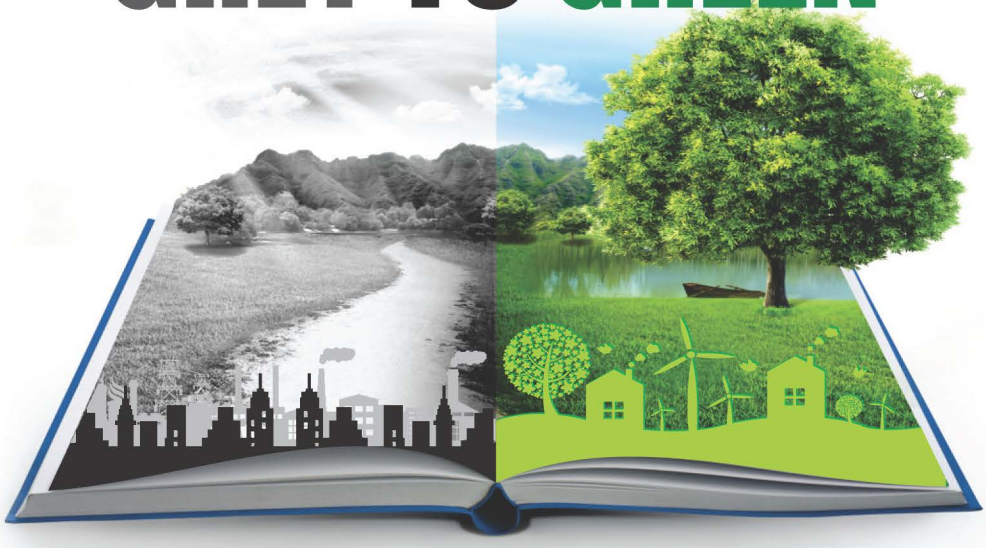
TÜV NORD
ISO 14001 : 2004
OHSAS 18001 : 2007
ISO 9001 : 2008

KJS CONCRETE
GREY TO GREEN

GREY TO GREEN



Building blocks for a greener future

Paving the way for Swachh Bharat

A Step Towards Making India Clean

www.kjsconcrete.com

WORLD CLASS BLOCKS, PAVERS & KERBS

Largest concrete block & paver plant of India at Ghaziabad NCR

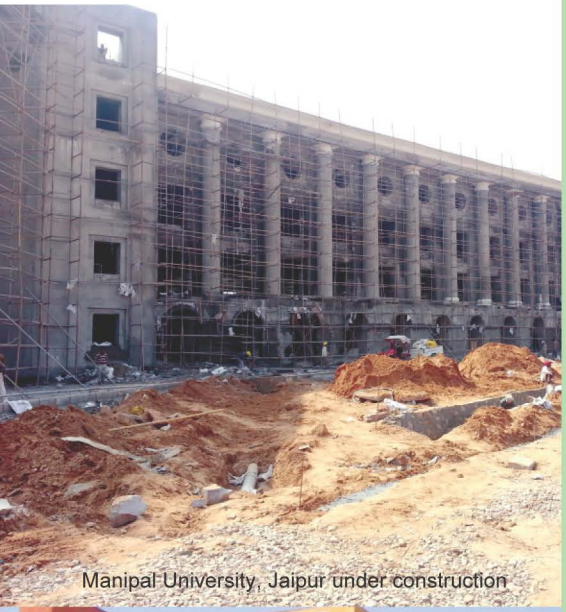
Large facility in 11acre

Block Plant Hess RH-2000-3VA

Big stockyard facilities

Hydraulic Press (Forest Press)

FURTHER EXPANSION COMING SOON



Manipal University, Jaipur under construction

Manipal University, Jaipur completed

KJS Concrete incorporated in 2011 is a green field venture of KJS Group which recognizes the imperatives of sustainable development, renewable energy and a green planet. Its corporate vision is based on triple bottom line principle which focuses on social and environmental responsibility as an intergral function of business growth.

The KJS Group founded in 1971 by Shri Kamaljeet Singh Ahluwalia, has iron ore mining operations in the State of Orissa. The Group has now diversified into Cement, Concrete Products, TMT, Hotels & Resorts and Township Development.

OUR MISSION

To provide green building materials that offer high quality, value pricing, efficient delivery and enhanced customer satisfaction based on sustainable green practices.

OUR VISION

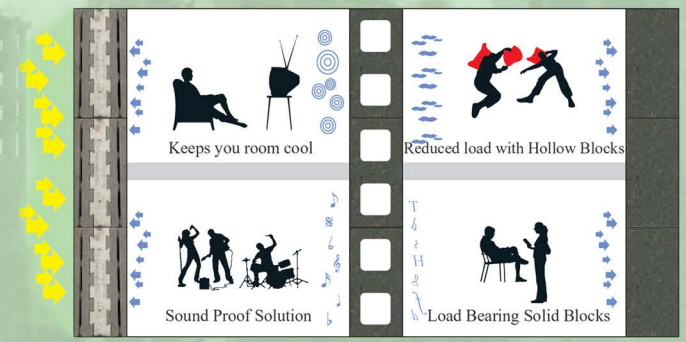
To establish leadership in green concrete products and services by ensuring financial growth based on environmental and social responsibility to support, sustainable environment and green earth practices.

MAJOR PROJECTS

- Manipal University
- DMRC
- HCL
- Nilayam Projects
- Sun World
- Gulshan Homz
- L&T
- Pratibha Industries
- Subhashray
- Era Infra
- Saha Infra
- Prateek Group
- CWC
- J Kumar
- K World
- Emaar MGF
- MCG
- Godrej Properties
- IVRCL
- ITD
- Experion
- TATA

Advantages of KJS Concrete Blocks

- High Compresive Strength
- High Dimensional Accuracy
- No water curing required
- Reduced joinery cost upto 30%
- Reduce Project Time upto 30%
- Fire resistance upto 4 hrs
- Better Sound & Thermal Insulation
- Reduced Structural loads



Externals walls made from KJS Thermal Blocks

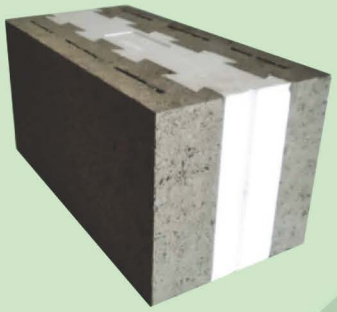
Walls made from KJS Hollow Blocks

Walls made from KJS Solid Blocks

Add value to your construction

- Eco-friendly products - Flyash is one of the raw material
- Fully Automated Production Capacity - No seasonal variations
- Uniformity of Supply - Production, Delivery and Handling
- Only semi skilled labour are required this type of construction
- Less than one percent wastage on site
- Packaged Supply - No under - delivery
- Reduced Plastering Costs - Aligned, better finished surface area
- Best in Class Water Absorption and Eforescene value
- Recycled content - Gain IGBC, LEED & GRIHA Credits
- Better Acoustic & Thermal Insulation properties for construction

KJS THERMO / POLYSTYRENE INSERT CONCRETE BLOCKS



Size of Block : 400x200x200
Size of insert : 400x200x75
Density : 1150kg / cum
Weight : 16.5 kg

Excellent Thermal Insulation

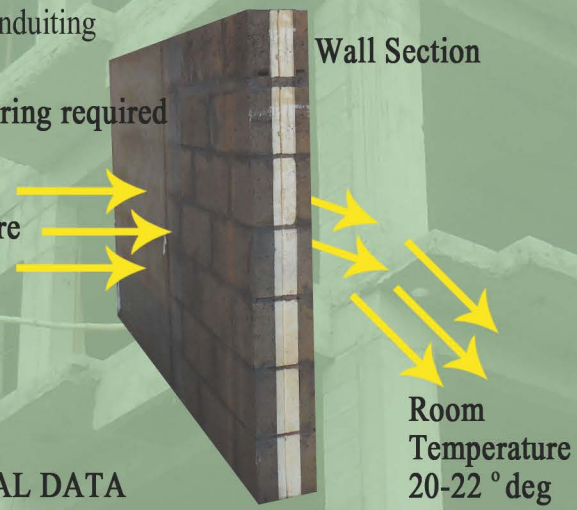
Excellent Sound Insulation

Energy Saving, hence low electricity bills

Sustainable

Eco friendly / Alternative Green Building Material

Easy for Conduiting



TECHNICAL DATA

Density of EPS insert (24-26 kgp/cum)

U: Thermal Transmittance [W/(m^2.K)] = .38

Vibro Compacted Product Range

Dimensions	230×115×80	230×115×90
Size	4.5”	4.5”
Average gross weight (kg)	2.75	3.1
Average gross density (kg/m^3)	1250-1350	1250-1350
Compressive strength (N/mm^2)	>7.5	>7.5
Water absorption	< 20% by mass	<20% by mass

Dimensions	400×200×200
Size	8”
Average gross weight (kg)	16.5
Average gross density (kg/m^3)	1030-1150
Compressive strength (N/mm^2)	>5
Water absorption	< 10% by mass

Dimensions	400×100×200	400×150×200	400×200×200
Size	4”	6”	8”
Average gross weight (kg)	10.5	14.5	18.5
Average gross density (kg/m^3)	1100-1500	1100-1500	1100-1500
Compressive strength (N/mm^2)	>5	>5	>5
Water absorption	<10% by mass	<10% by mass	<10% by mass

Dimensions	400×100×200	400×150×200	400×200×200
Size	4”	6”	8”
Average gross weight (kg)	14.5	23.5	31.5
Average gross density (kg/m^3)	1300 to 2000	1300 to 2000	1300 to 2000
Compressive strength (N/mm^2)	>7.5	>7.5	>7.5
Water absorption	<10% by mass	<10% by mass	<10% by mass

KJS Fly Ash Bricks

Conforms to IS 12894:2002

KJS Thermo Insulated Blocks

KJS Hollow Blocks

Conforms to IS 2185 P1, 2005

Open/Closed Cavity

KJS Solid Blocks / Flyash Blocks

Conforms to IS 2185 Pt-I, 2005

Also available in Low Density

Concrete Pavers Range

Rectangle

Uni Paver

Octagon

Cube Paver

Square Paver

Rectangular	
Dimensions (mm)	200×100×60/80/100
Compressive Strength (N/mm^2)	>35/40/50
Weight (kg/no.)	2.6/3.4/4.5

Uni Paver	
Dimensions (mm)	225×112×60
Compressive Strength (N/mm^2)	>35
Weight (kg/no.)	3.1

Octagon	
Dimensions (mm)	241.4×241.4×60
Compressive Strength (N/mm^2)	>35
Weight (kg/no.)	6.3

Cube		
Dimensions (mm)	100×100×60	200×200×60
Compressive Strength (N/mm^2)	>35	>35
Weight (kg/no.)	1.2	5.2

Square		
Dimensions (mm)	150×150×60	300×300×60
Compressive Strength (N/mm^2)	>35	>35
Weight (kg/no.)	4.5	12.5

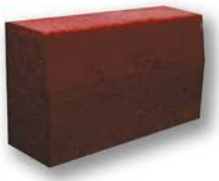
Product Range

Hydraulically Pressed Wet Cast Products

Compressed Bullnose Kerb		
	Dimensions (mm)	300×300×150
	Compressive Strength (N/mm^2)	>20
	Weigth (kg)	32.5

Bullnose Kerb / Half Battered		
	Dimensions (mm)	300×300×150
	Compressive Strength (N/mm^2)	>20
	Weigth (kg)	30

Kerb Stone		
	Dimensions (mm)	600×300×150
	Compressive Strength (N/mm^2)	>20
	Weigth (kg)	64.5

Riven/Patio Slab		
	Dimensions (mm)	600x200x350
	Compressive Strength (N/mm^2)	>20
	Weigth (kg)	90

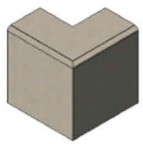
HESS FOREST PRESS (UK)

Bar Face Slab		
	Dimensions (mm)	400x400x40x/50/60
	Compressive Strength (N/mm^2)	>20
	Weight (kg)	22

Slab/Tile		
	Dimensions (mm)	400x400x40x/50/60
	Compressive Strength (N/mm^2)	>20
	Weight (kg)	22

Tact Tile Slab		
	Dimensions (mm)	400x400x40x/50/60
	Compressive Strength (N/mm^2)	>20
	Weight (kg)	22

Corner / Edge Kerb

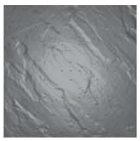


Dimensions (mm)	300x300x150
Compressive Strength (N/mm^2)	>20
Weight (kg)	42

Quadraint / End Kerb

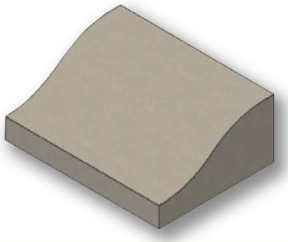
Dimensions (mm)	300x300x150
Compressive Strength (N/mm^2)	>20
Weight (kg)	50

Slab



Dimensions (mm)	400x400x40/50/60
Compressive Strength (N/mm^2)	>20
Weight (kg)	22

Roll-over Kerb/Parking

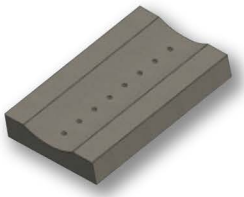


Dimensions (mm)	600×450×230
Compressive Strength (N/mm^2)	>20
Weight (kg)	229.5

Grass Grating

Dimensions (mm)	600x400x70/80
Compressive Strength (N/mm^2)	>20
Weight (kg)	24.5

Perforated Saucer Drain



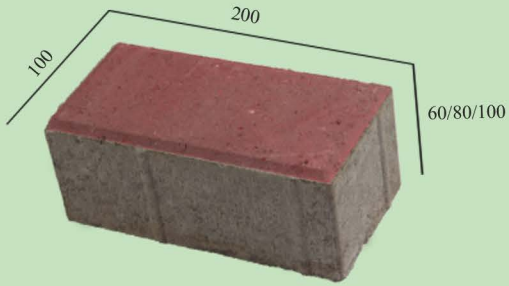
Dimensions (mm)	600x450x70/100
Compressive Strength (N/mm^2)	>20
Weight (kg)	57

Saucer Drain

Dimensions (mm)	600x450x70/100
Compressive Strength (N/mm^2)	>20
Weight (kg)	57

Note: Weights mentioned for all product are subject to change depending on the design mix and density of the product required.

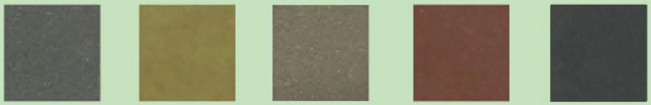
Rectangular Paver



RECTANGULAR

Dimensions (mm)	200x100x60/80/100
Compressive Strength (N/mm^2)	>35/40/50
Weight (kg/no.)	2.6/3.4/4.5
Nos. per sqm	50

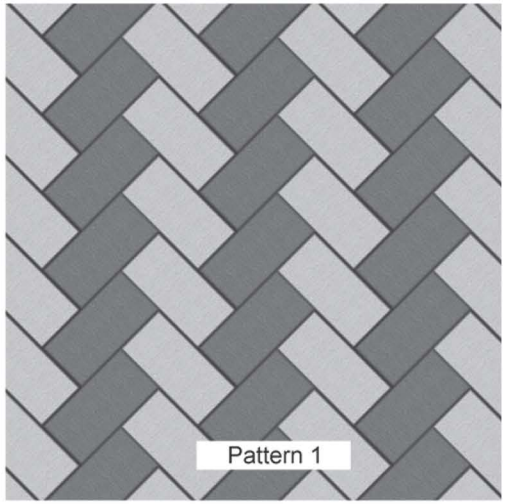
Available in the following colours:

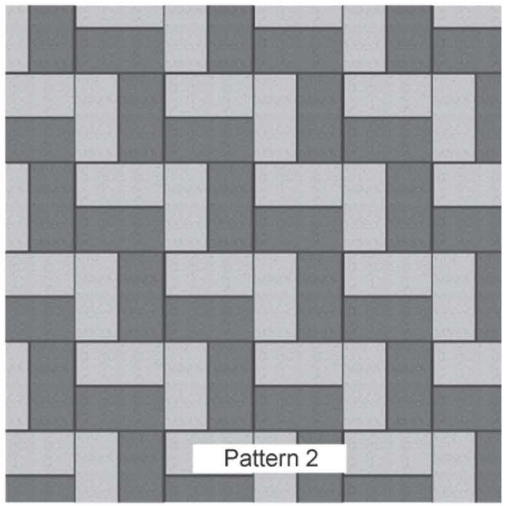


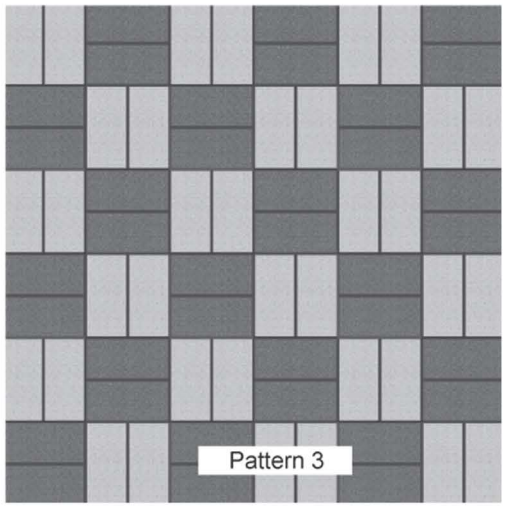
Grey Yellow Brown Maroon Black

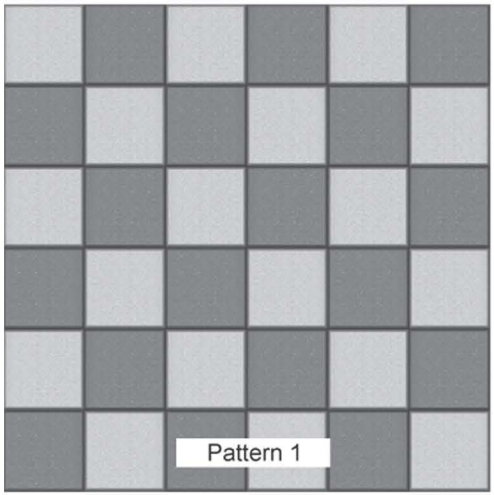
Paver finishes:

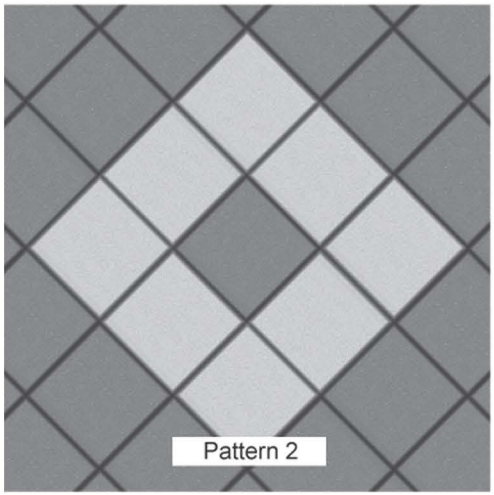
Normal Rough Sieved

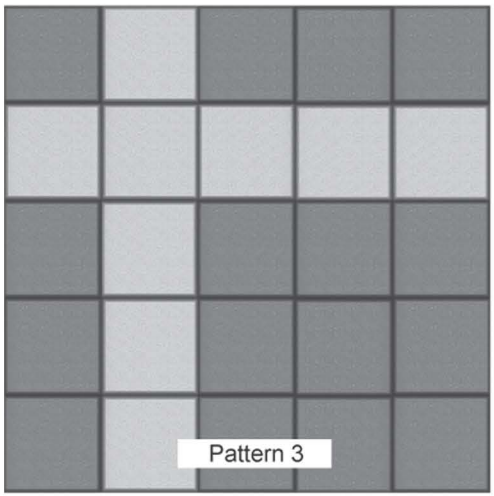




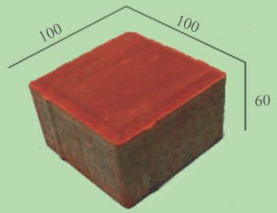


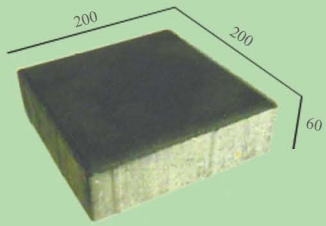


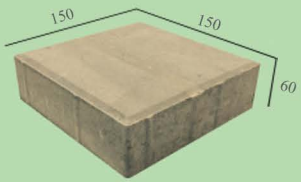


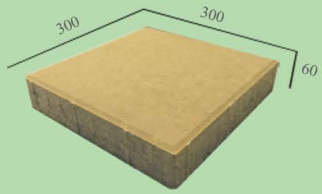


Square Pavers









SQUARE CUBE

Dimensions (mm)	100×100×60	150×150×60	200×200×60	300×300×60
Compressive Strength (N/mm^2)	>35	>35	>35	>35
Weight (kg/no.)	1.2	4.5	5.2	12.5
Nos. per sqm	100	44.5	25	11

Available in the following colours:

Grey Yellow Brown Maroon Black

Paver finishes:

Normal Rough Sieved

Paving Stone Base Preparation Guide

1.Preparation: Proper Preparation is must for Systematic functioning of the assigned task. the Important works to be carried out before starting the Construction of paved area are as follows:

- The areas to be paved must be sketched out
- Clear view about dimensions and laying pattern must be made
- Quantities of Cement and sand required for “Bedding” must be considered.
- Based on the paver size the sub layers must be made ready where the bedding must
- Be spread, if necessary the soft soil must be dug out and replaced with crushed stone.
- The Thickness of the sand must be approximately 40mm between the level of the paved area.

The Final Paving level below the finished paving level should be as follows:
Eg1: For 60mm paving Units : 100mm approximate
Eg2: For 80mm paving units : 120mm approximate
Eg3: For 100mm paving units : 140mm approximate

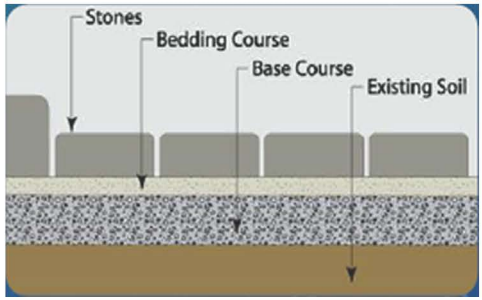
2.Installation of Edge Restraints: Edges are next important factors which enhances the life and look of the paved area.

- In order to prevent the border erosion edges must be considered to enhance the durability of the Pavers.
- Stability to the Edges in the Pedestrians, Driveways and Traffic areas must be given at the sub base level. Details given on page no. 18

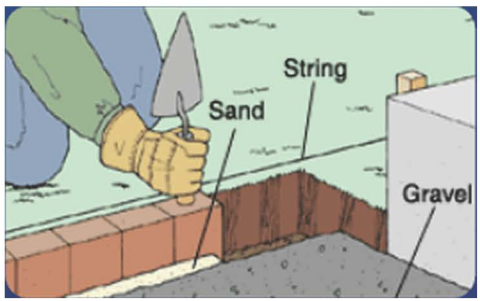
3.Laying Course:
Laying Course at the basement consists of well graded sand, composed of both fine and coarse particles

- Sand should also be spread in a uniform manner in moisture content and smoothness
- Once after laying the layer must not bear any weight atleastone day
- Cement should be kept away from the surface of paving to avoid staining

Base Structure Sectional View



Edge Restraints



4.Screeding:

- Levelling the area placing the paver on decided area.
- Screeding can be done either from kerb stone or by using screed rails to level the sand.
- Level of the paver can be checked by placing. Screeding guides range 1" to 1 " in diameter
- Once the levels of the pavers are checked guides can be removed & screeding can be continued.
- Usually laying must be started at the Longest Straight side area, to keep the lines straight

5.Placing the paving units:

Suitability:

- Pattern of paver must be selected according to the suitability for eg. Herring bone pattern
- is recommended for most vehicular movement.
- An ideal gap of 3mm ought to be left to ensure an even interlock after Vibration.
- Usually, Laying must be started at the Longest straight side area, to keep the lines straight.
- because, this will minimize the amount of cutting required.

6. Vibrator compaction:

- The Blocks must be swept clean and compacted with a plate vibrator with a frequency of
- 75-100 Hz.
- This is to settle the pavers into the bedding sand and creates smooth, flat surface.
- Vibration must be done at the end of completing day's work.

7. Joining Sand: Brushing fine sand into the joints of the pavers further locks the pavers together.

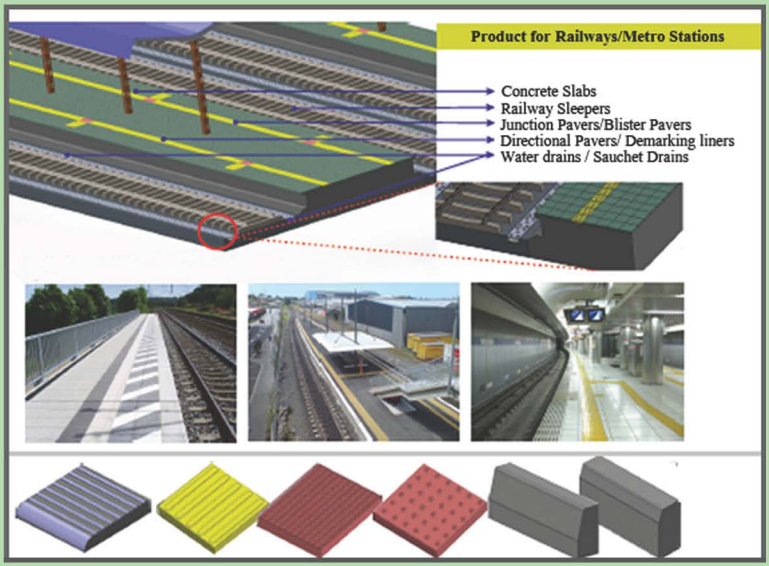
Screeding

Placing the Pavers

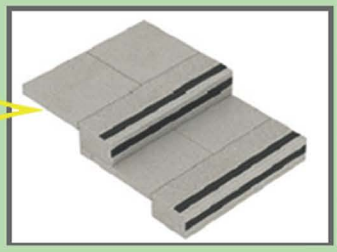
Vibration & Compaction Process

Final Look after Installation

Product for Railways/Metro Stations

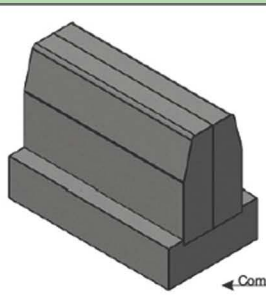


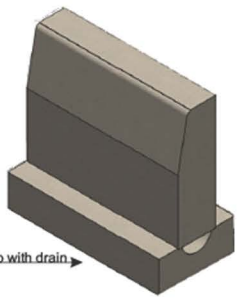
Readymade Concrete Steps



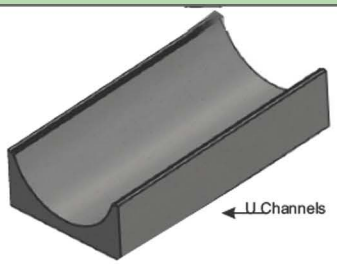
*Above products are manufactured on demand only.

UTILITY PRODUCTS FROM HYDRAULICALLY PRESSED WET CAST MACHINE



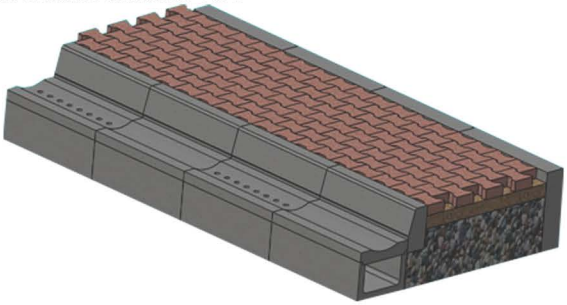


Combination Kerb with drain



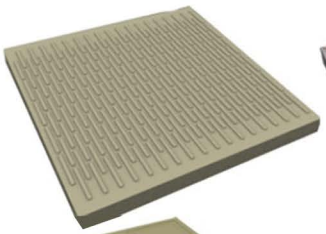
U Channels

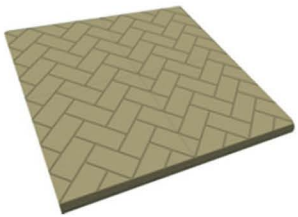
Edging, Kerbs & Paver Isometric View

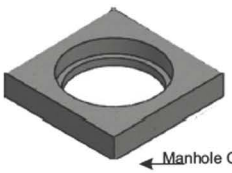


Drain Covers/ Cable Covers

Diferent types of Slabs (40 to 60mm)







Manhole Cover

*Above products are manufactured on demand only.

World Class Technology & Process

KJS CONCRETE
GREY TO GREEN

Credits
Gain Credits for GRIHA, LEED
and IGBC certifications for
Green Buildings

Compliance
Products conform to relevant BIS

TÜV NORD
ISO 14001 : 2004
OHSAS 18001 : 2007
ISO 9001 : 2008

From the first stage of production to the point of delivery, a series of checks and controls have been incorporated to ensure that the customer gets a world class product with minimum wastage on delivery and 100% satisfaction.

A custom-built ERP System, designed with in-house expertise enables KJS Concrete to maintain high efficiencies across all functions.

1. The Multimat RH 2000-3 is a high-end manufacturing plant from HESS, Germany and the largest of its kind in India with a capacity of producing 200000 fly ash bricks or 85000 blocks or 225000 pavers per day.

2. FOREST PRESS is a fully automatic hydraulically pressed wet cast kerb plant from UK.

3. The plant is located close to NTPC, Dadri and is fully automated energy efficient with a low carbon footprint.

Curing Chamber installed by Rotho Curing Systems,

Packing: All concrete products are strapped and kept ready for delivery - no under deliveries.

Storage: Extensive stockyard for storage of raw materials and finished goods.

Loading: High powered truck mounted cranes facilitate delivery of strapped blocks at the sites

Logistics and Transportation: Large lorries carrying over 35-40 tonnes of finished concrete goods are used for delivery

Quality Control

Raw Material Control

- Routine material checks are carried out by physical inspection as well as by sieve analysis of all aggregates.
- On a regular basis, material samples are sent to independent laboratories for sieve analysis (grading), salt content sulphate, chlorides, and specific gravity tests.
- Cement: Mandatory submission of test certificates by the supplier against each delivery received from cement factory.
- Water: Water analysis tests carried out every three months.
- Pigments: Company relies on technical data provided by supplier, and in compliance with BIS.
- Calibration of weighing scale.

Manufacturing Process

- During the period of manufacturing, the entire process is closely monitored from the central control room, besides conducting specific process checks as mentioned below.
- Constant monitoring moisture content in mix
- Monitoring texture, dimension and heights
- Routine plant checks as per machine manuals
- Regular maintenance with qualified technicians
- Monitoring wet weights

Curing Methodology

KJS Concrete Blocks and Pavers are cured by using the state-of-the art hydration heat and vapour Rotho Curing System, allowing blocks to cure in their moisture. This unique system, unlike conventional steam curing, enables the production of higher strength products at a relatively faster production speed. The curing chamber is built to account for the heat transfering to the concrete elements by maintaining the required humidity. The curing systems allow the plant to run in a closed loop.

Moisture curing commences immediately after a chamber is filled totally with the wet product; and de-polarizing of the sealed chambers cannot be opened prematurely, thus preventing the product to be removed before its curing time. The system is preprogrammed to ensure that chambers are opened at the exact pre-specified time (usually after 12-20 hours, depending on the products). The products once removed from the curing chambers, are kept in the yard for natural curing for a further period to gain optimum curing levels.

Finished Products Checks

Finished products are tested randomly in an internal laboratory on a daily basis to comply with IS codes and BS standards.

Important Information

Health & Safety

Care should be taken when handling and installing KJS CONCRETE products. Units weighing 20kg or more should ideally be handled mechanically, or by two or more persons if the process of carrying is repetitive.

Delivery & Storage

KJS CONCRETE products are normally delivered to sites, properly packed on crane-offload road vehicles. Upon special request, packs can also be delivered shrink-wrapped and/or palletized to aid subsequent site movement activities. After delivery, the customer is solely responsible to ensure all packaging is carefully disposed off in accordance with the local environmental laws. Delivered products should be stacked at a planned location on the site to avoid double handling. Bundles should be stacked on to a prepared, clean area to minimize soiling and damage. It is highly recommended that the products are kept at a distant location, away from passing vehicles and pedestrians.

Efflorescence

All concrete products may, in their early life, appear to lose some intensity of color and experience a white stain on the face of the product. This phenomenon is known as efflorescence - it is a temporary phenomenon and stains will generally clear within a period of time. This is not detrimental to the product performance in any way and KJS CONCRETE cannot be held responsible for its occurrence.

Color Variation

Due to the phenomenon of different curing, slight colour and shade variation do occur on individual colored concrete products. Site conditions, seasonal manufacture, or naturally occurring variations in the aggregates used, can also cause variations. The colours will invariably wither in time.

TÜV NORD

ISO 14001 : 2004
OHSAS 18001 : 2007
ISO 9001 : 2008

Credits
Gain Credits for GRIHA, LEED and IGBC certifications for Green Buildings

Compliance
Products conform to relevant BIS

ISO 9001 and ISO 14001 Compliant Safety, Manufacturing and Quality standards

Maintenance

It is recommended that the paving materials are cleaned 2-3 times in a year to maintain appearance. Products which are paved on driveway, particularly of light colors, require more maintenance as tyre marks and oil leakage can diminish the appearance. For cleaning the paved surfaces, it is recommended normal water be used with a soft brush, while high pressure jet pumps should not be used. Power washing is to be avoided completely.

Ordering

To avoid shortage and/or wastage of material, please double check the order quantity ordered, as KJS CONCRETE will neither be responsible for extra material nor the duration to deliver the shortage material. To avoid any confusion with respect to ordering, it is suggested that the paving tiles are ordered as a total batch and drawn out from several packs at the same time, to enhance any color variation. We recommend that colors are chosen from actual materials rather than color photographs herein.

Weathering

All concrete products will wither and change, especially after a period of time with exposure to natural elements.

Sizes

KJS CONCRETE pavers do not vary in thickness or dimensions as specified by the company. All sizes are equal, as they are cut from similar sized dies with a minimal difference between any two from the same batch. Bulging can occur on larger individual pavers as a natural result of shrinkage. This does not alter the durability of the product.

Liability

KJS CONCRETE cannot accept any liability or responsibility for their products being used for purposes other than for those they are intended for. Due to our continuous evolution of product design and improvement, our range is subject to change without prior notice. Customers are advised to ensure that the stated information is up to date.

Product Unsatisfactory Condition

In case a product is delivered in an unsatisfactory condition, other than as described, the aggrieved party will have to report the defect to KJS Concrete prior to laying. It will also be in the interest of the party to notify KJS Concrete at the earliest of the fault, thereby ensuring the shortest time for the rejected product to be replaced. If the complaint is raised after laying the product, no responsibility will be accepted for any relaying or removing costs.

Indian Green Building Council
MEMBER

Confederation of
Indian Industry

INDIAN BUILDINGS CONGRESS

TÜV NORD
ISO 14001 : 2004
OHSAS 18001 : 2007
ISO 9001 : 2008

KJS
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GREY TO GREEN

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KJS Concrete is expanding its manufacturing portfolio by installing concrete pipe making machine very soon.