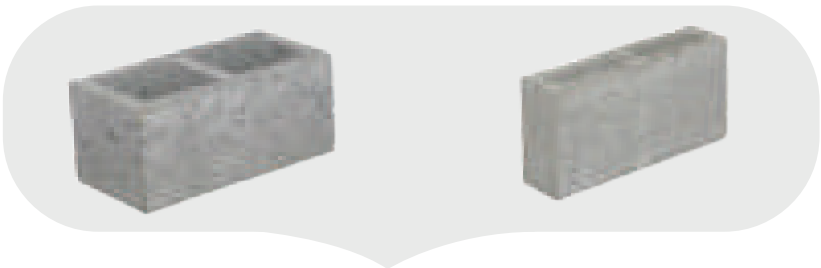
ABOUT US

Persistent innovation and exceptional customer service form the foundation of our values and these founding principles have marked every venture of Chelsea, making us one of the leading names in the vast world of concrete.

CONCRETE BUILDING BLOCKS



Block Type	8"SOLID	4" SOLID
Dimensions(mm)	L: 400 W: 200 H: 200	L: 400 W: 100 H: 200
Compressive Strength	13-14 N/mm²	13-14 N/mm²
Water Absorption by weight	3-5%	3-5%



Block Type	8"SOLID	4" SOLID
Dimensions(mm)	L: 400 W: 200 H: 200	L: 400 W: 100 H: 200
Compressive Strength	7-7.5 N/mm²	7-7.5 N/mm²
Water Absorption by weight	3-5%	3-5%

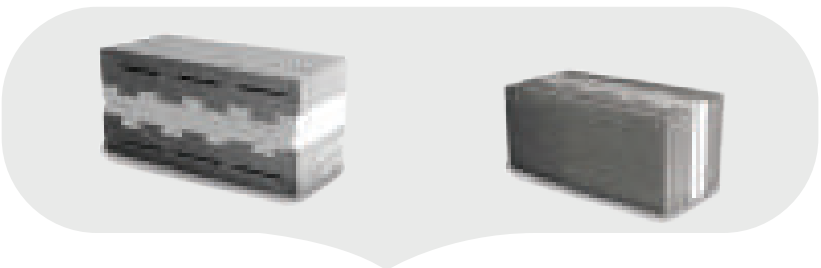
THERMAL INSULATED BLOCK

The Right Solution for sustainable & quick results

Reduce air conditioning

Quicker construction

Minimize time for R.O.I.



Dimensions (mm)	L: 400 W: 200 H: 200
Compressive Strength	7-7.5 N/mm
Water Absorption by Weight	3-5%
u Value	0.028

FLY ASH BRICK

COST REDUCTION & AREA INCREMENT

COMPARING 400 X 100 X 200mm BLOCK WITH 10" BRICK WALL

USE 113 BLOCKS INSTEAD OF 950 BRICKS

REDUCED COST	INCREASED AREA
34.48%	14.97sq. ft.

COMPARING 400 X 100 X 200mm BLOCK WITH 5" BRICK WALL

USE 113 BLOCKS INSTEAD OF 500 BRICKS

REDUCED COST	INCREASED AREA
22.72%	9.41sq. ft.

SPECIFICATION

SIZE:-

Length : 200 mm
Width : 100 mm
Thickness : 75 mm

Application : Compressive strenght can be adjusted according to your desired application.

COMPARISON OF COST OF DIFFERENT MASONRIES

(Estimated for an average area of 10m² 200 mm thick masonry wall area of)

TYPE OF MASONRY	Brick / Blocks / AAC Blocks		COST OF RAW MATERIALS FOR JOINTS					COST OF RAW MATERIALS FOR PLASTER					TOTAL COST OF MASONRY (₹)
			Sand		Cement		Total cost of Raw materials (₹)	Sand		Cement		Total cost of masonry Plastering (₹)	
	Nos	Rate / Each (₹)	Cum	Rate / m³	No. of Bags	Rate / Bag		Cum	Rate / m³	No. of bags	Rate / Bag		
Brick Masonry 230 x 100 x 75 mm	1150	3.5	0.74	580	4.24	280	5641	0.64	580	4.608	280	1661	7303
Solid Concrete Block 400x 200 x 200 mm	125	30	0.24	580	1.38	580	4276	0.12	580	3.168	280	957	5232
AAC Block 725 x 200 x 200 mm	69	80.64	0.2	580	1.15	580	6002	0.1	580	2.88	280	864	6867
CLC Block 600 x 200 x 200 mm	83	80	0.24	580	1.5	580	7199.2	0.35	580	2.15	280	805	8004
Fly Ash Bricks 230 x 110 x 75 mm	1150	3	0.61	580	3.5	580	4783.8	0.48	580	3.456	280	1246	6030

Specification

		METRIC	IMPERIAL
Coverage per pallet	:	1.14m²	12.27ft²
1 Bundle	:	10 Pallets	
Thickness	:	80mm	
Joint Depth	:	5-10mm	
Colors	:	Available in various vibrant colors	
Application	:	Compressive strength can be adjusted according to your desired application.	
Standard	:	As Per IS 15658:2006	

AMAN

"Made with Precision and Love

AMARA

Specification

		METRIC	IMPERIAL
Coverage per pallet	:	0.99m2	10.65ft2
1 Bundle	:	10 Pallets	
Thickness	:	60mm	
Joint Depth	:	5-10mm	
Application	:	Compressive strength can be adjusted according to your desired application.	
Standard	:	As Per IS 15658:2006	

"Made with Pride in INDIA

SAIRA

Specification

		METRIC	IMPERIAL
Coverage per pallet	:	0.99m2	10.65ft2
1 Bundle	:	10 Pallets	
Thickness	:	80mm	
Joint Depth	:	5-10mm	
Application	:	Compressive strength can be adjusted according to your desired application.	
Standard	:	As Per IS 15658:2006	

"First time in INDIA

ZEHEN

Specification

		METRIC	IMPERIAL
Coverage per pallet	:	0.99m2	10.65ft2
1 Bundle	:	10 Pallets	
Thickness	:	75mm	
Joint Depth	:	5-10mm	
Application	:	Compressive strength can be adjusted according to your desired application.	
Standard	:	As Per IS 15658:2006	

> Subtle yet Stylish

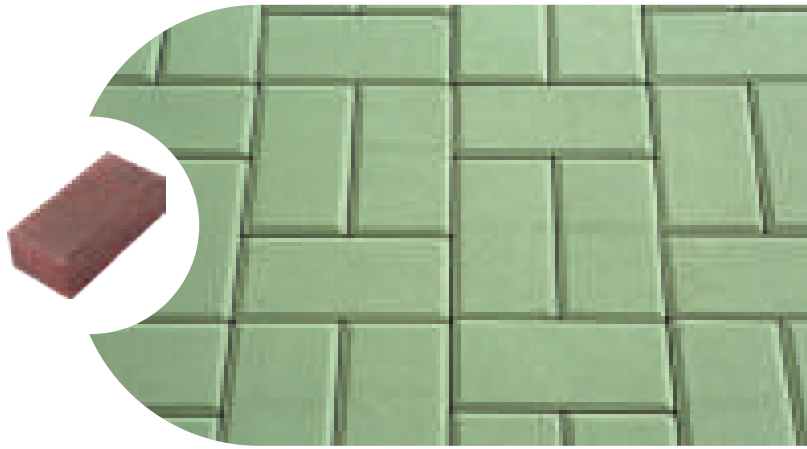
UNI PAVER

Specification

		METRIC	IMPERIAL
Coverage per pallet	:	40 Pieces	
Thickness	:	80mm, 60mm	
Joint Depth	:	80mm	
Color	:	Grey	
Application	:	Compressive strength can be adjusted according to your desired application.	
Standard	:	As Per IS 15658:2006	

Application : Compressive strength can be adjusted according to your desired application.

RACTANGLE PAVER



Specification

		METRIC	IMPERIAL
Coverage per pallet	:	54 Pieces	
Thickness	:	120mm, 80mm, 60mm	
Joint Depth	:	80mm	
Color	:	light Grey, Dark Grey, Red, Brown	
Application	:	Compressive strength can be adjusted according to your desired application.	
Standard	:	As Per IS 15658:2006	

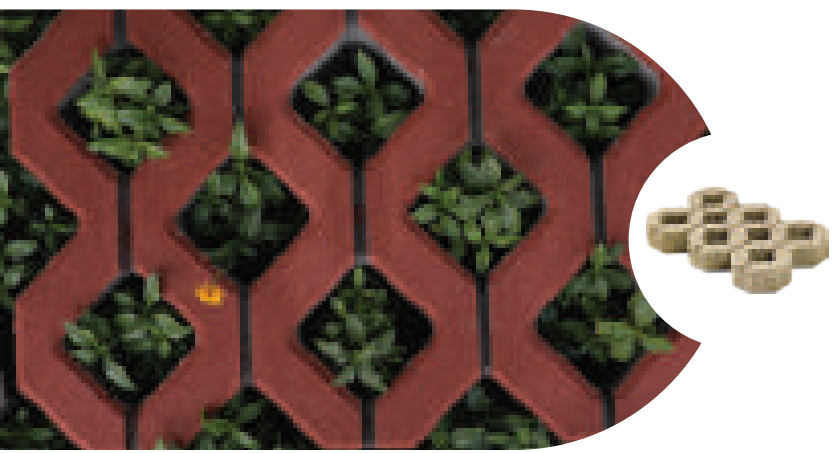
Application : Compressive strength can be adjusted according to your desired application.

TURF (GRASS PAVERS)

Specification

	METRIC	IMPERIAL
Coverage per pallet	:	5 Pieces
Thickness	:	80mm
Joint Depth	:	80mm
Color	:	Grey
Application	:	Compressive strength can be adjusted according to your desired application.
Standard	:	As Per IS 15658:2006

Application : Compressive strength can be adjusted according to your desired application.



KERB STONE

Specification

	METRIC	IMPERIAL
Coverage per pallet	:	18 Pieces
Thickness	:	150 mm
Joint Depth	:	80 mm
Color	:	Grey
Application	:	Compressive strength can be adjusted according to your desired application.
Standard	:	As Per IS 15658:2006

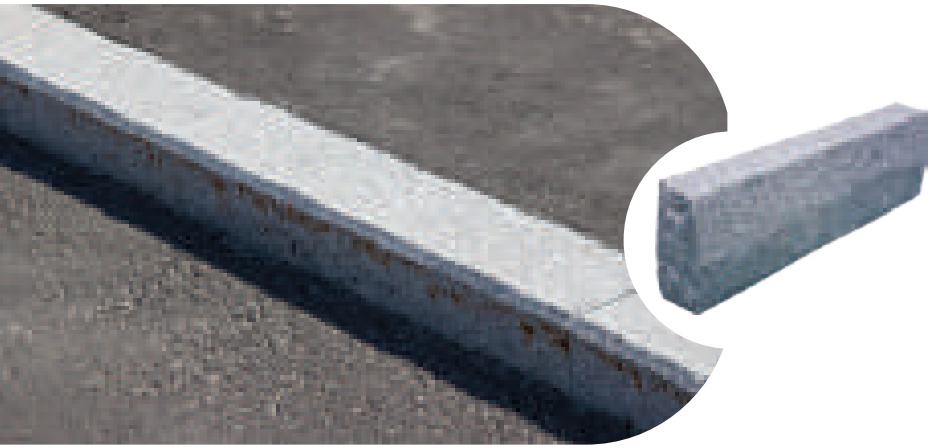
Application : Compressive strength can be adjusted according to your desired application.

KERB STONE

Specification

		METRIC	IMPERIAL
Coverage per pallet	:	6 Pieces	
Thickness	:	150 mm	
Joint Depth	:	80 mm	
Color	:	Grey	
Application	:	Compressive strength can be adjusted according to your desired application.	
Standard	:	As Per IS 15658:2006	

Application : Compressive strength can be adjusted according to your desired application.



EVOLVE

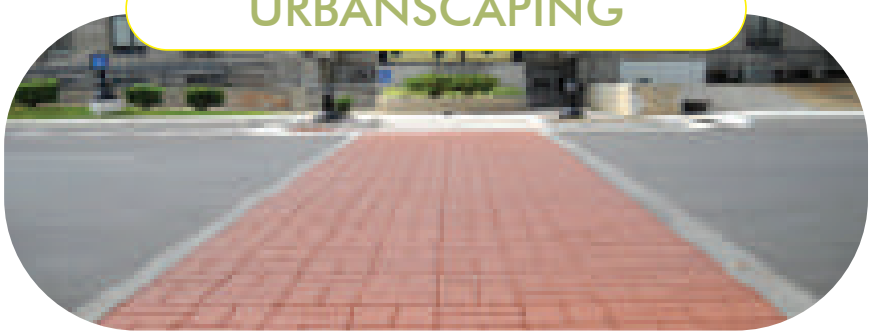
URBANSCAPING

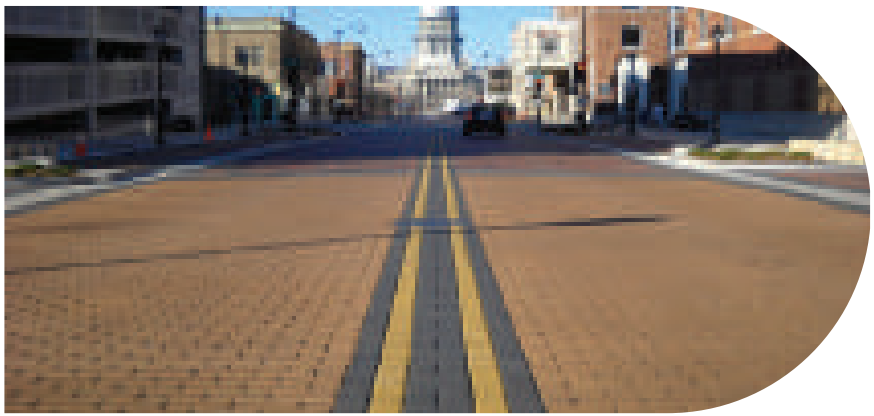
Inner City roads & Walkways

PAVED ROADS

PRODUCTS TO IMPROVE LIVING

URBANSCAPING





CROSSING

ECOLOGY LOVING

Enviroment Frindly

We use DFA (Dry Fly-Ash) which is a waste product of Thermal Power Plantd.

Clay bricks are made of alluvial soil, also called Top soil which is fertile and should be used for agriculture.

Millions of tons of CO, added by brick kilns to the atmosphere every year.

Thousands of acres of agricultural land destroyed by brick kilns every year in INDIA.

Over 100,000 Acres are being used as FLY ASH-PONDS in INDIA.
We can reclaim these lands!

WHY CHOOSE ?

Chelsea Blocks over Clay Bricks

COMPARISON OF CONCRETE BLOCKS WITH CLAY BRICKS

Parameters	Concrete masonry Blocks	Clay Bricks / Red Bricks
Compaction during production	Good compaction followed by good vibration results in high strength	Good compaction but without vibration
asic raw materials and other inputs	Cement, Sand, aggregates, fly ash, water & chemical admixtures	Top agriculturals oil(Clay) & water
General applications	Load-bearing walls, non-load bearing walls, retaining walls and decorative wall	Non-Load bearing walls
Dry Density (kg/m^3)	1900-2100	1800-1950
Compressive Strength (N/mm^2)	7.0 – 14.0	2.5 – 6.5
Thermal Conductivity (W/m.k)	0.80 – 1.20	0.80 – 1.20
Thermal resistance: R value for 200 / 230 mm wall (m^2 °K/W)	0.83	0.59
Heat Transmission: U value (8" wall) (W/m^{2}K)	1.2	1.98
Fire resistance	2.0 hours (8" Hollow) 4.0 Hours (8" Solid load bearing)	1 ½- 2.0 Hours
Water Absorption (% by volume)	5.0 – 7.0 %	5.0 – 20.0 %
Sound Reduction Index value (dB)	45 (8" Hollow) - 55 (8" solid)	25-30 (8" wall)
Energy consumed in production (KWH/m^3	700	900 - 1100
Aging Impacts	Gains strength with age (Infinite)	No gain in strength with age. Brick stend to wear on ageing. The wear value is 0.64 to 5.77
Precision in size	Variation: ± 3.0 mm Dimensional accuracy & uniform shape because of nature of production	Variation ± 3-5mm Uneven shape & not precisely made

Eco Friendliness	No smoke, No CO_2 emitted, pollution free	Process creates more smoke
	Low Energy is required. Energy efficient. Thermal mass of concrete slows down the flow of heat	High energy isrequired
	Approximately 30 % of fly ash is used as raw materia	No fly ash is used
	No top soil consumption	Top soil is consumed and wastes agricultural land. One brick consumes 3.2 kg ofsoil
	Controlsseismic stress	No control on seismic stress
	Rejection is very less at 1.5% maximum	Rejection is very high, up to 10-12 %
	Can be fully recycled in block production	Cannot be recycled. To go aslandfill only
	- mold resistant -Rot & termite proof	Not mold resistant
Precision in size	Variation: ± 3.0 mm Dimensional accuracy & uniform shape because of nature of production	Variation ± 3-5mm Uneven shape & not precisely made
Emission hazards	1ft^2 of carpet area emits 14.0 kgs of CO_2 - No irritants during production	1 ft^2 of carpet area emits 17.6 kgs of Co_2
Adaption to various surface finishes & castinshaping	- All kinds of coatings & paintings are possible. Painting is relatively well with the block walls -Shaping & forming are not possible	- All kinds of coatings & paintings are possible -Shaping & forming are not possible
Energy saving in heating & cooling	Saving of up to 35% of annual energy costs	No saving
Maintenance	Low maintenance because of low efflorescence	Prone to impact damage. Hence maintenance cost is higher
Render & plaster consumpon	Render as littleas 5 mm may be required because of the size perfection	Because of the variation sizes, renders as muchas 30 mm may be required

Labor welfareconcerns	Manufacturing done instate-of-the-art facility by organized sector with proper HR practices.	-Unorganized sector with rampant use of child laborers. -Unhealthy working conditions due to toxic gases.
Consistency inquality	Consistency due to the control of production parameters	Inconsistency due to the nature of production
Architectural facade finish	Versatility. Plain, fair-faced,splitface, fluted faced, etc	Only plain-faced bricks are manufactured
Enhancement of waterproofingproperty	Possible with the addition of waterproofing admixtures	No waterproofing enhancement
Enhancement oftensile andflexuralstrengths	Cavities in blocks create form for reinforcement & the block forms the columns. Lintels & horizontal beams can be built with in blocks	Not possible with steel reinforcement - Vertical column reinforcement is separately required with forms causing delay
Cost of constructionof 1.0m^2wall	Rs. 486 (200mm thick solid wall)	Rs. 658 (200mm thick wall)
Availability	Easily available. Any quantity canbe procured within short time because of the huge production	Clay bricks share more than 90% of the Indian brick market. Redbricks are available through outIndia

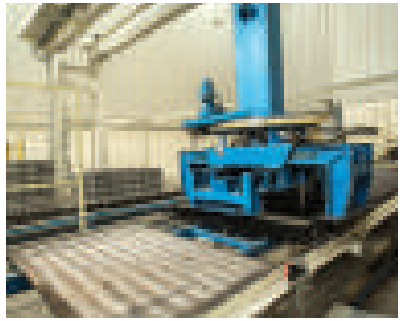
CHELSEA CONCRETE
THE RIGHT SOLUTION

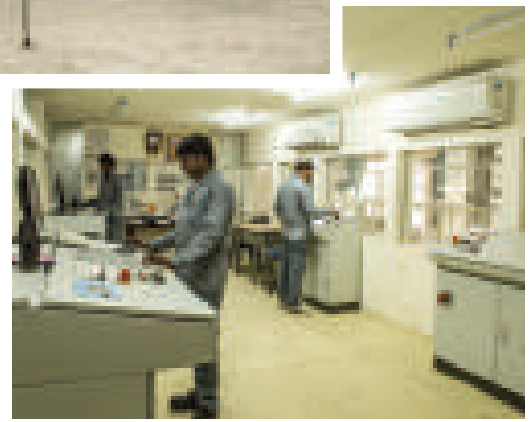
MANUFACTURING

State- Of- The- Art Manufacturing

Pallets of **'ZEHEN'** ready to be coubed after being nurtured in our curing chamber for 48 hours.

FULLY AUTOMATED PRODUCTION, LOADING & UNLOADING





CHELSEA PAVER STONES

INSTALLATION GUIDE FOR **CHELSEA** PAVER BLOCKS

1 Remove Old Pavement and/or Existing soil, then excavate to the proper depth depending on the type of traffic.

2 Spread gravel (also referred to as 3/4" minus crushed rock or equivalent), uniformly throughout the excavated area.Using the mechanical tamper, compact the entire area evenly. A sprinkling of water, prior to compaction, will increase the density of the base material and control dust. Do not compact the base material in layers of more than 2 inches.

NOTE: Prior to base preparation, water run-off and grade detail should be considered.

3 The compacted base must be uniform and conform to the contour of the finished job. the elevation of the compacted base should be uniform be uniform 3-1/4" to 3-3/4" below the finished paving stone surface.

NOTE: The base should extend 8"-12" beyond the Finished edge of the pavers in order to provide a proper base to support and anchor your edge restraint.

4 Following the completed base preparation, edge restraints are installed to prevent lateral movement of interlocking paving stones and to enhance the aesthetic appearance of your installation.

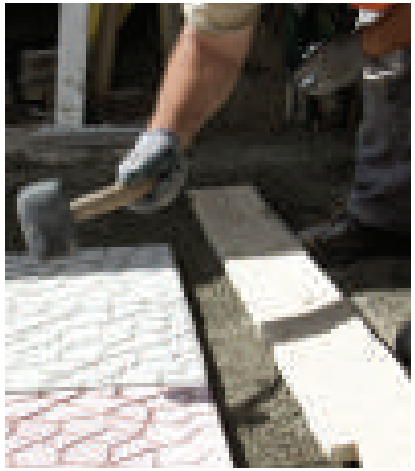
Edge restraints may be set in a manner to sit flush with, or slightly below your completed paving stone surface. Granular material is used as backfill on the outer edge of the restraint which meets sod or softer material.

NOTE: Care should be taken in determining the width of the area being paved in order to minimize the cutting of pavers, and optimize the use of edge pieces.

5 Spread 1" of coarse sand evenly over the compacted base to establish a bedding for placement of concrete pavers.

6 Screeding must be done to ensure that an even bedding surface is established. A screed board (i.e. 2" x 4") is used to smooth the bedding layer to the shape of the completed surface.

For distances greater than 12 feet, use a screed guide to level the bedding layer. Avoid walking on the screeded surface.



7 Commence placing paver on the screeded bed in the pattern you wish to use. It is important that the pavers being installed are taken from several pallets to ensure a proper color dispersion.

Start installation of pavers at the edge and in a corner if possible. this will maximize the use of edge stone and minimize the amount of cutting.

8 Hand place the stones close together. Spaces between individual units should be consistent with an allowable maximum of 1/8". With the installer standing on the laid paving stones, the nest row is placed. The occasional use of masonry string will ensure that your installation pattern will continue to run true throughout the project. To verify accuracy, the string should run along the front row of pavers. A screwdriver is used to move the pavers into proper alignment

9 Any paving stone cutting should be done upon completion of laying your paving stone pattern. Using a stone cutter or masonry saw, stone should be cut to fill the spaces.

If cut pavers leave small gaps, these can be filled with jointing sand. When cutting pavers with a wet saw, please take care not to cut on top of other pavers as you will generate a slurry mix. This slurry mix, if allowed to dry, will leave a permanent cement residue on your pavers.

10 Once all pavers have been placed, sweep the entire paving stone surface clean in preparation for tamping. Sweeping also aids in the removal of any foreign deposits that are on the pavers.

11 Using a mechanical plate tamper, being tamping from the outside edge, moving inward. Tamp the entire paving surface in both directions until the surface is bedded down uniformly.

12 Once all pavers have been placed, sweep the entire paving stone surface clean in preparation for tamping. Sweeping also aids in the removal of any foreign deposits that are on the pavers.

OUR CLIENTS PARTNERS

एन बी सी सी
NBCC
A Navratna CPSE

MARUTI SUZUKI

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

MCG

TATA HOUSING

LARSEN & TOUBRO

THANK YOU

For business with us.

Persistent innovation and exceptional customer service form the foundation of our values and these founding principles have marked every venture of Chelsea, making us one of the leading names in the vast world of concrete.

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