









We are ISO certified companies, built on our founder's values of excellence, honesty and hard work

It is in our DNA to deliver the best materials using state-of-the art machinery and equipment.





#### » Vision

To be recognised as the leading provider of building products, infrastructure solutions, and construction services across East Africa.



#### » Mission

We are a premier one-stop enterprise in the construction and infrastructure sector of East Africa, offering a high-quality range of aggregates and precast concrete products that build safe and enduring environments for one and all.

#### » Our Values



#### **GRATITUDE**

- >> We consistently express gratitude for every contribution, big or small, as it's central to our corporate values.
- >> We welcome all feedback with humility, seeing it as a crucial opportunity for growth and striving for excellence.
- >> We respect others' time by prioritising punctuality, reflecting our dedication to reliability and efficiency.
- >> We are committed to recognising and valuing exceptional performance, knowing that this acknowledgement boosts motivation and fosters high achievement.
- Our culture of appreciation helps cultivate an environment where both individuals and teams can thrive.



#### RELIABILITY

- >> We take full responsibility for our work, ensuring every task adheres to our high standards of quality and precision.
- >> We consistently deliver projects ahead of schedule, showcasing our proactive commitment to our business obligations.
- >> We communicate any deviations from planned schedules in advance, maintaining transparency and trust with all stakeholders.
- >> We maintain the highest ethical standards and confidentiality, protecting sensitive information and ensuring our practices comply with legal and moral expectations.
- >> We responsibly manage our resources, valuing each as essential for our long-term success and sustainability.



#### **EXCELLENCE**

- >> We consistently surpass our goals, setting new benchmarks for excellence within our industry.
- >> Our data is maintained with accuracy, regularly updated, and fully auditable, reflecting our commitment to precision.
- >> We are devoted to fulfilling customer needs and exceeding their expectations, establishing us as a benchmark for outstanding service.
- >> We value customer feedback as a catalyst for improvement and embrace every mistake as a learning opportunity.
- >> We execute all tasks with meticulous care, ensuring our work is error-free and meets the highest standards of quality.



#### **AMBITION**

- >> We persist until every option has been explored, showcasing our dedication to securing the best outcomes.
- >> We set ambitious targets and tackle challenges head-on, reflecting our dynamic pursuit of success.
- >> We consistently seek more efficient methods and innovations to enhance our performance and achieve excellence.
- >> We consistently go above and beyond the call of duty, demonstrating exceptional commitment in all our endeavours.
- >> Our quest for better methods and innovative solutions keeps us at the forefront of our industry.



#### **TEAMWORK**

- >> We actively support our colleagues' goals, creating a collaborative environment where success is a shared experience.
- >> We foster a workplace where everyone can openly share ideas and feelings, promoting an atmosphere of open dialogue and mutual respect.
- >>> We consistently show unwavering respect for each other, both privately and publicly, reflecting our commitment to professional courtesy.
- >> We engage in positive and constructive conversations, knowing that such interactions enhance our work environment and drive collective success.

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#### **AGGREGATES**

Our aggregates are essential components in a variety of applications, including Ready Mix Concrete, Asphalt Concrete, Surface Dressing, Precast Concrete, Plaster Sand, and as Subbase material.

## CONCRETE PAVING BLOCKS

Our concrete paving blocks are economical and durable, available in a variety of colors and thicknesses. They are ideal for use in parking areas, pathways, and both commercial and domestic roads.

## CONCRETE MASONRY BLOCKS

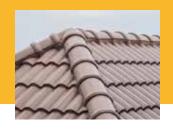
Our engineered concrete masonry blocks are resilient and versatile, ideal for constructing load-bearing walls, partitioning walls, and serving as permanent formwork in slabs. Additionally, we offer customization options to meet specific project requirements, ensuring flexibility and precision in design and functionality.

## PRECAST PRODUCTS

Our precast products are manufactured to the highest quality standards under controlled conditions, ideal for applications such as drainage channels, decorative enhancements for walls and column tops, and fencing solutions.

#### **CONCRETE PIPES**

Our concrete pipes are durable, sustainable, fire-resistant, and cost-effective. They are ideally suited for a variety of applications including sewerage systems, stormwater drainage, tunnels, and underground detention systems.













#### ROOFING TILES

Our roofing tiles are of the highest quality, combining durability, sustainability, and longevity. Our range includes Double Roman and Venetian tiles, available in a variety of colors and with a selection of accessories to meet diverse architectural needs.

#### **COBBLESTONES**

Our cobblestones are distinctively shaped and available in various colors and textures, ideal for creating elegant finishes in patios, driveways, foyers and garden areas.

#### EUROCON TILES

Our Eurocon tiles are precision-engineered in a variety of distinct shapes, colors, and textures. These versatile tiles are suitable for both internal and external applications, enhancing landscapes, walls, foyers and floors across different building types.

### NATURAL STONES

Our natural stones are precisely machine-cut in a variety of sizes, shapes, and textures. Ideal for crafting unique patterns, they enhance the ambiance of walls and floors, transforming any space.

## CONSTRUCTION CHEMICALS

We serve as toll manufacturers for the Master® Builders Solutions powder range (now branded as SIKA) and PowerChem construction chemicals.

These products are integral for diverse applications such as waterproofing, structural strength enhancement, curing, floor hardening and the repair and renovation of buildings.

#### **CIVIL WORKS**

We provide value-added civil engineering solutions, including earthworks, pavements, storm water drainage, and sewerage systems. Our projects not only meet budgetary requirements but also consistently exceed our clients' expectations.



AGGREGATES (BALLAST/KOKOTO)

We have been manufacturing building materials since 1952. Today, we are a leading supplier of quality construction materials and technical solutions. Over the years, we have built up significant expertise and now have a fleet of over 100 trucks to ensure steady delivery to our esteemed clients. We have state-of the-art quarry machinery and equipment to allow production of quality aggregates.

#### 1. AGGREGATES FOR MANUFACTURE OF CONCRETE

Concrete Aggregates refers to the use of coarse materials such as gravel, crushed stone and recycled concrete in the manufacture of concrete. Essentially, aggregate materials make up a large portion of the total volume of concrete and serve to enhance its overall strength.

### FACTORS TO CONSIDER WHEN CHOOSING AGGREGATES FOR USE IN CONCRETE

- 1. Type of binder and cement characteristics such as gypsum or alkali content.
- 2. Total cementitious content.
- 3. Water-cement ratio.
- 4. Aggregate type.
- 5. Degree of hydration or cementing reaction.
- 6. Total water content in the fresh concrete.
- 7. Environment/exposure conditions of concrete.
- 8. Surface: volume ratio of the concrete as affected by shape and size of elements.

#### DIFFERENT CONCRETE APPLICATIONS

- 1. Foundations.
- 2. Suspended slabs.
- 3. Industrial & domestic floors.
- 4. Paths, patios & driveways.
- 5. Precast lintels, flagstones & blocks.

#### **MATERIALS SPECIFICATION**

- 1. When batching concrete, one should ensure that the aggregate does not contain any deleterious material (such as leaves, clay etc) as this can have a negative effect on the mix.
- 2. One should also be aware of the water content of the fine aggregates as this is very important in ensuring the control of cement content in the mix.



#### 2. ROAD STRUCTURE LAYERS

Base and subbase materials provide the support structure for any pavement design.

Approved target gradings are determined by laying a trial section using material complying with grading limits as per the consultant's specifications.

The hardness and particle shape of aggregate used in road layer works is important as these influence the workability, compaction and density achieved.

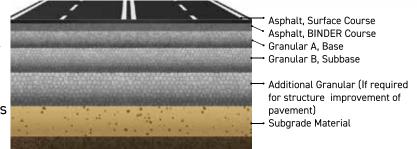


Illustration for Aggregate sub base material on a roads works

#### 3. SURFACING AGGREGATE

Surfacing Aggregates are the aggregates used in the production of the surface layers or seals for road construction. These are usually applied by chip spreaders and comply with certain specifications. The process involves spraying a bitumen binder onto a prepared base-course layer and then applying aggregate particles immediately after and rolling them in to achieve a mosaic pattern. This causes the binder to move into voids between the particles.

#### 4. ASPHALT AGGREGATE

Asphalt Aggregates are those materials used in asphalt pavements. Asphalt is densed as a mixture of inert mineral matter, such as aggregate, mineral filler and bituminous binder in predetermined proportions. There are two types of Asphalt;

#### » Continuously Graded Asphalts

These are mechanically mixed asphalts in which the aggregates and the filler are distributed in size from coarse to a fraction within a specific smooth grading envelope.

#### » Open Graded Asphalts

These are mixes which normally require single-sized crushed aggregate. It is mechanically mixed asphalt constituted to give a rough surface texture in the compacted state. This type of layer is also used when ultra-thin pavement is laid using paving machine.



Due to the importance of aggregates in the mix, it is vital to understand the impact of its properties. The customer must conduct necessary tests to ensure the asphalt design mix meets the specified requirements.



#### Single Crush Aggregates

Application	<b>Product Code</b>	Descritpion	Imperial Dim.	Metric Dim.
Precast Concrete &	1-11-010-001	Aggregate stone dust	1/8"	0 - 3 mm
Ready Mix Concrete	1-11-010-002	Aggregates	3/8"	6 - 10 mm
	1-11-010-003	Aggregates	1/2''	10 -14 mm
	1-11-010-004	Aggregates	3/4''	14 - 20 mm



Stone Dust

#### **Graded Aggregates**

Application	<b>Product Code</b>	Descritpion	Imperial Dim.	Metric Dim.		
Precast Concrete & 1-11-012-001	Graded Aggregates	1/2" + 3/4"	10 - 20 mm			
Ready Mix Concrete	1-11-012-002	Graded Aggregates	1/2" +3/4" + 3/8"	5 - 20 mm		



Aggregates

#### All in Aggregates

Application	Product Code	Descritpion	Imperial Dim.	Metric Dim.
Precast & fine concrete repair works	1-11-011-010	Aggregate all-in	1/4"+ Dust	0 - 6 mm



**Double Crush Aggregates** 

#### **Double Crush Aggregates**

Application	Product Code	Descritpion	Imperial Dim.	Metric Dim.
Asphat Concrete Surface Dressing & High Strength Ready Mix Concrete	1-11-011-001	Stone Dust	1/8''	0 - 3 mm
	1-11-011-011	Cubitized	1/4''	3 - 5 mm
	1-11-011-002	Cubitized	3/8''	6 - 9 mm
	1-11-011-003	Cubitized	1/2''	10 - 14 mm
	1-11-011-004	Cubitized	3/4''	14 - 20 mm



**Washed Sand** 

#### **Washed Sand**

Application	<b>Product Code</b>	Descritpion	Imperial Dim.	Metric Dim.
Ready Mix Concrete	1-11-013-005	Washed sand	1/16"	0 - 3 mm
& Plaster Sand	1-11-013-002	Washed sand	1/8''	0 - 4 mm



**Crusher Run** 

#### All in Crusher Run

Application	Product Code	Descritpion	Imperial Dim.	Metric Dim.
Sub-base & filling material	1-11-011-013	Crusher Run	1 1/2"	0 - 37.5mm

#### Abbreviations.

Imperical Dim. - Imperical Dimensions Metric Dim. - Metric Dimensions

\*Always consult a qualified professional when using the products \*Product specifications are made to KEBS or client custom requirements. KS 95:2003 Kenya Standard Specification for Narural Aggregates for use in concrete

Aggregate Type	Imperial	Metric		Aggregate Type e of Quarry
1,55.05.10 1,70	Dimensions	Dimensions	Kayole	Mlolongo
Single Crush	1/16 "	0 - 3 mm	<b>√</b>	✓
Aggregates	1/8 "	0 - 4 mm	✓	Х
	1/8 "	0 - 6 mm	✓	Х
	3/8 " + dust	6 - 10 mm	✓	✓
	1/2 "	10 - 14 mm	Х	✓
	3/4 "	14 - 20 mm	X	✓
	1/2 " + 3/4 "	10 - 20 mm	✓	✓
Double Crush	1/8 "	0 - 3 mm	✓	✓
Aggregates	3/8 "	6 - 10 mm	✓	✓
	1/2 "	10 - 14 mm	✓	✓
	3/4 "	14 - 20 mm	✓	✓
Washed Sand	1/16 "	0 - 3 mm	X	✓
	1/8 "	0 - 4 mm	✓	✓
Graded Crused	4 "	0 - 100 mm	Х	Х
Stone/Crusher Run	2.5 "	0 - 62.5 mm	Х	Х
	1.5 "	0 - 37.5 mm	✓	✓





World over, natural sand is becoming an increasingly depleted resource. Understanding the need to protect our rivers and livelihoods, KBCCL has invested heavily in manufacturing sand at our rock quarries. The result is a high-quality fine aggregate sand that can be used for concrete applications.



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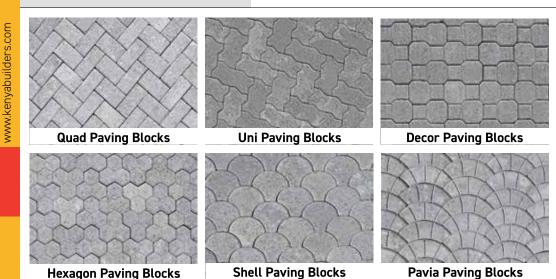






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#### WHY KENBLOC CONCRETE PAVING BLOCKS

- 1. Paving blocks are economical & durable.
- 2. Suitable for use in parking areas, pathways, commercial & domestic roads.
- 3. They offer an **attractive**, **practical** & **long lasting option** for pavement material.
- 4. They come in various **sizes, thickness** and **shapes** which include Quad, Uni, Decor, Shell, Pavia and Hexagon paving blocks.
- 5. We have **bulk stock** for all types of paving blocks.
- 6. Available in a **variety of colours** including Grey, Black, Red, Beige and many other custom colours can be made on order.



#### **CONCRETE PAVING BLOCK FEATURES**

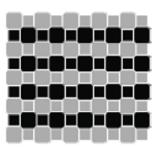
- 1. Provide great, hard-wearing & textured surface.
- 2. Vibrant long-lasting colours.
- 3. Available in 6 shapes creating **distinctive patterns** when utilized.
- 4. Creates a **neat finish** for pavements, light or commercial traffic areas.
- 5. Stacked for easy transportation.

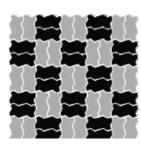
#### **CONCRETE PAVING BLOCK LAYING PATTERNS**

To achieve neat driveways and patios there are three laying patterns to consider which include **Basket Weave**, **Herringbone** and **Stretcher Bond**. It is important therefore to consider the type of paving block and the place of laying before choosing a laying pattern.

- **1. Stretcher bond** is the simplest offset block paving pattern and is also known as a running bond or half bond. The joints are offset by exactly half the width of the block when using the quad paving block.
- **2. Herringbone** is an interlocking laying pattern which is used for all tracked areas such as driveways. The interlock ensures that where ve hicles are braking and turning, blocks are not moved out of position. Common designs are 90° herringbone pattern.
- **3. Basket weave pattern** is commonly used on patio areas. As a decorative pattern it looks nice, however for heavy truck areas, basket weave is not recommended.



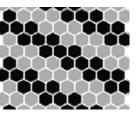




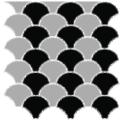
Quad paver (Basket Weave)

Decor paver (Stretcher Bond)

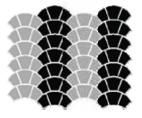
Uni paver(Basket Weave)



Hexagon paver (Herringbone)



Shell paver (Stretcher Bond)



Pavia paver(Stretcher Bond)

#### Technical Information PAVING BLOCKS

Quad & Uni (50 mm Thick; minimum strength of 25 N/mm²)									
	Product Code lxw(mm) pcs/m² Weight/pc(kgs) Weight/m²(kgs) Weight/pallet (kgs) Total m2/pallet								
Quad	1-15-020-50-100-200S	200 x 100	50	2.1	100	1000	10	500	
Uni	1-15-021-50-112-223S	240 x 130	40	2.5	100	1000	10	400	

#### Quad, Uni, Decor, Hexagon, 77 Square, Behaton & Shell (60mm Thick; minimum strength of 35 Nmm²)

	Product Code	l x w (mm)	pcs/m²	weight/pc(kgs)	weight/m²(kgs)	Weight/pal- let(kgs)	Total m <sup>2</sup> /pallet	Total pcs/pallet
Quad	1-15-020-60-100-200-35S	200 x 100	50	2.4	130	1300	10	500
Uni	1-15-021-60-112-223-35S	240 x 130	40	3.1	130	1300	10	400
Hexagon	1-15-023-60-158-158-35S	205 x 195	40	3.3	130	1560	12.9	516
Shell	1-15-024-60-131-132-35S	200 x 210	36	3.6	130	1300	10.19	367
77 Square (Produced at Warren Concrete)	1-15-027-002-60-100-100-35	100 x 100	100	1.2	120	1200	10	1000
Behaton ( Produced at Warren Concrete)	1-15-027-001-60-165-200-35	200 x 165	35.6	3	124.6	1246	10	357

#### **CONCRETE PAVING BLOCK TYPES**



Behaton



Uni



Quad



Pavia



77 Sauare



Hexagon





Decor



A set of Piazza

0

Shell

50mm is suitable for side walks & pedestrian paths.
60mm is suitable for driveways & light traffic areas.
80mm is suitable for commercial roads & heavy traffic areas.

<sup>\*</sup>Shade variations can occur from batch to batch. Samples in the brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to KEB Standards (KS 827: 2003 Kenya Standards For Pre-cast Concrete Paving Blocks) or client custom requirements. Always consult a qualified professional when using the products.

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	Product Code	Size	L (mm)	W (mm)	Area (mm²)	Area (m²)	Pcs Per Set	m² per Set
Block No A	1-15-027-003-60-165-300-250	250 x 300	250	300	75000	0.0750	2	0.1500
Block No B	1-15-027-003-60-165-350-300	350 x 300	350	300	105000	0.1050	2	0.2100
Block No C	1-15-027-003-60-165-400-150	400 x 150	400	150	60000	0.0600	1	0.0600
Block No D	1-15-027-003-60-165-500-150	500 x 150	500	150	75000	0.0750	1	0.0750
Block No E	1-15-027-003-60-165-300-150	300 x 150	300	150	45000	0.0450	1	0.0450
Block No F	1-15-027-003-60-165-350-225	350 x 225	350	225	78750	0.0788	2	0.1575
Block No G	1-15-027-003-60-165-260-225	250 x 225	250	225	56250	0.0563	2	0.1125
				•	•		11 pcs per set	0.8100 m <sup>2</sup> per set

Uni, Décor	Uni, Décor & Pavia (60mm Thick; minimum strength of 49 N/mm²)									
	Product Code	l x w (mm)	pcs/m²	Weight/pc (kgs)	Weight/m² (kgs)	Weight/pallet (kgs)	Total m²/pallet	Total pcs/pallet		
Uni	1-15-021-60-112-223S	240 x 130	40	3.3	130	1300	10	400		
Décor	1-15-022-60-118-227	225 x 135	38	3.4	130	1560	12	456		
Pavia	1-15-025-60-107-280	330 x 110	33	3.9	130	1300	10	330		
Quad	1-15-020-60-100-200-35S	200 x 100	50	2.4	130	1300	10	500		
77 Square (Produced at Warren Concrete)	1-15-027002-60-100-100-35	100 x 100	100	1.2	120	1200	10	1000		

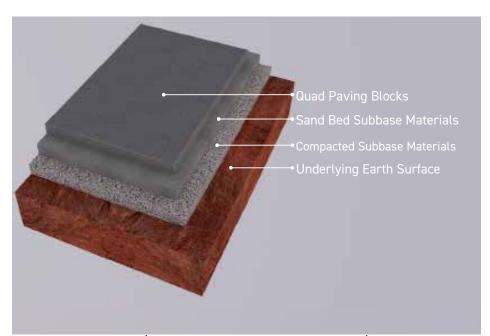
Quad & Uni (80 mm Thick; minimum strength of 49 N/mm²)									
	Product Code l x w (mm) pcs/m <sup>2</sup> Weight/pc (kgs) Weight/m <sup>2</sup> (kgs) Weight/pallet (kgs) Total m2/pallet								
Quad	1-15-020-80-100-200	200 x 100	50	3.3	165	1650	10	500	
Uni	1-15-021-80-112-223	240 x 130	40	4.2	168	1680	10	400	

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50mm is suitable for side walks & pedestrian paths.
60mm is suitable for driveways & light traffic areas.
80mm is suitable for commercial roads & heavy traffic areas.





\*For Illustration Purpose (Laid Quad paving blocks with subbase layers).

#### \*For paving base layer design, layout and construction consult a qualified professional or contact our technical department for guidance.

#### **CONCRETE PAVING BLOCKS LAYING GUIDELINES**

#### 1. Subgrade, subbase and road-base

It is necessary to prepare subgrade and subbase so that the surface levels are within the tolerance. Preparation of the sub material provides a surface that is dense enough to prevent laying course material being lost into it during construction.

#### 2. Edge Restraints

Should be adequate to support traffic loads and to prevent loss of laying course material beneath the surface course. Examples are kerbs and channels, established structures or rigid abutments such as paving blocks fixed vertically and bedded and haunched.

#### 3. Surface Course

It is important to lay blocks and make minor adjustments to maintain the bond pattern and ensure that the joints remain wide enough for sand filling. Block paving is designed to function with sand - filled joints, which will normally lie within the range of 1 - 1.5mm when placed hand tight. The joint width will be influenced by block shape and bond pattern.

#### 4. Compaction, Joint Filling and Vibrating of Paving Blocks

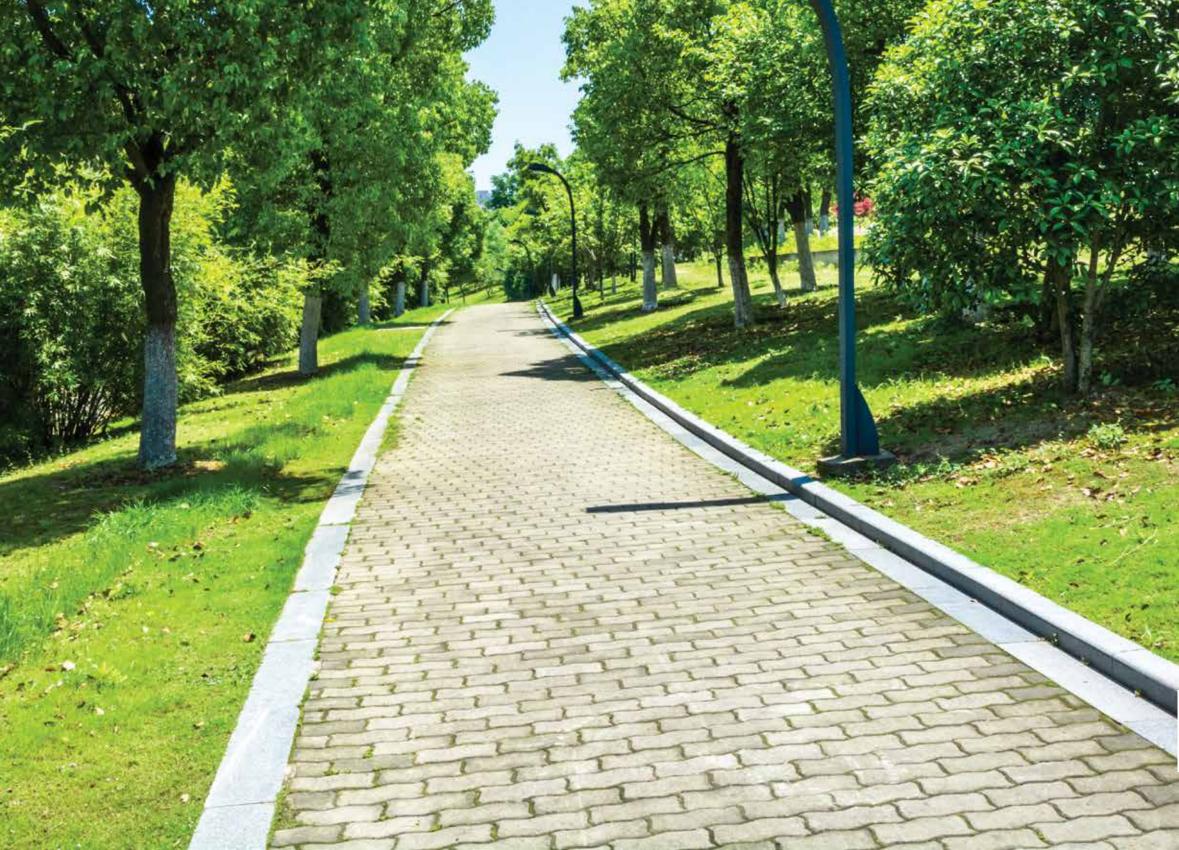
Use compacting equipment and transmit a frequency of vibration in the range 75 - 100Hz. After compaction of the surface course, spread sand or crushed rock fines over the surface and brush it into the joints. Do not use sand which might stain pavement surface, if this is an important consideration.

#### RECOMMENDATIONS FOR REPAIRS & RELAYING BLOCKS

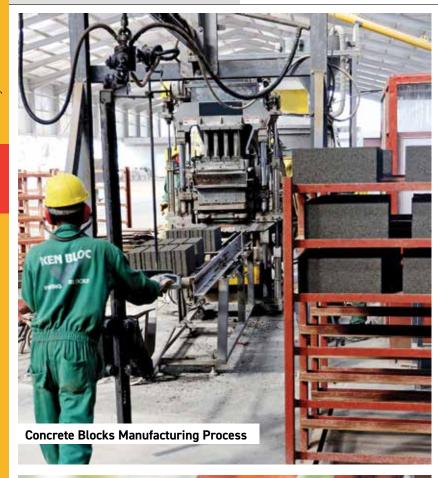
- » Remove the sand from joints around the first block and level it out. Remove and stack further blocks until the working area is exposed.
- » Using suitable excavated or new material, backfill the excavation and compact sufficiently to avoid subsequent settlement. Before the original blocks are relaid, clean off all loose and extraneous material.
- » Re-lay the blocks and bond them into the existing pavement. Use compacting equipment and transmit a frequency of vibration in the range 75 100Hz.

#### MAINTENANCE OF BLOCKS

A properly designed, located & constructed concrete block pavement will perform well for many years. A combination of regular inspection & light maintenance will ensure long-term durability and performance.









#### **6 ADVANTAGES OF CONCRETE BLOCKS**

#### 1. REDUCES CONSTRUCTION COST

Using concrete block in construction significantly **reduces cost** in various ways. To produce clay brick, hectares of land, tons of wood and coal are wasted. If we practice using concrete block we can save these natural resources to build our home, offices, roads and any other construction applications. Each block can save approximately 25% compared to using clay brick. Quarry cut stone requires large land masses for its extraction and once depleted become redundant sites resulting in further environmental damage.

#### 2. REDUCE MAINTENANCE COST

In the long run, concrete buildings and pavements, "stand the test of time" through their low maintenance requirements & have a significant sustainable advantage over other structures. Moisture, which can undermine other building materials through rust or rot, has no weakening effect on concrete. Neither termites/mold take any toll on concrete. In fact, concrete continues to strengthen over time, which is why concrete structures built thousands of years ago are still intact.

#### 3. EXTREMELY DURABLE

Concrete is one of the most **durable materials on Earth.** Concrete homes are far less likely to suffer damage in the event of earth tremors and earthquake. Concrete blocks can be reinforced to protect against high winds or earth tremors. If damage does occur, the **structural integrity** of the home typically remains intact, allowing for easier rebuilding. Concrete block is unquestionably the

most practical home building material. **There's no rotting or wall warping.** Your home retains its appeal and its value – beautifully.

#### 4. ENERGY SAVER

Insulated concrete wall systems provide high R-value and thermal mass with low air infiltration to provide superior thermal efficiency and optimal energy performance over the long life of the building. Since homes and buildings constructed with insulated concrete walls are not subject to large daily temperature fluctuations, owners can lower heating and cooling bills by up to 25%.

#### 5. DESIGN FLEXIBILITY

Concrete block is an extremely flexible building material. Concrete block can be used to build just about any type of house feature imaginable. Columns, archways and other intricate designs are all easily achieved with the material. Building with concrete block means you have the flexibility to do just about anything you want. Whether it be a onestory home or a three-story home with such options as high ceilings & tall windows concrete block provides the needed flexibility for every type of job. On the contrary quarry cut stone cannot be easily altered and are difficult to repair or relocate.

#### 6. SUSTAINABILITY

Concrete blocks are made from **recyclable materials** hence reducing its impact on natural resources. On the contrary, clay bricks & quarry cut stones, once formed are difficult to remold and reuse.

#### Solid Blocks

Application	Product Code	<b>Metric Dim.</b> w x h x l (mm)	Weight (kgs)	pcs/ton	pcs/m²
Tough and load bearing blocks suitable for wall	1-15-010-75-190-390	75 x 190 x 390	10	100	13
	1-15-010-100-190-390	100 x 190 x 390	14	67	13
	1-15-010-140-190-390	140 x 190 x 390	20	48	13
construction	1-15-010-190-190-390	190 x 190 x 390	27	36	13



**MASONRY BLOCKS** 

#### Solid Block

#### Hollow Blocks

Application	<b>Product Code</b>	<b>Metric Dim.</b> w x h x l (mm)	Weight (kgs)	pcs/ton	pcs/m²
Wall Partitioning (bottom open)	1-15-011-140-190-390	140 x 190 x 390	9	111	13
	1-15-011-190-190-390	190 x 190 x 390	13	77	13
	1-15-011-100-190-390	100 x 190 x 390	12	83	13
Wall Partitioning (bottom closed)	1-15-011-140-190-390	140 x 190 x 390	13	77	13
(bottom ctosed)	1-15-011-190-190-390	190 x 190 x 390	16	62	13



Hollow Blocks

#### **Hollow Pot Blocks**

Application	Product Code	<b>Metric Dim.</b> h x w x l (mm)	Weight (kgs)	pcs/ton	pcs/m²
Placed on slabs allowing direct application of	1-15-012-200-300-380	300 x 200 x 380	19.5	51	13
	1-15-012-200-230-380	230 x 200 x 380	16	63	13
	1-15-012-200-200-380	200 x 200 x 380	15.5	65	13
concrete	1-15-012-200-150-380	150 x 200 x 380	11	91	13



**Hollow Pot** 

#### Concrete Blocks classes ,for solid blocks, available as per Kenyan Standards (KS 02-625:2009)

Class	Min N/mm²
Α	7.0
В	3.5
С	2.5

<sup>\*</sup>Higher Strength Blocks available on request.

<sup>\*</sup>Weights, Block pcs/ton and Block pcs/m² are estimates for reference only. Product specifications are made to KEBS or client custom requirements. Always consult a qualified professional when using the products.



**Concrete Solid Blocks** are tough, load bearing blocks suitable for construction of walls.



**Concrete Hollow Blocks** are highly resilient blocks suitable for partition walls providing thermal and sound insulation.



Concrete Hollow Pots are used to fill portions of the slab thickness; this results in a deeper arm for the reinforcement while saving the amount of concrete.

The reinforcement is located between the pots inside the ribs. The major advantage of these floor is the **reduction in weight** achieved by removing part of the concrete section below the neutral axis and replacing that with lighter weight concrete hollow pots.

#### **IN SUMMARY**

#### **ADVANTAGES OF SOLID & HOLLOW CONCRETE BLOCKS**

- 1. Thinner walls possible, hence giving more carpet area
- Structurally stronger than clay bricks and quarry cut stones.
   Additionally can be manufactured to custom strength requirements.
- 3. Large in size, hence number of joints are less, saving in mortar
- 4. **Better insulating** against heat, sound and dampness.
- 5. Needs less plastering due to even surface texture and shape.
- 6. The high self-weight leads to great gravity and seismic loads
- 7. No dressing work & less time consuming when laying.
- 8. **Safer to use**, since they are lighter in weight compared to quarry cut stones. Quarry cut stones can result in serious incidents, where joints inside the interior wall have deteriorated due to a lack of drainage for moisture which may lead to the overall collapse of the stone masonry structure.

#### **ADVANTAGES OF HOLLOW POT BLOCKS**

- 1. Moisture insulation.
- 2. Heat insulation improves by around 25%.
- 3. Good insulation against sound.
- 4. Cheaper and economical.
- 5. Reduces weight on building structure.



Considering the above facts, concrete blocks as a complete solution are superior and work out economically cheaper compared to clay bricks or quarry cut stones.











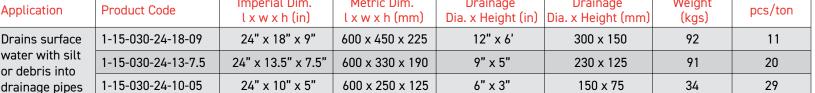


PRECAST PRODUCTS

PRECAST PRODUCTS Technical Information

#### **Invert Block Drain**

Application	Product Code	Imperial Dim. l x w x h (in)	Metric Dim. l x w x h (mm)	Drainage Dia. x Height (in)	Drainage Dia. x Height (mm)	Weight (kgs)	pcs/ton
Drains surface	1-15-030-24-18-09	24" x 18" x 9"	600 x 450 x 225	12" x 6'	300 x 150	92	11
water with silt or debris into	1-15-030-24-13-7.5	24" x 13.5" x 7.5"	600 x 330 x 190	9" x 5"	230 x 125	91	20
drainage pipes	1-15-030-24-10-05	24" x 10" x 5"	600 x 250 x 125	6" x 3"	150 x 75	34	29



<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions, \*Drainage Dia. x Height - Drainage Diameter x Drainage Height

#### Rectangular Invert Block Drain

Application	Product Code	Imperial Dim. l x w x h (in)	Metric Dim. l x w x h (mm)	Drainage Dia. x Height (in)	Drainage Dia. x Height (mm)	Weight (kgs)	pcs/ton
Drains surface water with	1-15-31-600-400-600	24" x 30" x 19" (R)	600 x 750 x 475 (R)	24" x 16"	600 x 400	158	6
	1-15-31-600-300-600	24" x 30" x 14" (R)	600 x 750 x 350 (R)	24" x 12"	600 x 300	155	6
silt/debris	1-15-31-525-350-600	24" x 26.5" x 17" (R)	600 x 670 x 425 (R)	21" x 14"	525 x 350	151	7
into drainage	1-15-31-450-300-600	24" x 24" x 15" (R)	600 x 600 x 375 (R)	18" x 12"	450 x 300	121	8
pipes	1-15-31-300-200-600	24" x 17.5" x 11" (NR)	600 x 450 x 275 (NR)	12" x 8"	300 x 200	92.5	11

<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions, \*Drainage Dia. x Height - Drainage Diameter x Drainage Height \*NR - Noternforced, \*R - Reinforced

#### **Shallow Block Drain**

Application	Product Code	Imperial Dim. w x l x h (in)	Metric Dim. w x l x h (in)	Weight (kgs)	pcs/ton
Drains water	1-15-130-32-24-07	32" x 24" x 7"	800 x 600 x 175	135	7
into drainage pipes	1-15-130-32-20-07	32" x 20" x 7"	800 x 500 x 175	116	8
pipes	1-15-130-15.6-18-5	15.6" x 22" x 5"	390 x 450 x 125	51	20

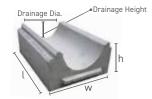
<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions

#### Side Slab

Application	Product Code	Imperial Dim. l x w x h (in)	Metric Dim. l x w x h (mm)	Weight (kgs)	pcs/ton
Drains water into a drain	1-15-035-03-09-24	24" x 9" x 3"	600 x 225 x 75	26	38

<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions

Invert Block Drain (Plain)



Invert Block Drain (for Side Slab use)



Rectangular Block Drain (for Side Slab use)



Shallow Block Drain



Side Slab

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specification are made to KEBS (made to KS 829 Kenyan Standard Specification for Precast Concrete) or client custom requirements. \*Always consult a qualified professional when using the product.

Drainage Height

#### **Drain Cover Slabs**

Application	Product Code	Imperial Dim. l x w x h (in)	Metric Dim. l x w x h (mm)	Weight (kgs)	pcs/ton
Cover block	1-15-311-SQ-600-600-75	24" (S) x 24" x 3"	600 (S) x 600 x 75	60	15
drains on various roads	1-15-311-SQ-600-600-100	24" (S) x 24" x 4"	600 (S) x 600 x 100	42	23
rigidly and	1-15-311- 450-600	24" (S) x 18" x 4"	600 (S) x 450 x 100	65	15
properly in	1-15-311-RT-600-450-075	24" x 18" (S) x 4"	600 x 450 (S) x 100	58	17
order to avoid any serious	1-15-311-400-400-50	16" x 16" (S) x 2"	400 x 400 (S) x 50	18	55
mishaps	1-15-311-SQ-400-400	16" (G) x 16" x 2"	400 (G) x 400 x 50	17	58



#### **Paving Slab**

Application	Product Code	Imperial Dim. l x w x h (in)	Metric Dim. l x w x h (mm)	Weight (kgs)	pcs/ton
Provides an	1-15-100-12-12-24	12" x 12" x 2"	300 x 300 x 50	10	100
ideal smooth surface to	1-15-100-20-20-24	20" x 20" x 2"	500 x 500 x 50	23	44
walk on for	1-15-100-24-9-24	24" x 9" x 2"	600 x 225 x 50	15	59
pedestrian access around	1-15-100-24-12-24	24" x 12" x 2"	600 x 300 x 50	19	45
homes,	1-15-100-18-18-24	18" x 18" x 2"	450 x 450 x 50	23	43
gardens and	1-15-100-24-18-24	24" x 18" x 2"	600 x 450 x 50	31	30
buildings	1-15-100-24-24-24	24" x 24" x 2"	600 x 600 x 50	39	22

<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions

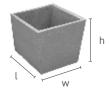
#### **Dhobi Sink**

Application	Product Code	Imperial Dim. w x l x h (in)	Metric Dim. w x l x h (mm)	Weight (kgs)	pcs/ton
Washing oily &	1-15-190-08	20" x 24" x 16"	500 x 600 x 400	86.50	12
extreme dirt	1-15-190-08-24-16	20" x 24" x 16"	500 x 600 x 400	92	12

<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions



Paving Slab



Dhobi Sink

<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specification are made to KEBS (made to KS 829 Kenyan Standard Specification for Precast Concrete) or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the product.

#### PRECAST PRODUCTS Technical Information

#### Road Kerbs, Garden Kerbs and Edge Kerbs

Application	Product Code	Imperial Dim. l x w x h (in)	Metric Dim. l x w x h (mm)	Weight (kgs)	pcs/ton
Barrier	1-15-090-05-10-36	5" x 10" x 36" (ST)	125 x 250 x 900	65	15
preventing damage along a	1-15-090-05-10-36	5" x 10" x 36" (RD)	125 x 250 x 900	65	15
pavement	1-15-090-4-8-36	4" x 8" x 36"	100 x 200 x 900	24	42
Produced at Warren Concrete	1-15-090-4-8-20	8" x 4" x 20"	200 x 100 x 500	24	42

# $\mathsf{h} \big[ \big]_{\mathsf{W}}$

Road Kerb and Garden Kerb

#### Road Channel

Application	Product Code	Imperial Dim. l x w x h (in)	Metric Dim. l x w x h (mm)	Weight (kgs)	pcs/ton
Prevents damage to a pavement	1-15-095-05-4-36	5" x 4" x 36" (ST)	125 x 100 x 900	27	34
from exposed running water	1-15-095-05-4-36	5" x 4" x 36" (RD)	125 x 100 x 900	27.5	36

<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions

#### Quadrant

Application	Product Code	Imperial Dim. h x l x w (in)	Metric Dim. h x l x w (mm)	Weight (kgs)	pcs/ton
Creates neat finish along	1-15-160-10-18-18	10" x 18" x 18"	250 x 450 x 450	90	11
curved edges.	1-15-160-10-12-12	10" x 12" x 12"	250 x 300 x 300	45	21

<sup>\*</sup>Imperial Dim - Imperial Dimensions, Metric Dim - Metric Dimensions

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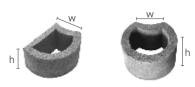
Road Channel

Quadrant

#### **Eclipse Blocks**

Application	Product Code	Imperial Dim. w x h (in)	Metric Dim. w x h (mm)	Weight (kgs)	pcs/ton
Protects loose	1-15-080-0300-0200-0100	13.2" x 7.2"	330 x 180	16.8	59
soil along slopes	1-15-080-0400-0400-0100	14" x 7.2"	330 x 180	17	58

<sup>\*</sup>Imperial Dim - Imperial Dimensions, Metric Dim - Metric Dimensions

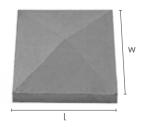


Eclipse Blocks

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specification are made to KEBS (made to KS 829 Kenyan Standard Specification for Precast Concrete) or client custom requirements.
\*Always consult a qualified professional when using the product.

#### Pillar Copping

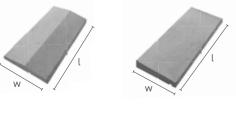
Application	Product Code	Imperial Dim. l x w (in)	Metric Dim. l x w (mm)	Weight (kgs)	pcs/ton
	1-15-036-012-012	12" x 12"	300 x 300	13	71
Decorative pieces that	1-15-036-016-016	16" x 16"	400 x 400	23	40
create	1-15-036-018-018	18" x 18"	450 x 450	30	30
elegance to a	1-15-036-020-020	20" x 20"	500 x 500	32	39
gate or wall tops	1-15-036-020-020 R	20" x 20" Raised	500 x 500	45	22
	1-15-036-024-024	24" x 24"	600 x 600	59	15



Pillar Copping

#### Window cill and Wall Copping

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Application	Product Code	Product Name	Imperial Dim. w x l (in)	Metric Dim. w x l (mm)	Weight (kgs)	pcs/ton
	1-15-050-04	Wall Copping	4" wall x 24"long	100 wall 600 long	9.5	105
Provide a	1-15-050-06	Wall Copping	6"wall x 24"long	150 wall 600 long	9	67
cost	1-15-050-08	Wall Copping	8"wall x 24"long	200 wall 600 long	17	59
effective	1-15-050-09	Wall Copping	9" wall x 24"long	225 wall 600 long	14	56
way to finish off	1-15-050-12	Wall Copping	12"wall x 24"long	300 wall 600 long	17	45
any style	1-15-035-175-600	1 sided wall copping	7" x 24"	175 x 600	10	100
of a wall or a	1-15-035-225-600	1 sided wall copping	9" x 24"	225 x 600	12	83
window	1-15-035-250-600	1 sided wall copping	10" x 24"	250 x 600	15.5	70
respectively	1-15-035-300-600	1 sided wall copping	12" x 24"	300 x 600	17	45
	1-15-035-375-600	1 sided wall copping	15" x 24"	375 x 600	20	40
	1-15-170-09	Window Cill	7" x 24"	175 x 600	5	91
	1-15-170-12	Window cill	10" x 24"	250 x 600	20	50



Wall Copping

One Sided Wall Copping



Window Cill

## W

Lattice Block

#### Lattice Block

Application	Product Code	Product Name	Imperial Dim. l x w x h (in)	Metric Dim. l x w x h (mm)	Weight (kgs)	pcs/ton
Grass paver	1-15-013-450-450-65	Block Lattice	18" x 18" x 2.6"	450 x 450 x 65	17.8	57

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specification are made to KEBS (made to KS 829 Kenyan Standard Specification for Precast Concrete) or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the product. \*Imperial Dim - Imperial Dimensions \*Metric Dim - Metric Dimensions.

PRECAST PRODUCTS

Technical Information

#### **Balustrade & Balustrade Copping**

Application	Product Code	Imperial Dim. (in)	Metric Dim. (mm)	Weight (kgs)	pcs/ton	Name
Used to decorate a home/garden as ornamental stands	1-15-150-12	12" (h)	300 (h)	9	111	Balustrade
	1-15-150-24	24" (h)	600 (h)	14	71	Balustrade
	1-15-150-36	36" (h)	900 (h)	24.5	41	Balustrade
	1-15-151-12	12" (l) x 12" (w)	300 (l) x 300 (w)	22	45	Balustrade Copping
	1-15-155-06-32-C	6" (l) x 32" (w)	150 (l) x 800 (w)	66	15	Balustrade Copping

#### Finale & Pillar Stand

Application	Product Code	Imperial Dim. l x w (in)	Metric Dim. l x w (mm)	Weight (kgs)	pcs/ton	Name
Decorative	1-15-186-20-20	20" x 20"	500 x 500	64.50	12	Finale
pieces that provide an	1-15-186-16-16	16" x 16"	400 x 400	45.00	18	Finale
elegant	1-15-186-12-12	12" x 12"	300 x 300	19.00	52	Finale
accent to	1-15-185-20-20-01	20" x 20"	500 x 500	64.50	16	Pillar Stand
your gate or wall	1-15-185-16-16-02	16" x 16"	400 x 400	55.00	18	Pillar Stand
tops.	1-15-185-12-12-02	12" x 12"	300 x 300	30.00	33	Pillar Stand

<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions

# W

Finale



Pillar Stand

#### Flower Pots

Application	Product Code	Imperial Dim. l x w (in)	Metric Dim. l x w (mm)	Weight (kgs)	pcs/ton	Name
	1-15-180-14	14" Hexagonal	350	84.50	11	Top Hexagon
Designed for displaying	1-15-180-12-16	12" x 16"	300 x 400	26.00	38	Rectangular (Simba)
outdoor plant	1-15-180-10-10	10" x 10"	250 x 250	33.50	29	Square
in a stylish	1-15-180-15-16	15" x 16"	375 x 400	34.00	29	HR Round Top
way	1-15-180-14-16	14" x 16"	350 x 400	23.00	43	Rectangular (Dhobi)







Top Hexagon

Rectangular

Square

**HR Round Top** 

<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions

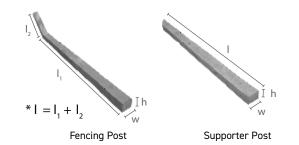
<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specification are made to KEBS (made to KS 829 Kenyan Standard Specification for Precast Concrete) or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the product.

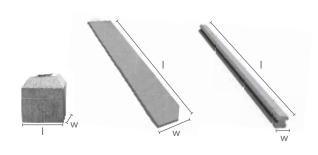
#### Fencing Posts and Supporter Poles

•	• •					
Application	Product Code	Product Name	Imperical Dim. w x h x l (in)	Metric Dim. w x h x l (mm)	Weight (kgs)	pcs/ton
Strong, not	susceptible to		4" x 5" x (10 FT)	100 x 125 x 3048	86	11
susceptible to ground rot &	1-15-070-04-05-08-01	Fencing Posts	4" x 5" x (8 FT)	100 x 125 x 2440	65	15
are durable for	1-15-070-06-06-08		6" x 6" x (8 FT)	150 x 150 x 2440	182	5
fencing	1-15-071-04-05-08	Supporter Poles	4" x 5" x (8 FT)	100 x 125 x 2440	64	16



#### Wall Panel, Post and Base

Application	Product Code	Product Name	Imperical Dim. l x w (in)	Metric Dim. l x w (mm)	Weight (kgs)	pcs/ton
Innovative	1-15-075-01-06-01	Plain	72" x 12"	1800 x 300	237	15
products designed	1-15-075-01-06-02	Decorated	72" x 12"	1800 x 300	238.5	31
to form	1-15-076-06-06-08	Post (8 FT)	8 FT x 6"	2440 x 150	99	10
external boundary wall	1-15-076-06-06-10	Post (10 FT)	10 FT x 6"	3048 x 150	128	7
for residential	1-15-076-06-06-11	Post (11 FT)	11 FT x 6"	3350 x 150	143	6
agricultural	1-15-076-06-06-12	Post (12 FT)	12 FT x 6"	3660 x 150	156	6
& industrial compounds	1-15-077-20-20	Panel Post Base	20" x 20"	500 x 500	148	6

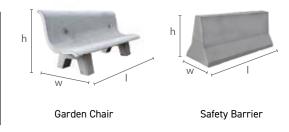


Panel Post Base Wall Panel

Panel Post

#### **Garden Chair and Safety Barrier**

Application	Product Code	Product Name	Imperical Dim. w x h x l (in)	Metric Dim. w x h x l (mm)	Weight (kgs)	pcs/ ton
Mobile concrete bench	1-15-092-6	Garden Chair	27" x 32" x 73"	675 x 800 x 1825	280	4
Crush barrier along roads	1-15-070-0600-0800- 2000	Safety Barrier	24" x 32" x 80"	600 x 800 x 2000	1260	1



<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specification are made to KEBS (made to KS 829 Kenyan Standard Specification for Precast Concrete) or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the product.

#### PCC Marker Posts, Earth Box & Stay Blocks

PRECAST PRODUCTS

Application	Product Code	Product Name	Imperial Dim. l x w x h (in)	Metric Dim. l x w x h (mm)	Weight (kgs)	pcs/ton
	1-15-195-09-09	A.V & S.V	2" x 9" x 44"	50 x 230 x 1110	18	56
Provide clear & long-lasting	1-15-195-09-09-42	F.H & W.L	2" x 9" x 42"	50 x 230 x 1050	18	56
identification	1-15-070-2.8-9.6-30	U.G Cable	9.6" x 2.8" x 30"	70 x 40 x 750	28	36
for utility service lines	1-15-311-0300-0300	Earth Box & Cover	12" x 12" x 9"	300 x 300 x 225	23.50	43
which may	1-15-010-50	Stay Blocks	22.4" x 15.2" x 2.4"	560 x 380 x 60 (1/2)	26.50	38
be buried	1-15-010-75	Stay Blocks	22" x 15.2" x 2.4"	550 x 380 x 60 (3/4)	27.50	36
underground	1-15-010-100	Stay Blocks	26.4" x 18.5" x 2.6"	660 x 470 x 65 (1)	57.00	18

	1-15-010-100	Stay Blocks	26.4"
*Imperial Dim - Imper	rial Dimensions, *Metric Dim	- Metric Dimensions	

## S.V F.H W.L

Earth Box & Cover

UG Cable

Stay Block

#### **Hatari Tiles**

Application	Product Code	Product Name	Imperial Dim. l x w (in)	Metric Dim. l x w (mm)	Weight (kgs)	pcs/ton
ground cable & utility lines from	1-15-140-06-15	Hatari Cable Tile	15" x 6"	375 x 150	4	250
	1-15-140-6-12	Hatari Slab LV	12" x 6"	300 x 150	5	200
	1-15-140-9-22.5	Hatari Slab HV	15" x 9"	375 x 225	15	67

<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions

## Hatari Cable Tile Hatari Slab LV Hatari Slab HV

#### Interlocking Floor and Wall Tiles

Application	Product Code	Product Name	Imperial Dim. h x w x l (in)	Metric Dim. h x w x l (mm)	Weight (kgs)	pcs/ton
Used on floors	1-15-100-08-08-075P	Floor Tile	3/4" x 8" x 8"	19 x 200 x 200	2	600
and walls to create a neat	1-15-100-08-08-075C	Plain/Coloured	3/4" x 8" x 8"	19 x 200 x 200	2	600
finish and act	1-15-100-010-010-075	Interlocking Tile	3/4" x 10" x 10"	19 x 250 x 250	2.5	400
as barrier to water	1-15-100-10-10-075C	Plain/Coloured	3/4" x 10" x 10"	19 x 250 x 250	2.5	400
penetrating areas	1-15-100-012-012-075P	Floor Tile	3/4" x 12" x 12"	19 x 300 x 200	4	250
	1-15-100-12-12-075C	Plain/Coloured	3/4" x 12" x 12"	19 x 300 x 200	4	250

<sup>\*</sup>Imperial Dim - Imperial Dimensions, \*Metric Dim - Metric Dimensions

\*Product specification are made to KEBS (made to KS 829 Kenyan Standard Specification for Precast Concrete) or client custom requirements.

ENA TS 43-91 Energy Networks Association Technical specification Standards is KP16C/313/TSP/07/001:Specification for concrete products (hatari and stay blocks). Always consult a qualified professional when using the product.



Interlocking Tile

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only.

#### **Ventilation Grills**

Application	Product Code	Product Name	Imperial Dim. l x w x h (in)	Metric Dim. l x w x h (mm)	Weight (kgs)	pcs/ton	
	1-15-080-010	Α	10.5" x 8.5" x 3.5"	262.5 x 212.5 x 87.5	5	200	
	1-15-080-020	В	8" x 8" x 5.5"	200 x 200 x 137.5	4	250	
	1-15-080-030	С	7" x 7" x 4"	175 x 175 x 100	3	333	
Designed to provide	1-15-080-040	D	8" x 8" x 8"	200 x 200 x 200	9	111	
residential	1-15-080-050	Е	9" x 9" x 3.5"	225 x 225 x 87.5	6.5	154	
and	1-15-080-060-06	F6	12" x 12" x 6"	300 x 300 x 150	17.5	57	
commercial buildings	1-15-080-060-04	F4	12" x 12" x 4"	300 x 300 x 100	100	10	
with	1-15-080-070-06	G6	12" x 12" x 6"	300 x 300 x 150	15	67	
ventilation purposes	1-15-080-070-04	G4	12" x 12" x 4"	300 x 300 x 100	11	91	
	1-15-080-080	Н	9" x 12" x 1"	225 x 300 x 25	2	500	
	1-15-080-090	J	9" x 9" x 1"	225 x 225 x 25	1.5	667	
	1-15-080-100	K	10.5" x 8.5" x 3.5"	262.5 x 200 x 200	4	250	























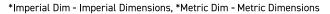


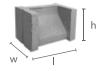




#### Louver Blocks

Application	Product Code	Imperial Dim. w x h x l (in)	Metric Dim. w x h x l (mm)	Weight (kgs)	pcs/ton
Designed for	1-15-040-06-06-12	6" x 6" x 12"	150 x 150 x 300	8	125
ventilation	1-15-040-08-08-12	8" x 8" x 12"	200 x 200 x 300	9	111





Louvre Block

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specification are made to KEBS (made to KS 829 Kenyan Standard Specification for Precast Concrete) or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the product.

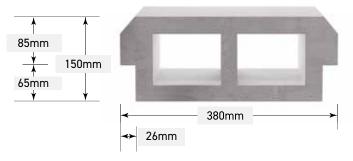
#### **BEAM & BLOCK FLOOR SYSTEM**

#### **OVERVIEW**

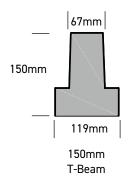
www.kenyabuilders.com

Beam & Block is a suspended floor slab system using precast T-beams and infill blocks. T-shaped beams are laid in rows, supported on internal walls, then infill blocks fill the spaces. Utilities and trunking are laid on top, followed by a 50 mm screed to finish the floor. This approach enables rapid installation, strong structural performance, and adaptability across various spans and load requirements.

#### **INFILL BLOCK**



#### T-BEAM



Our standard solid blocks measure  $380 \, \text{mm} \times 200 \, \text{mm} \times 150 \, \text{mm}$  and are manufactured using a high-pressure hydraulic press. These  $150 \, \text{mm}$  aggregate blocks deliver a transverse strength of  $3.5 \, \text{KN}$ , verified through rigorous testing in compliance with both Kenyan and British Standards

#### **KEY SPECIFICATIONS & PERFORMANCE**

Parameter	Typical Value / Range
Beam depths/sizes	150 mm for standard span and load applications & 225 mm for heavy duty and longer span requirements.
Beam weight	≈ 35 kg/m (150 mm), up to ≈ 68 kg/m (225 mm)
Infill block size	380mm*200mm*150mm
Infill block strength	> 3.5 kN/mm² (transverse capacity) tested in accordance to Kenyan Standards.
Span capability	Up to ~ 8 m (depends on loading & beam section)
Imposed design loads	Residential $\sim 1.5 \text{ kN/m}^2$ ; heavier uses up to 5–10 kN/m <sup>2</sup> as required
Fire resistance	Up to 1 hour (depends on beam size & concrete cover)
Sound insulation	Suitable for intermediate floors in housing when detailed to approved standards
Thermal / insulation options	Can integrate lightweight blocks or insulation to enhance U-values

#### **INSTALLATION NOTES & DESIGN CRITERIA**

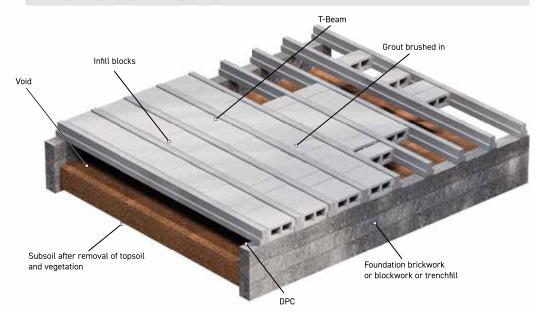
- » Provide minimum bearing of 100 mm on masonry or 75 mm on steel supports. Grout all beam/block interfaces with a cement-sand mix (e.g. 1:3 or 1:6, per spec) to ensure composite action.
- » Ensure proper ventilation of voids beneath suspended floors (e.g. 1,500 mm² per m run of wall) to avoid moisture buildup. Allow for camber (upward curvature) inherent in prestressed beams when specifying final floor level.
- » Service penetrations should be through infill blocks, not through beams. Any gaps must be sealed with structural grout. For heavy load zones (garages, mechanical footprints), specify thicker beams or additional reinforcement topping.

#### **BENEFITS AND USES**

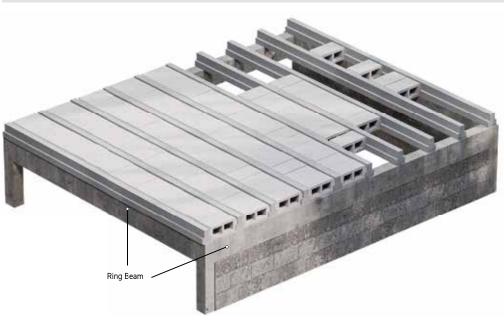
#### **BENEFITS**

- » Minimal excavation and no backfill: Only foundation trenches are needed; the suspended floor rests on walling
- » No formwork: The system is self-supporting and needs no shuttering
- » No propping: No temporary props are needed during installation
- » No extra reinforcement: Beams are prestressed and conform to standards, so no additional BRC or steel mesh is required
- » Fast, easy installation: Components are placed rapidly with minimal machinery
- » High performance and durability: Resistant to weather, rot, and movement; stable, solid floors
- » Safe working platform immediately: Once installed the floor can be used for further work
- » All-weather construction: Installation is not dependent on specific weather conditions
- » Acoustic performance: Good at reducing floor-to-floor noise, no timber squeaks
- » Fire resistance: Provides enhanced fire protection thanks to concrete
- » Thermal moderation: Concrete's heat storage properties help regulate indoor temperature
- » Long lifespan: Precast structures last for decades under normal conditions
- » Reduced theft / material losses: Custom elements cannot easily be reused elsewhere; less exposure to theft

#### **TYPICAL GROUND FLOOR SLAB**



#### **TYPICAL UPPER FLOOR / ROOF SLAB**

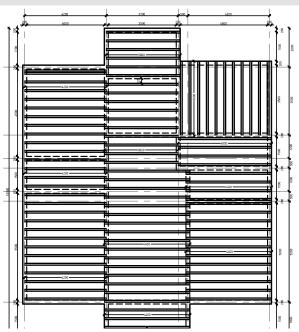


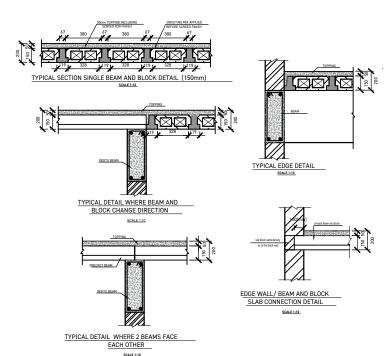
#### **USES**

- 1. Ground floor slabs; beams supported on walls, blocks infill
- 2. Roof / flat slab systems; often with slight slope + waterproofing
- 3. Septic tank covers; suspended slabs over tank walls
- 4. High-rise & commercial building floors, for strength, durability and repeatability
- 5. Staircases; using beams as stringers with infill steps
- 6. Lintels; precast prestressed beams over openings
- 7. Tent / platform decks; raised slabs for off-ground use
- 8. Water tower slabs; designed beam layouts for elevated tank loads
- 9. Industrial cold storage slabs; use lightweight infill (e.g. foam) where needed
- 10. Steel decking / mezzanine floors; composite usage with metal decking

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#### **TYPICAL BEAM PLAN**





#### **150 MM LOAD TABLE**

Density of Hollow Infill blocks =  $1160 \text{Kg/m}^3$ , Topping (50mm)=  $1.25 \text{KN/m}^2$ , Celling plaster for suspended floor 12 mm thick + tiles  $18 \text{mm} = 0.72 \text{KN/m}^2$ 

Beam - Block Types		1 1	шш	ш ш
	1.5KN/m <sup>2</sup>	4.7	5.8	6.4
ad	2.0KN/m <sup>2</sup>	4.4	5.5	6.1
Super Imposed Load	2.5KN/m <sup>2</sup>	4.2	5.3	5.8
ose	3.0KN/m <sup>2</sup>	4.0	5.1	5.6
l m	4.0KN/m <sup>2</sup>	3.8	4.7	5.2
ber	5.0KN/m <sup>2</sup>	3.5	4.4	4.9
Su	7.5KN/m <sup>2</sup>	3.1	3.8	4.3
	10.0KN/m <sup>2</sup>	2.8	3.4	3.8

Residential houses = 1.5KN/m2, Hotels = 2.0KN/m2, Classrooms = 3.0KN/m², Shops = 4.0KN/m2, Workshops = 5.0KN/m2; Industrial walkways = 7.5KN/m²

#### **225 MM LOAD TABLE**

Density of Hollow Infill blocks =  $1160 \text{Kg/m}^3$ , Topping (50 mm)=  $1.25 \text{KN/m}^2$ , Celling plaster for suspended floor 12 mm thick + tiles  $18 \text{mm} = 0.72 \text{KN/m}^2$ 

Ве	am - Block Types	1 1	1
	1.5KN/m <sup>2</sup>	6.5	8.0
Load	2.0KN/m <sup>2</sup>	6.1	7.7
	2.5KN/m <sup>2</sup>	6.0	7.4
ose	3.0KN/m <sup>2</sup>	5.7	7.1
<u>  m</u>	4.0KN/m <sup>2</sup>	5.4	6.7
Super Imposed	5.0KN/m <sup>2</sup>	5.1	6.3
Sul	7.5KN/m <sup>2</sup>	4.5	5.6
	10.0KN/m <sup>2</sup>	4.0	5.0

Residential houses =  $1.5 \text{KN/m}^2$ , Hotels =  $2.0 \text{KN/m}^2$ , Classrooms =  $3.0 \text{KN/m}^2$ , Shops =  $4.0 \text{KN/m}^2$ , Workshops =  $5.0 \text{KN/m}^2$ ; Industrial walkways =  $7.5 \text{KN/m}^2$ 

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specifications are made to KEBS (made to KS 829 Kenyan Standard Specification for Precast Concrete) or client custom requirements. \*Always consult a qualified professional when using the product.

Beam & Block PRECAST PRODUCTS

#### T-Beam Data

Application	Product Code	Imperial Dim. (W × H × L) (in)	Metric Dim. (W × H × L) (mm)	Weight (kgs)	Pcs/Ton
Beam and block flooring	P-1-15-199-00150-0119-1800	4.7 × 5.9 × 70.9	119 × 150 × 1800	43.2	23.1
provides a quick, durable, and cost-effective solution for	P-1-15-199-00150-0119-2000	4.7 × 5.9 × 78.7	119 × 150 × 2000	48.0	20.8
constructing suspended floors.	P-1-15-199-00150-0119-2400	4.7 × 5.9 × 94.4	119 × 150 × 2400	57.6	17.4
The infill blocks distribute	P-1-15-199-00150-0119-2600	4.7 × 5.9 × 102.4	119 × 150 × 2600	62.4	16.0
loads evenly between precast concrete beams, creating a	P-1-15-199-00150-0119-2700	4.7× 5.9 × 106.3	119 × 150 × 2700	64.8	15.4
solid, stable base ready for	P-1-15-199-00150-0119-3000	4.7 × 5.9 × 118.1	119 × 150 × 3000	72.0	13.9
screeding and finishing.	P-1-15-199-00150-0119-3200	4.7 × 5.9 × 126.0	119 × 150 × 3200	76.8	13.0
	P-1-15-199-00150-0119-3400	4.7 × 5.9 × 133.7	119 × 150 × 3400	81.6	12.3
	P-1-15-199-00150-0119-3600	4.7 × 6.0 × 141.7	119 × 150 × 3600	86.4	11.6
	P-1-15-199-00150-0119-3700	4.7 × 6.0 × 145.7	119 × 150 × 3700	88.8	11.3
	P-1-15-199-00150-0119-3800	4.7 × 6.0 × 149.6	119 × 150 × 3800	91.2	11.0
	P-1-15-199-00150-0119-4000	4.7 × 6.0 × 157.5	119 × 150 × 4000	96.0	10.4
	P-1-15-199-00150-0119-4200	4.7 × 6.0 × 165.4	119 × 150 × 4200	100.8	9.9
	P-1-15-199-00150-0119-4400	4.7 × 6.0 × 173.2	119 × 150 × 4400	105.6	9.5
	P-1-15-199-00150-0119-4600	4.7 × 6.0 × 181.1	119 × 150 × 4600	138.8	7.2
	P-1-15-199-00150-0119-5900	4.7 × 6.0 × 232.2	119 × 150 × 5900	141.6	7.1
	P-1-15-199-00150-0119-6000	4.7 × 6.0 × 236.2	119 × 150 × 6000	144.0	6.9

#### **Block Data**

Application	Product Code	Imperial Dim. (W × H × L) (in)	Metric Dim. (W × H × L) (mm)	Weight (kgs)	Pcs/Ton
Suspended floor slabs	1-15-012-150-200-380-002	7.87 × 14.96 × 5.91	200 × 380 × 150	13.5	74



<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specifications are made to KEBS (made to KS 829 Kenyan Standard Specification for Precast Concrete) or client custom requirements.
\*Always consult a qualified professional when using the product.

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#### 9 GOOD REASONS WHY YOU SHOULD USE PRECAST CONCRETE PIPES

#### 1. SUSTAINABILITY

Precast concrete pipes outperform other pipeline solutions in a number of the environmental impact categories, such as human toxicity levels and chemical or hazardous waste generated. The CO<sup>2</sup> emissions from concrete production are relatively small compared to other building materials. Some 95-99% of ingredients used in the production of concrete pipes are **sourced locally**, so a considerable positive impact on the **carbon footprint** and fuel consumption associated with transporting these materials can be achieved.

#### 2. STRENGTH

Precast concrete pipe is more durable than any other kind of pipe. Hence, it can carry more load at any given time and gains strength over time. It cannot be weakened by heat, moisture, mold or pests, nor will it rust. Precast concrete pipe will not rust, burn, tear, buckle or deflect, have the ability to resist chemical attacks and is immune to most environmental elements. A general lack of pipe stiffness is the biggest contributor to deflection and deformation problems in plastic pipes.

#### 3. QUALITY

Since precast concrete pipes are produced in highly controlled plant environments under rigid production standards and testing specifications, they achieve **consistent high quality levels of performance.** 

#### 4. FIRE RESISTANCE

**Being naturally fire-resistant,** concrete forms a highly effective barrier to fire spread and it does not emit any toxic fumes when affected by fire. It will not produce smoke or drip molten particles. Therefore, in the majority of applications, concrete can be described as virtually 'fireproof'. Due to

its inbuilt fire-resistant properties, concrete not only maintains an airtight construction that stops smoke spreading, but also has the ability to **keep** its strength during a fire.

#### 5. WHOLE LIFE VALUE

Due to its amazing structural properties and functional benefits, precast concrete pipes tend to attract lower insurance premiums than those built from other construction materials. The natural strength of precast concrete pipes enables recycled aggregate to be used as a bedding material, significantly reducing installation costs and the elimination of waste disposal costs. Plastic pipe products may have lower initial costs, but they are not as cost-effective as concrete pipe. Over the long term, plastic pipe has a shorter service life, and requires premium bedding and backfill. Installation procedures have to be precise for the bedding and backfill to take on the required structural characteristics. During and after installation, inspection of plastic pipe systems is critical to performance, and mandrel or laser/video testing is mandatory in many jurisdictions. In general, the true cost (installation, maintenance and replacement) of plastic pipe can be twice that of concrete based on a 50-year or greater service life. Precast concrete pipe is the strongest drainage product available, the most hydraulically efficient, and has great current and future value as an infrastructure asset.

#### **6. BEDDING PERFORMANCE**

The superior strength of concrete pipes enables recycled aggregate to be used as a bedding material, thus reducing costs and environmental impact during installation. Since a full trench depth of granular material can actually be more expensive than the pipe, significant pipe bedding savings can be achieved when using a concrete pipe instead.

Source: American Concrete Pipe Association.

36 Warren Concrete Ltd

Concrete Pipe Benefits CONCRETE PIPES

#### 7. HYDRAULIC EFFICIENCY

The rigidity and mass of precast concrete pipes (within the pipe & pipe joints) allows it to retain its shape over its long service life, preserving structural integrity & hydraulic efficiency, by minimizing the resistance to water-flow that often occurs when the shape or integrity of a plastic pipe is compromised through deformation.

#### 8. INSTALLATION

The primary purpose of a conduit is to move a certain amount of storm water from one point to another. A precast concrete conduit, in conjunction with the surrounding soil, provides the structure the installation must provide. Concrete pipe far outperforms plastic pipes. Concrete's rigidity and mass allow for easy and secure placement in the ditch, without disrupting line/ grade. Precast concrete pipe joints are easily assembled, which help minimize the time needed for installation. Precast concrete pipe is a rigid pipe system that is over 85% dependent on the pipe strength & only 15% dependent on the strength derived from the soil envelope, thus installation is made easy. Unlike plastic pipe, where up to 95% of the structure must be painstakingly designed & installed in the field. The installation of plastic or metal pipes can take longer than precast concrete pipe. That's because the structural & hydraulic integrity of plastic pipes rely heavily on how well you prep the surrounding soil at installation, rather than on their own inherent brute strength. Plastic pipe installation requires carefully selected backfill material, high compaction of the backfill, on-site inspection and post-installation laser testing which all increase the overall time and cost of installation. The longer lengths of pipe require close control of bedding material, grade and compaction during installation, or high & low spots or deflection may occur.

#### 9. CHEMICAL RESISTANCE

Precast concrete pipes and manholes are resistant to sulphate & chemical attack. Concrete pipeline products with higher design chemical classes **need special instructions and sulphur-resistant cement** which are capable of withstanding attack from aggressive ground environments.



# **ADVANTAGES OF CONCRETE PIPES**

- The designer has more control over pipe strength than any other facet of the project.
- There is less reliance on quality installation by the installer.
- » There is lower embedment material cost.
- » There is less compaction required.
- » It is easier to maintain grade and alignment.
- » There are no excess deflection concerns.
- » There is a lower life cycle cost of the project.
- » There is a lower maintenance cost over the design life of the project.
- » There is a reduced likelihood of failure.
- » A lower risk for the specifier, designer and owner of the project, and reduced overall liability to the public after the project has been commissioned.

#### MASS OF CONCRETE PIPE ALLOWS

- » Effective compaction of embedment and backfill.
- » Prevention of movement during backfilling ensuring adherence to design grade and alignment.
- » Unlikely movement of structure following installation.
- » Reduced likelihood of flotation.
- » Reduced possibility of damage during subsequent construction or maintenance in phased projects.

### **CONCRETE PIPE INSTALLATIONS PROVIDE SEVERAL BENEFITS**

- » Provides flexibility to meet design requirements and site conditions.
- » Allows for narrower excavation limits.
- » Less expensive backfill materials may be used.
- » Can reduce the level of compaction.
- » Increases contractor productivity in installing concrete pipe.



Precast concrete pipe's staying power has another benefit; it's not a passing fad. When concrete pipe is specified, the projects you build today are more likely to be compatible with any future expansions or alterations.

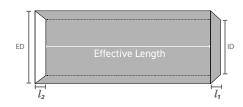


### **Ogee Joint Concrete Pipes**

Application	Product Code	ID (mm)	ED (mm)	Effective Length (mm)	Weight (kgs)	Wall Thickness (mm)	l <sub>1</sub> (mm)	<b>l</b> <sub>2</sub> (mm)
	1-15-220-0100-1000	100	150	1000	24	25	15	15
	1-15-220-0150-1000	150	205	1000	35	28	20	20
	1-15-220-0225-1000	225	285	1000	65	30	20	20
	1-15-220-0300-1000	300	375	1000	87	38	25	25
	1-15-220-0375-1000	375	455	1000	117	40	27	27
lland for	1-15-220-0450-1000	450	535	1000	160	43	30	30
Used for land surface	1-15-220-0525-1000	525	625	1000	187	50	32	32
water	1-15-220-0600-1000	600	715	1000	261	58	37	37
drainage systems.	1-15-220-0760-1000	760	890	1000	402	65	45	45
.,	1-15-220-0915-1000	915	1055	1000	535	70	45	45
	1-15-220-1070-1000	1070	1250	1000	600	70	45	45
	1-15-220-1200-1000	1200	1350	1000	760	75	50	50
	1-15-220-1350-1000	1350	1530	1000	870	90	75	75
	1-15-220-1500-1000	1500	1700	1000	1207	100	75	75



**Ogee Joint Concrete Pipes** 



Cross section of a Ogee Joint Concrete Pipes

# **Half Round Ogee Concrete Pipes**

Application	Product Code	Imperial Dim. Dia x Height (in)	Metric Dim. Dia x Height (mm)	<b>Weight</b> (kgs)	pcs/ton
	1-15-240-0150-1000	6" x 39"	150 x 1000	14	71
Used for	1-15-240-0225-1000	9" x 39"	225 x 1000	28	35
	1-15-240-0300-1000	12" x 39"	300 x 1000	39	26
open storm water	1-15-240-0375-1000	15" x 39"	375 x 1000	56	18
drainage	1-15-240-0450-1000	18" x 39"	450 x 1000	76	13
systems	1-15-240-0525-1000	21" x 39"	525 x 1000	88	11
	1-15-240-0600-1000	24" x 39"	600 x 1000	124	8
	1-15-240-0900-1000	36" x 39"	900 x 1000	234	4



**Half Round Ogee Joint Concrete Pipes** 

#### Abbreviations.

Imperial Dim. - Imperial Dimensions Metric Dim. - Metric Dimensions

Dia - Diameter

ID - Internal Diameter

ED - External Diameter

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specifications are made to KEBS (KS 02-548) or client custom requirements. Always consult a qualified professional when using the product.

#### **Spigot & Socket for Flexible jointed Concrete Pipes**

**CONCRETE PIPES** 

Application	Product Code	ID (mm)	ED (mm)	Effective Length (mm)	Weight (kgs)	Wall Thickness (mm)	OD (mm)	լ <sub>1</sub> (mm)	<b>l</b> <sub>2</sub> (mm)	Rubber Rings Dia. (mm)
Spigot &	1-15-200-0150-1200	150	210	1200	54	30	300	50	50	230
	1-15-200-0225-1200	225	301	1200	101	38	380	55	55	235
	1-15-200-0300-1200	300	380	1200	148	40	490	55	55	280
socket for Flexible	1-15-200-0375-1200	375	465	1200	198	45	580	55	55	270
jointed	1-15-200-0450-1500	450	590	1500	433	70	680	100	100	310
concrete	1-15-200-0525-1500	525	665	1500	515	70	800	100	100	350
pipes used for sewerage	1-15-200-0600-1500	600	760	1500	634	80	870	100	600	350
systems.	1-15-200-0760-1500	760	920	1500	920	80	1040	100	760	400
	1-15-200-0825-1500	825	991	1500	1150	83	1100	115	825	440
	1-15-200-0900-1500	900	1100	1500	1350	100	1250	115	900	400



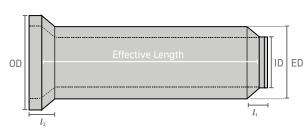
Spigot & Socket for Flexible/Rigid Jointed Concrete Pipes



Rubber Ring for Spigot & Socket for Flexible Jointed Concrete Pipes

# **Spigot & Socket for Rigid Jointed Concrete Pipes**

Application	Product Code	ID (mm)	ED (mm)	Effective Length (mm)	Weight (kgs)	Wall Thickness (mm)	OD (mm)	ι <sub>1</sub> (mm)	l <sub>2</sub> (mm)
Spigot &	1-15-210-0100-1000	100	156	1000	34	28	230	15	150
	1-15-210-0150-1000	150	210	1000	45	30	270	20	150
socket for	1-15-210-0225-1000	225	285	1000	74	32	390	20	190
Rigid	1-15-210-0300-1000	300	376	1000	113	38	480	25	210
jointed concrete	1-15-210-0375-1000	375	455	1000	141	40	550	27	215
pipes <b>used</b>	1-15-210-0450-1000	450	536	1000	192	43	640	30	225
for storm water and	1-15-210-0525-1000	525	615	1000	259	45	740	37	260
sewerage	1-15-210-0600-1000	600	704	1000	340	52	860	38	280
systems.	1-15-210-0760-1000	760	870	1000	385	55	980	20	290
	1-15-210-0835-1000	825	945	1000	440	60	1040	20	320



Cross Sectional view of Spigot & Socket for Flexible/Rigid Jointed Concrete Pipes

Abbreviations; ID - Internal Diameter, ED - External Diameter, OD - Outside Diameter & Rubber Rings Dia - Rubber Rings Diameter

40

<sup>\*</sup>The above weights are estimates for informational purpose only. Product specifications are made to KEBS (KS 02-548) or client custom requirements. Always consult a qualified professional when using the product.

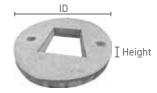
Technical Information CONCRETE PIPES

### Manhole Rings

Application	Product Code	Imperial Dim. ID x Height(in)	Metric Dim. ID x Height (mm)	<b>Weight</b> (kgs)	pcs/ton
	1-15-315-1200-1000	48" x 39"	1200 x 1000	760	1
	1-15-315-1200-0750	48" x 30"	1200 x 750	570	1
	1-15-315-1200-0610	48" x 24"	1200 x 610	465	2
Used as a manhole to	1-15-315-1200-0450	48" x 18"	1200 x 450	345	2
clear	1-15-315-1200-0305	48" x 12"	1200 x 305	232	4
blockage in	1-15-315-1070-1000	42" x 39"	1070 x 1000	600	1
drainage systems.	1-15-315-1070-0750	42" x 30"	1070 x 750	450	2
,	1-15-315-1070-0610	42" x 24"	1070 x 610	365	2
	1-15-315-1070-0450	42" x 18"	1070 x 450	270	3
	1-15-315-1070-0305	42" x 12"	1070 x 305	180	5
	1-15-315-0915-1000	36" x 39"	915 x 1000	535	2



Manhole Rings



Manhole Cover Slab

#### Manhole Cover Slab

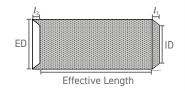
Application	Product Code	Imperial Dim. ID x Height(in)	Metric Dim. ID x Height(mm)	<b>Weight</b> (kgs)	pcs/ton
Used to	1-15-311-01220-150	48" x 6"	1220 x 150	506	2
cover manhole	1-15-311-01070-150	42" x 6"	1070 x 150	433	2
ring	1-15-311-00915-150	36" x 6"	915 x 150	379	3
pipes.	1-15-311-00685-150	27" x 6"	685 x 150	284	4

#### Abbreviations.

Imperial Dim. - Imperial Dimensions Metric Dim. - Metric Dimensions Dia - Diameter ID - Internal Diameter

#### **Porous Concrete Pipes**

· · · · · · · · · · · · · · · · · · ·									
Application	Product Code	ID (mm)	ED (mm)	Effective Length (mm)	Weight (kgs)	Wall Thickness (mm)	ι <sub>1</sub> (mm)	ι <sub>2</sub> (mm)	
Capture	1-15-230-0100-0760	100	150	760	16	25	15	15	
water around external area	1-15-230-0150-1000	150	204	1000	32	27	20	20	
of porous	1-15-230-0225-1000	225	285	1000	51	30	20	20	
pipes	1-15-230-0300-1000	300	374	1000	72	37	25	25	



ED - External Diameter



Cross-sectional view of Porous Concrete Pipes

**Porous Concrete Pipes** 

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specifications are made to KEBS (KS 02-548) or client custom requirements. Always consult a qualified professional when using the product.

# CONCRETE PIPES Technical Information

### Concrete Pipe Saddle

Application	Product Code	Imperial Dim. ID x Length (in)	Metric Dim. ID x Height (mm)	<b>Weight</b> (kgs)	pcs/ton
Anchor &	1-15-120-04-09	4" x 9"	100 x 225	29	34
guide loads from other	1-15-120-06-09	6" x 9"	150 x 225	43	23
pipes	1-15-120-06-06	6" x 12"	150 x 300	68	14



Concrete Pipe Saddle

#### **Concrete Pipe Bends**

Application	Product Code	Imperial Dim. ID (in) x Degrees	Weight (kgs)	For Flexible Jointed pipes	For Ogee Jointed pipes	For Rigid Jointed pipes
	1-15-310-0100-45	4" x 45°	18	×	✓	✓
	1-15-310-0100-90	4" x 90°	19	×	✓	✓
Connection	1-15-310-0150-45	6" x 45°	25	✓	✓	✓
that directs water in pipes	1-15-310-0150-90	6" x 90°	23	✓	✓	✓
along sewer	1-15-310-0225-45	9" x 45º	44	✓	✓	✓
lines.	1-15-310-0225-90	9" x 90°	41	✓	✓	✓
	1-15-310-0300-45	12" x 45°	94	✓	✓	✓
	1-15-310-0300-90	12" x 90°	97	✓	✓	✓



**Concrete Pipe Bend** 

# **Concrete Road Gully**

Application	Product Code	Imperial Dim. ID x Height(in)	Metric Dim. Dia x Height (mm)	<b>Weight</b> (kgs)	pcs/ton
Collects	1-15-311-01220-150	48" x 6"	1220 x 150	503	2
surface water					



**Concrete Road Gully** 

#### Abbreviations.

Imperial Dim. - Imperial Dimensions Metric Dim. - Metric Dimensions ID - Internal Diameter

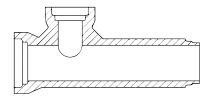
\*The above weights and pcs/ton are estimates for informational purpose only. Product specifications are made to KEBS (KS 02-548) or client custom requirements. Always consult a qualified professional when using the product.

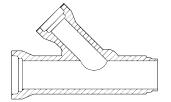
#### **Concrete Backdrops and Junctions Pipes**

Application	Product Code	Imperial Dim. Connection Dia x Main Lin Dia (in)	Metric Dim. Connection Dia x Main Lin Dia (mm)	For Flexible Jointed pipes	For Ogee Joint ed pipes	For Rigid Jointed pipes
	1-15-270-0100-0100	4" x 4"	100 x 100	×	✓	✓
	1-15-270-0100-0150	4" x 6"	100 x 150	×	✓	✓
	1-15-270-0100-0225	4" x 9"	100 x 225	×	✓	✓
Acts as a	1-15-270-0100-0300	4" x 12"	100 x 300	×	✓	✓
connector of different pipes	1-15-270-0150-0150	6" x 6"	150 x 150	✓	✓	✓
with different	1-15-270-0150-0225	6" x 9"	150 x 225	✓	✓	✓
levels of flow.	1-15-270-0150-0300	6" x 12"	150 x 300	✓	✓	✓
	1-15-270-0150-0375	6" x 15"	150 x 375	✓	✓	✓
	1-15-270-0150-0450	6" x 18"	150 x 450	✓	✓	✓
	1-15-270-0150-0600	6" x 24"	150 x 600	✓	✓	✓
	1-15-270-0225-0225	9" x 9"	225 x 225	✓	✓	✓
	1-15-270-0300-0300	12" x 12"	300 x 300	✓	✓	✓
	1-15-270-0375-0375	15" x 15"	375 x 375	✓	✓	✓
	1-15-270-0450-0450	18" x 18"	450 x 450	×	✓	✓

Abbreviations. Imperial Dim. - Imperial Dimensions Metric Dim. - Metric Dimensions Dia - Diameter







T Junction Concrete Pipe Cross sectional view (T Junction Concrete Pipe) Cross sectional view (Y Junction Concrete Pipe)

<sup>\*</sup>The above weights and pcs/ton are estimates for informational purpose only. Product specifications are made to KEBS (KS 02-548) or client custom requirements. Always consult a qualified professional when using the product.

### **CONCRETE PIPES**

#### **APPLICATIONS**

- » Concrete pipe is a load-bearing structure requiring bedding control from the spring line to the bottom of the pipe only.
- Engineering occurs at production facility and arrives on site with known performance.
- Has been used for centuries and proven characteristics.
- There have been decades spent on research to improve joint design and production.
- \* Recommended to be installed 0 to 10 feet beneath road.



#### **SERVICE LIFE**

» Older material with established service life and documented life-cycle performance.

#### **HDPE PIPES**

#### **APPLICATIONS**

- » Installation details must include bedding materials, bedding width and compaction requirements below the pipe, at the sides, and above due to variable soil conditions.
- » Engineering and testing occurs on site after installation to ensure proper performance.
- » A more recent material with on-going data collection identifying issues that are not satisfying long-term performance requirements.
- \* Recommended to be installed 3 to 10 feet beneath road.



#### SERVICE LIFE

» Newer material with fewer known deficiencies but less certain service life.

# Source: British Precast Drainage Association

### **CONCRETE PIPES**

#### COST

- » Higher material cost due to pre-engineering.
- » Lower installation cost.
- » Easier installation.

### **HDPE PIPES**

#### **COST**

- » Lower production cost.
- » Higher installation cost: Installation procedures are more demanding it must be site-assembled, inspected, and structural integrity must be tested.
- » Total costs may include a requirement for engineered backfill, on-site inspection, and post-installation laser testing.





#### COST



#### **FEATURES**

» Arrives at site with greater than 90% of its maximum specified strength; It is a known quantity & installation is generally straightforward.

#### **FEATURES**

» Arrives with about 10% of required strength; requires backfill material at site to reach specification.

90%



10%

Gallery CONCRETE PIPES



















1. DESIGN

We are a well-known and trusted concrete roof tile manufacturer that not only provides quality products with unmatched durability and sustainability, but also exquisite beauty. Available in a vast array of rich colors and striking profiles, the concrete roof tile is sure to meet your residential or commercial design needs while exceeding your performance expectations.

Concrete Roof Tile, the top material in Durability, Sustainability and Longevity. Whether you are building a new custom home or residential community, reroofing your existing residence, or specifying a commercial structure, your project deserves the best roof possible. The facts speak for themselves. When you compare a properly installed concrete tile roof system against all others, it is a beautiful, cost-effective and high-performing alternative that exceeds expectations, while providing years of protection and peace of mind.

### **5 KEY BENEFITS OF CONCRETE TILE ROOFING**

Color Variety : Concrete tiles come in a wide array of colors, from

light shades to dark or multi-colored, making it easy to coordinate your roof with exterior colors.

Profiles and Styles : Concrete tiles can match any architectural style,

from colonial to contemporary.

Increased Value : Houses sell better and faster, with more appraisal

credits.

#### 2. SUSTAINABLE BUILDING

**Sustainability** : Concrete tiles, are highly efficient roofing products

that may qualify for LEED certification – the most widely used green building rating system in the

world.

**Environmentally Responsible**: Materials do not deplete limited natural

resources and use no chemical preservatives in production. All waste can be recycled and tile's long life cycle reduces the need for re-roofing and

landfilling of waste.

**Reflectivity** : Concrete tile's inherent reflective properties allow

for the tiles to reflect sunlight and release heat for greater energy efficiency instead of absorbing it and transferring it from the roof deck and into the

structure.

#### 3. ACOUSTIC PERFORMANCE

The density of concrete tiles helps to reduce external sound particularly, rain & hail

4. DURABILITY

Long-Term : Concrete tiles have the lowest life-

cycle cost of any other roofing material. Centuries-old tile roofs still endure today.

Fire Resistance : Concrete tiles are fire resistant as a

product and a system.

**High Wind Resistance** : Concrete tile roofing has been tested to

withstand wind speeds up to 150 miles

per hour.

Salt-Safe, Frost & Hail Resistance : Concrete tiles are salt-safe & frost-

resistant, making them suitable for any location, including harsh marine areas. They can resist damage from hailstones

that are larger than a golf ball.

5. EASY TO INSTALL & LOW MAINTENANCE

Easy to Install : Concrete tiles are one of the simplest

systems to install when done by trained

professionals.

Fewer Installation & Maintenance Costs: Installation and maintenance

costs are much lower than other roofing

materials.

Easy to Repair : Concrete tiles are easiest to repair

because a damaged tile can be

individually replaced.

Easy to Maintain : Concrete tiles are practically

maintenance free.

# Technical Information CONCRETE ROOF TILES

Colour	<b>Product Code</b>	Weight (kgs)	pcs/ton	pcs/m²
Double Roman Grey	1-15-400-01-100	4.5	222	9
Double Roman Red R110	1-15-400-01-100	4.5	222	9
Double Roman Red R130	1-15-400-01-130	4.5	222	9
Double Roman Red R660	1-15-400-01-660	4.5	222	9
Double Roman Dark Grey	1-15-400-01-DGY	4.5	222	9
Double Roman Green	1-15-400-01-GX	4.5	222	9
Double Roman Grey	1-15-400-01-GY	4.5	222	9

Colour Product Code		Weight (kgs)	pcs/ton	pcs/m²
Venician Red R110	1-15-400-01-110	4.9	204	9
Venician Red R130	1-15-400-01-130	4.9	204	9
Venician Brown 660	1-15-400-01-660	4.9	204	9
Venician Brown	1-15-400-01-BN	4.9	204	9
Venician Green	1-15-400-01-GN	4.9	204	9
Venician Grey	1-15-400-01-GY	4.9	204	9

Colour	<b>Product Code</b>	Weight (kgs)	pcs/ton	pcs/m²
Ridge & Hip Grey	1-15-420-00	4.1	244	N/A
Ridge & Hip Dark Grey	1-15-420-00-DGX	4.1	244	N/A
Ridge & Hip Green	1-15-420-00-GX	4.1	244	N/A
Ridge & Hip Brown	1-15-420-000	4.1	244	N/A
Ridge & Hip R110	1-15-420-110	4.1	244	N/A
Ridge & Hip R130	1-15-420-130	4.1	244	N/A
End Ridge R110	1-15-430-110	4.1	244	N/A
Y Apex	1-15-440-110	3.9	256	N/A









Double Roman

loman Venician

Ridge

Y Apex End Ridge

**Concrete Roof Tiles** are designed to preserve, prolong & protect the roofing architecture of any structure while providing aesthetic beauty. They come in two profiles; Venician & Double Roman roof tiles.

Size of Double Roman Tile; 420 mm x 330mm (16.5" x 13")

**Roof Pitch;** 30° minimum (25° in colour through smooth faced)

 Headlap;
 75 mm (3") minimum

 Gauge;
 345 mm (13.5") maximum

 Linear Cover;
 300 mm (11.75")

 Weight at many country
 (1/15/1-20.01) kg/1/2 annum

Weight at max gauge;44 Kg/m2 (81 lbs/yt) approx.Weight per 1000 tiles;4.6 tonnes (4.2 tons) approx.Net covering capacity at max gauge; $9.7 \text{ tiles/m}^2$  (8 tiles/yd)

 Size of Venician Tile;
 420 mm x 330mm (16.5" x 13")

 Roof Pitch;
 17.5 minimum 25° maximum

**Headlap;** 75 mm (3") minimum 100 mm (4" maximum)

**Gauge**; 345 mm (13.5") maximum

**Linear Cover**; 300 mm (11.75")

Weight at max gauge; 47 Kg/m² (87 lbs/yd) approx.

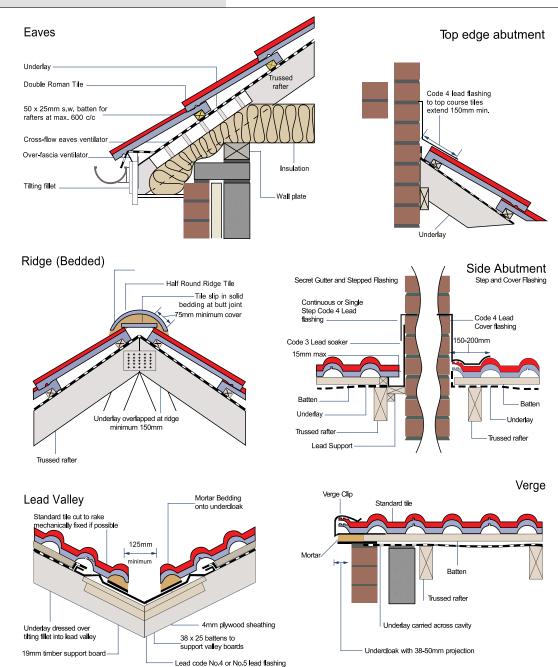
Weight per 1000 tiles; 4.9 tons approx. Net covering capacity at max gauge; 9.7 tiles/m² (8 tiles/yd²)

**Concrete Ridge Tiles** are intersections of all roofs that require careful weather blocking such as preventing wind-driven rain. They are provided in matching color, finish and texture of the roofing tile.

Effective Length of Ridge Tile; 1 foot long (12"); 300 mm long

<sup>\*</sup>Available colours include; Grey, Dark Grey, Green, Brown and Red.

<sup>\*</sup>Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying.



Manufacture	Produced by high pressure extrusion and compaction
Fire	Non-combustible when tested to BS476: Part 3:1975 (spread of flame and fire penetration).
Maximum Pitch	60° (Subject to fixing specification)
Minimum Pitch	22.5° (75mm Headlap) Smooth finish 30° (75mm Headlap) Granular finish
Headlap (Minimum)	75mm
Gauge (Maximum)	343mm
Covering Width	298mm
Covering Capacity (net)	75mm Headlap - 9.8 Tiles/m² 100mm Headlap - 10.6 Tiles/m²
Weight of Tiling	75mm Headlap - 45kg/m² (approx) 100mm Headlap - 49kg/m² (approx)
Weight/1000 Tiles	4.6 tonnes (approx)
Batten Size - minimum	50 x 25mm (for rafters not exceeding 600mm c/c nailed to BS5534)
Battens required	75mm Headlap - 2.9m per m², 100mm Headlap - 3.1m per m²
Ridge	Universal Angle Ridge or Multi Ridge, 1100 capped Angle Ridge, 900 Angle Ridge, Feature Ridge Tiles or Finials, Dry Ridge System (ventilated or unventilated), Security Ridge, Gas Vent Ridge Terminal, Soil/Vent Pipe Ridge Terminal
Eave	Standard Tile
Verge	Standard Tile with 150mm wide fibre reinforced cement strip to provide 38-50mm overhang or Russell Interlocking Cloak Verge Units Russell Interlocking Dry Verge Units
Hips	Third round
Valleys	Open Metal Valley or GRP Valley Trough
Abutments	Cover flashing with lead soaker or cover flashing with secret gutter (severe exposed conditions)
Nails for Tiles	38mm x 3.35mm Aluminium Alloy Nail Smooth or annular ring shank dependent upon fixing specification

<sup>\*</sup>For Illustration purpose only based on Double Roman Roof Tiles. Always consult a qualified professional when using the product.

#### IN SUMMARY

- 1.Concrete roof tiles are produced from all-natural products that are fully recyclable and biodegradable at the end of their lifespan.
- 2.Compared to other roofing materials, concrete roof tile systems have the lowest life cycle costs based on the life of the roofing material and required maintenance. In addition, the long life of a tile roof reduces the need for re-roofing.
- 3. Concrete roof tile come in a multitude of colors and profiles to choose from that complement various architectural styles.
- 4.Concrete roof tiles are installed in a way that allows air to circulate under and through the tile, resulting in greater energy efficiency.

# **FEATURES OF ROOFING TILES**

- » Low maintenance and easy to install.
- » Suitable for most climates and coastal areas.
- » Durable and weather resistant.
- » Safe to walk on.
- » Affordable.
- » Available in many shapes and colours.
- » Provides excellent insulation from heat and sound.
- » Made from sustainable & recyclable material.

# **COMPARATIVE TABLE** Image Comparison **Asphalt** Concrete Clay Stone **FEATURES Roof Tile** Shingle Tile **Roof Tile Coated Tile** Average Lifespan 75 years 20 years 75 years 75 years |X|Recyclable **Design Versatility** $\sqrt{}$ Class A Fire Resistant Hail/Impact Resistant Resistant (150mph wind) |X|Freeze-Thaw Resistant |X| $\overline{\mathsf{V}}$ **Insulative Properties**



According to a study performed by the National Association of Home Builders (NAHB) of the USA and Bank of America, a concrete tile roof is the most cost-effective roofing material available. Concrete roof tile is 30-50 percent less expensive than clay when it comes to both product and installation costs. Many homes built with these first concrete roof tiles still remain, proving their durability. Concrete roof tiles have experienced 100-year lives in Europe, USA & other parts of the world.

















### **EUBBRO COBBLESTONES**

Eubbro Cobblestones are small square shaped blocks available in different colours.

The colours create neat finishes for patios, driveways & garden areas. They are available in sizes 100mm by 100mm with a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

### **EUBBRO COBBLESTONES COLOURS**



(Sf)



(Sgy)



(Dgy)

Light Grey Dark Grey



Black

(Bk)





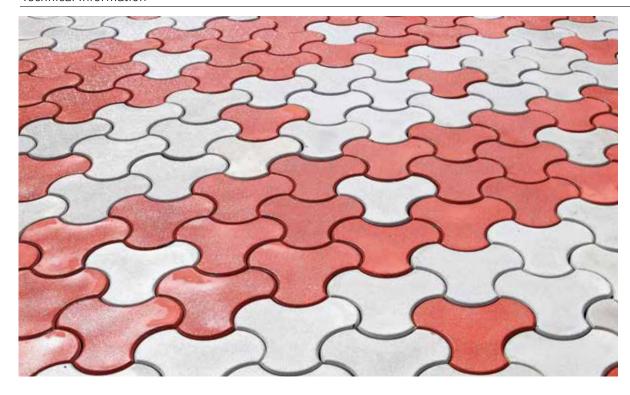


Terracotta Nut Brown Dark Green Light Biscuit
(Tc) (Nbw) (Dan) (Lbst)

Product Code	Shape	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	pcs/m²	pcs/pallet	Weight/pallet (kgs)
1-51-050-10	Square	100 x 100	60	1.2	100	864	1149

<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



Product Code	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-51-057-10	270 x 250	60	5.20	0.042	24

# **DUNE COBBLESTONES**

Dune Cobblestones are artistically shaped grass paving blocks available in different colours.

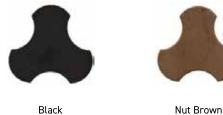
The colours create neat finishes for garden areas. They are available in size 270mm by 250mm with a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

# **DUNE COBBLESTONES COLOURS**



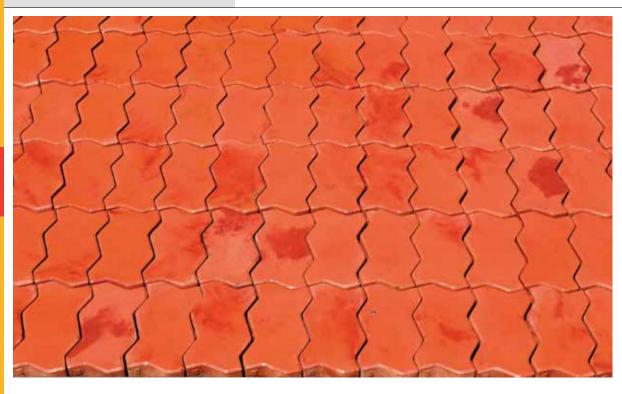
(Nbw)



(Bk)

<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



# **EURO PAV UNI COBBLESTONES**

Euro Uni Pav Cobblestones are zigzag shaped blocks available in different colours.

The colours create neat finishes for patios, driveways & garden areas. They are available in sizes 230mm x 130mm and are 60mm thick.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

#### **EUBBRO PAV UNI COBBLESTONES COLOURS**



Product Code	Shape	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	pcs/m²	pcs/pallet	Weight/pallet (kgs)
1-51-100-10	Zigzag	230 x 130	70	3.04	40	400	1216

56

<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



# **EURO SLABS COBBLESTONES**

Euro Slabs Cobblestones are rectangular shaped blocks available in different colours.

The colours create neat finishes for patios, driveways & garden areas. They are available in sizes  $(50 \times 300)$ mm for small slab and  $(153 \times 300)$ mm for the big slab. They have a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

# **EURO SLABS COBBLESTONES COLOURS**











<b>Product Code</b>	Shape	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	pcs/m²	pcs/pallet	Weight/pallet (kgs)
1-20-102-10	Big Rectangle	300 x 153	50	4.74	22	276	1308
1-20-101-10	Small Rectangle	300 x 50	50	1.62	67	540	875

<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



<b>Product Code</b>	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-51-056-10	N/A	60	8.50 (splendour)	0.065	15

# **SPLENDOUR COBBLESTONES**

Splendour Cobblestones are artistically shaped blocks available in different colours.

The colours create neat finishes for patios, driveways & garden areas. They have a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

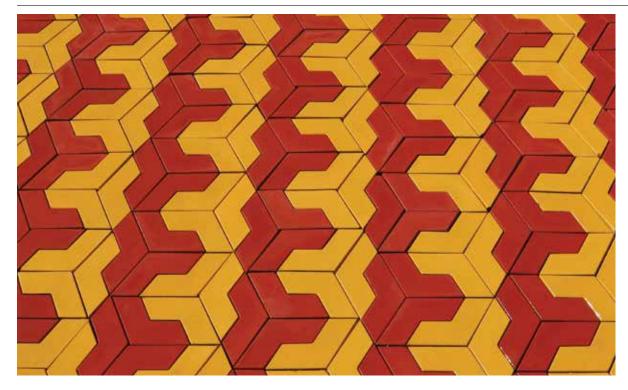
### **SPLENDOUR COBBLESTONES COLOURS**





\*Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



Product Code	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-51-059-10	N/A	60	4.20	0.033	30

### **ARROW PAVER COBBLESTONES**

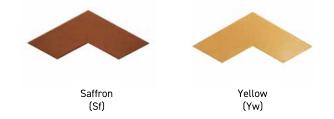
Arrow Paver Cobblestones are artistically shaped blocks available in different colours.

The colours create neat finishes for patios, driveways & garden areas. They have a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

# **ARROW PAVER COBBLESTONES COLOURS**





<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



<b>Product Code</b>	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-51-062-10	N/A	60	4 (Meera)	0.028	36
1-51-061-10	N/A	60	8.3 (Heera)	0.065	15
1-51-062-80-10	N/A	80	5.6 (Meera)	0.028	36
1-51-061-80-10	N/A	80	11.2 (Heera)	0.065	15

#### **MEERA & HEERA COBBLESTONES**

Meera & Heera Cobblestones are artistically shaped blocks available in different colours.

The colours create neat finishes for patios, driveways & garden areas. They have a thickness of 60mm.

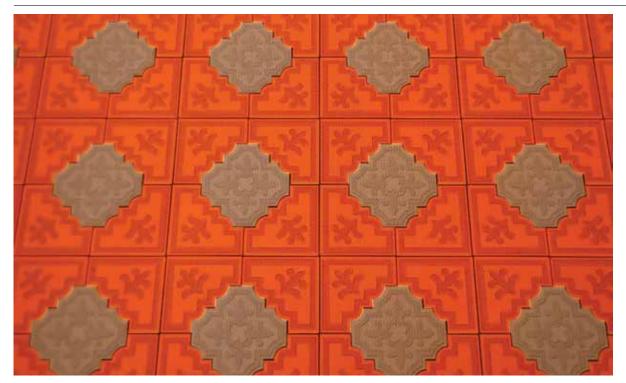
After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

### **MEERA & HEERA COBBLESTONES COLOURS**



<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



<b>Product Code</b>	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-51-060-10	N/A	60	6.26 (Thara)	0.046	22
1-51-061-10	N/A	60	8.30 (Heera)	0.065	15

### **THARA & HEERA COBBLESTONES**

Thara & Heera Cobblestones are artistically shaped blocks available in different colours.

The colours create neat finishes for patios, driveways & garden areas. They have a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

### **THARA & HEERA COBBLESTONES COLOURS**







Nut Brown & Saffron (Nbw & Sf)



Black & Saffron (Bk & Sf)



Mid Green & Yellow (Mgn & Yw)



Terracotta & Saffron (Tc & Sf)

<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



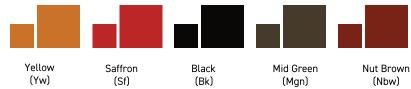
#### **EURO BLOCK SMOOTH COBBLESTONES**

Euro Block Smooth Cobblestones are small square shaped blocks available in different colours.

The colours create neat finishes for patios, driveways & garden areas. They are available in sizes 98mm x 98mm, 196mm x 196 mm and are 60mm thick.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

### **EURO BLOCK SMOOTH COBBLESTONES COLOURS**



Product Code	Shape	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	pcs/m²	pcs/pallet	Weight/pallet (kgs)
1-51-109-10	Big Square	196 x 196	58	4.70	50	400	1880
1-51-108-10	Small Square	98 x 98	58	1.21	100	800	960

<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



Product Code	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-51-109-10	100 x 100	60	1.40 (Euro)	0.010	100
1-20-105-10	100 x 200	60	2.50 (Eubro)	0.020	50

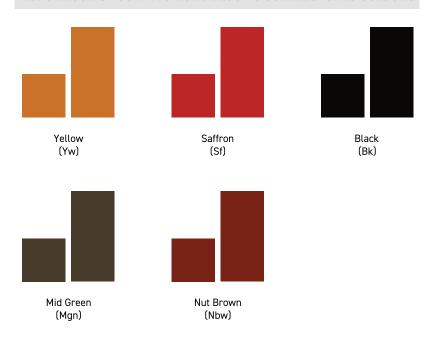
### **EURO BLOCK SMOOTH A & EURO BLOCK C**

This is a combination of Euro Block Smooth Small and Eubro Block C to create a neat paving pattern for patios, drive ways & garden areas. They are available in different colours.

They are available in size 100mm by 100mm for Euro Block Smooth Small and 100mm by 200mm for Eubro Block C with a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

#### **EURO BLOCK SMOOTH A & EURO BLOCK C COBBLESTONES COLOURS**



<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



### **EURO BLOCKS COBBLESTONES**

Euro Blocks Cobblestones are small rectangular and square shaped blocks available in different colours. The colours create neat finishes for patios, driveways & garden areas.

They are available in sizes A(100 x 100) mm, B(100 x 150) mm, C(100 x 200)mm, D(150 x 150) mm, E(150 x 200) mm and they are 60 mm thick.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

### **EURO BLOCKS COBBLESTONES COLOURS**











Yellow (Yw)

Saffron (Sf)

Light Biscuit (Lbst)

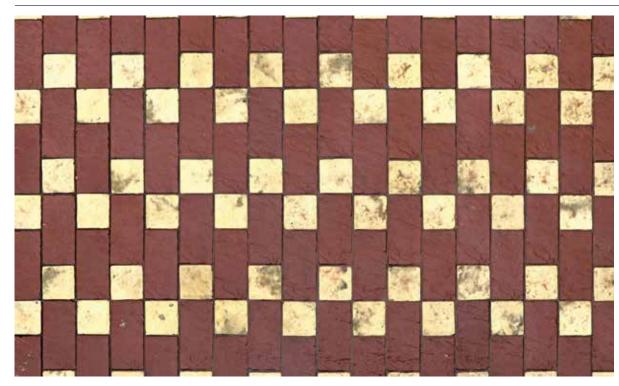
Mid Green (Mgn)

Nut Brown (Nbw)

<b>Product Code</b>	Shape	<b>Dim.</b> (l x w) (mm)	Thickness (mm)	Weight (kgs)	pcs/m²	pcs/pallet	Weight/pallet (kgs)
1-20-103-10	Shape A	100 x 100	60	1.40	100	864	1200
1-20-104-10	Shape B	100 x 150	60	1.90	19	528	1000
1-20-105-10	Shape C	100 x 200	60	2.50	50	500	1250
1-20-106-10	Shape D	150 x 150	60	3.00	46	402	1200
1-20-107-10	Shape E	150 x 200	60	3.00	34	280	1090

<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Knyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



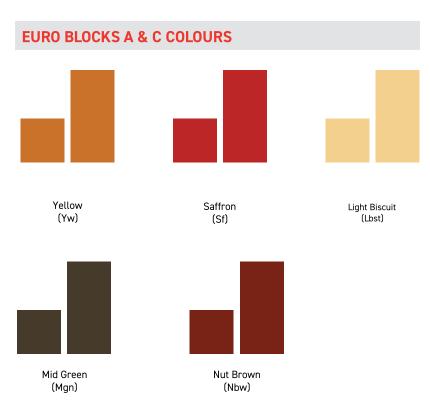
<b>Product Code</b>	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-20-103-10	100 x 100	60	1.40 (A)	0.010	100
1-20-105-10	100 x 200	60	2.50 (C)	0.020	50

# **EURO BLOCKS A & C**

Euro Blocks Cobblestones are small rectangular and square shaped blocks available in different colours. The colours create neat finishes for patios, driveways & garden areas.

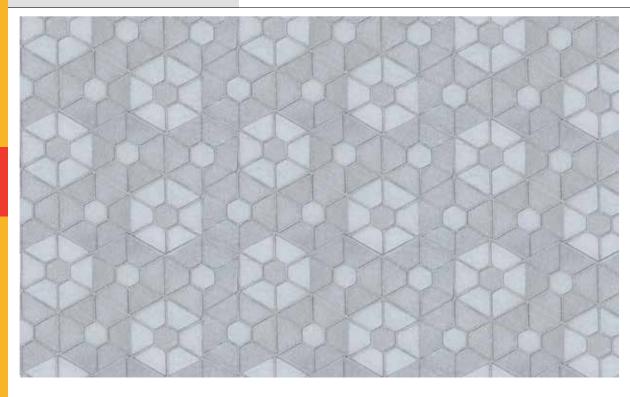
They are available in sizes A(100 x 100) mm & C(100 x 200) mm. They have a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.



<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



## **SUPERHEX COBBLESTONES**

Superhex cobblestones are a collection of small hexagobal shaped paving material that interlock to create beautiful circular patterns.

They are available in different colours that create neat finishes for patios, driveways & garden areas. They have a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

#### SUPERHEX COBBLESTONES COLOURS











Yellow (Yw)

Saffron (Sf)

Black (Bk)

Mid Green (Mgn)

(Nbw)

Product Code	Shape	Dim.(l x w) (mm)	Thickness (mm)	Weight (kgs)	pcs/m²	pcs/pallet	Weight/pallet (kgs)
1-51-066-10	N/A	N/A	60	4.96	0.037	27	N/A

<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



#### **EURONICA COBBLESTONES**

Euronica cobblestones are a collection of small polygon shaped paving material that interlock to create beautiful circular patterns. They include Rectangular, Square, Slow Wedge & Wedge.

They are available in different colours that create neat finishes for patios, driveways & garden areas. They have a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

### **EURONICA COBBLESTONES COLOURS**









Dark Grey (Dgy)

Light Grey (Say)

Dark Biscuit (Dbst)

Black (Bk)

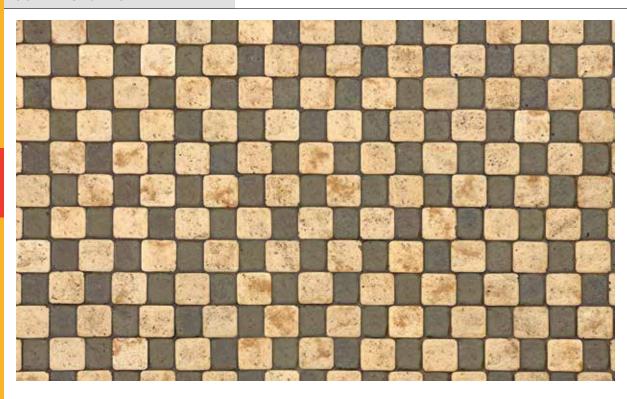
<b>Product Code</b>	Shape	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	pcs/m²	pcs/pallet	Weight/pallet (kgs)
1 - 20 - 054 - 10	Rectangular	90 x 120	55	1.40	93	1269	1700
1 - 20 - 053 - 10	Square	120 x 120	55	1.90	69	1030	1950
1 - 20 - 051 - 10	Slow Wedge	130 x 200	55	1.52	72	1296	1940
1 - 20 - 052 - 10	Wedge	110 x 150	55	1.41	83	N/A	N/A



(Tc)

<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



<b>Product Code</b>	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-20-053-10	120 x 120	60	1.90 (Square)	0.014	69
1-20-054-10	120 x 90	60	1.40 (RT)	0.011	91

# **EURONICA SQUARES & RECTANGLES**

Euronica cobblestones are a collection of squares and rectangular shaped paving material that interlock to create beautiful circular patterns.

They are available in different colours that create neat finishes for patios, driveways & garden areas. They have a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

### **EURONICA SQUARES & RECTANGLES COLOURS**



<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



<b>Product Code</b>	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-20-054-10	120 x 90	60	1.40 (RT)	0.011	91

#### **EURONICA RECTANGLES**

Euronica cobblestones are a collection of rectangular shaped paving material that interlock to create beautiful circular patterns.

They are available in different colours that create neat finishes for patios, driveways & garden areas. They have a thickness of 60mm.

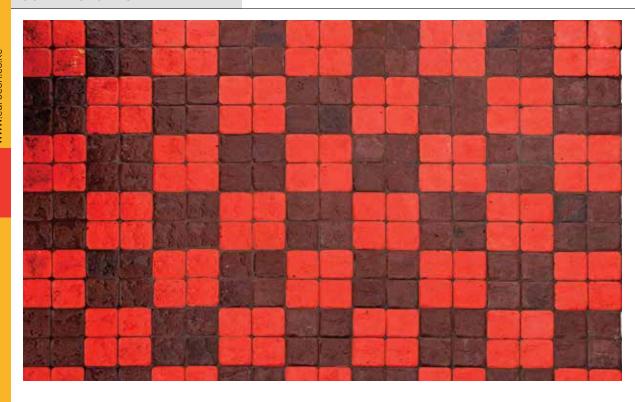
After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

### **EURONICA RECTANGLES COLOURS**



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<sup>\*</sup>Always consult a qualified professional when using the products.



<b>Product Code</b>	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-20-053-10	120 x 120	60	1.90 (Square)	0.014	69

## **EURONICA SQUARES**

Euronica cobblestones are a collection of square shaped paving material that interlock to create beautiful circular patterns.

They are available in different colours that create neat finishes for patios, driveways & garden areas. They have a thickness of 60mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

### **EURONICA SQUARES COLOURS**



<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



<b>Product Code</b>	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-20-012-10	290 x 290	45	4.37 (A)	0.084	12
1-20-013-10	435 x 290	45	8.32 (B)	0.126	8
1-20-014-10	590 x 290	45	9.84 (C)	0.171	6
1-20-015-10	435 x 435	45	9.00 (D)	0.189	5
1-20-016-10	590 x 435	45	18.10 (E)	0.257	4
1-20-017-10	590 x 590	45	21 (F)	0.348	3

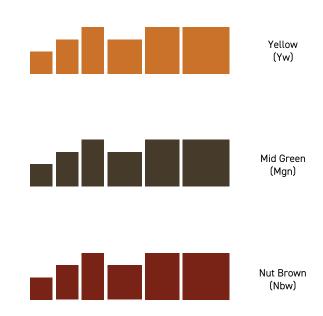
# YORKSTONE BLOCKS

These are rough textured idea for outdoor paving solution and they are available in different colours comprising of square and rectangular shapes.

The colours create neat finishes for patios, driveways & garden areas. They are available in different sizes (A, B, C, D, E & F) with a thickness of 45 mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

### YORKSTONE BLOCKS COLOURS



<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



<b>Product Code</b>	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-20-015-10	435 x 435	45	9.00 (D)	0.189	5
1-20-016-10	590 x 435	45	18 <b>.</b> 30 (E)	0.257	4

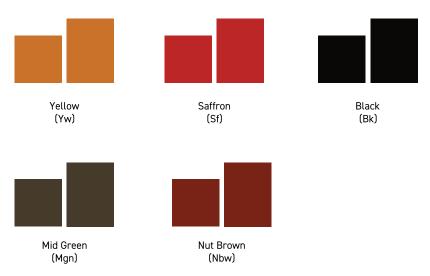
# YORKSTONE BLOCKS D & E

These are rough textured idea for outdoor paving solution and they are available in different colours.

The colours create neat finishes for patios, driveways & garden areas. They are available in different sizes (D - 435 x 435 & E - 590 x 435 ) with a thickness of 45mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

# YORKSTONE BLOCKS D & E



<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.

Technical Information COBBLESTONES



<b>Product Code</b>	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-20-035-10	N/A	45	20.54 (OC)	0.270	4
1-20-036-10	N/A	45	12.25 (OB)	0.238	4
1-20-025-10	N/A	45	10.56 (TR)	0.042	24
1-20-026-10	N/A	45	10.15 (TL)	0.042	24

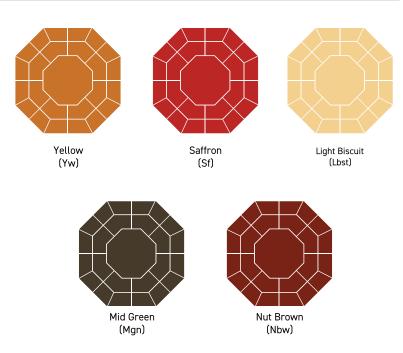
# **POLYGON YORKSTONES**

These are rough textured octagonal patterned concrete slate like blocks that are idea for outdoor paving solution and they are available in different colours.

The colours create neat finishes for patios, driveways & garden areas. They are available in different sizes and shapes (OC, OB, TR & TL) with a thickness of 45mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

# **POLYGON YORKSTONES**



<sup>\*</sup>OC - Octagon Centre, \*OB - Octagon Border, \*TR - Trapezium Right & \*TL - Trapezium Left

<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Knyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.



<b>Product Code</b>	Dim. (l x w) (mm)	Thickness (mm)	Weight (kgs)	Area (m²)	pcs/m²
1-20-031-10	N/A	45	13.80 (RC)	0.256	4
1-20-032-10	N/A	45	16 <b>.</b> 00 (R1)	0.200	5
1-20-033-10	N/A	45	9.60 (R2)	0.083	12
1-20-034-10	N/A	45	11 <b>.</b> 20 (R3)	0.250	4

\*RC - Premier Rotunda Centre, \*R1 - Premier Rotunda1, \*R2 - Premier Rotunda2 & \*R3 - Premier Rotunda3

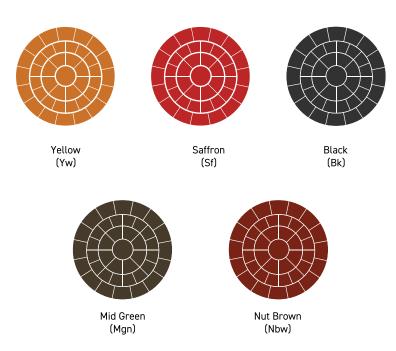
#### PREMIER ROTUNDA YORKSTONES

These are rough textured circular patterned concrete slate like blocks that are idea for outdoor paving solution and they are available in different colours.

The colours create neat finishes for patios, driveways & garden areas. They are available in different sizes and shapes (RC, R1, R2 & R3) with a thickness of 45mm.

After laying they are cleaned with acid and polished with **Eurocon FabriGlaze** to preserve their colours for longer periods.

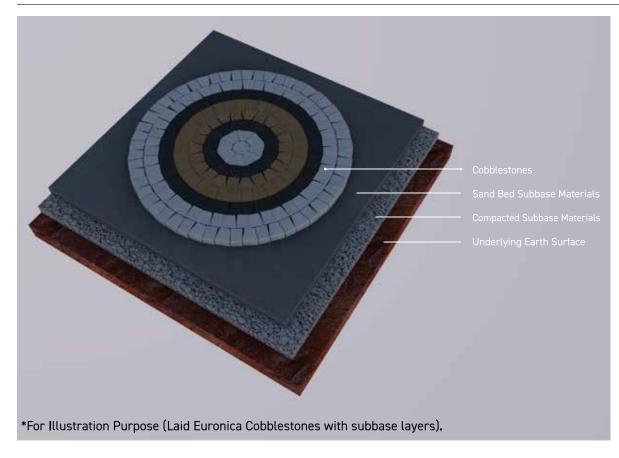
#### PREMIER ROTUNDA YORKSTONES COLOURS



<sup>\*</sup>Other colour shades are available on order. Above weights & area are approximate quantities and can vary. Shade variations can occur from batch to batch. Samples, brochures and displays should be viewed as a guide only. Customers should ensure that all delivered products are acceptable, and any concerns are notified to us prior to laying. Product specifications are made to Kenyan Standards or client custom requirements.

<sup>\*</sup>Always consult a qualified professional when using the products.

Technical Information COBBLESTONES



#### HELPFUL GUIDELINES FOR MAINTAINING COLOURED COBBLESTONES

- » To maintain cobblestones, spray at least once a year to clear moss and mould.
- » Always use low-pressure to wash mud off cobblestones as high-pressure waterblasting breaks down the cobblestones.
- » During the laying process you can design your concrete surface to channel water away from your home using clever contouring and drainage.
- » Use Eurocon Fabriglaze to polish the cobblestones after they have been acid washed to add sheen, highlight colour, protect the aggregate and help prevent stains such as oil leaks.

#### **IMPORTANT NOTES ON COLOURED COBBLESTONES**

- 1. A number of variables will mean that no two coloured cobblestones look the same specifically:
- » The tiles are made from natural raw materials.
- » Weather and site conditions differ at the time of placing.
- » Placing and curing methods vary.
- 2. Coloured cobblestones will often exhibit uneven shading of aggregates and or oxide, giving a look which is sometimes referred to as 'mottled' or 'aged'. This is the expected finish with decorative concrete and should be considered part of its character.
- 3. Use of a damp-proof membrane (e.g. polythene) over the subbase may limit the appearance of mottling (more noticeably so on cobblestones) by providing a consistently dry subbase and therefore more even curing.
- 4. The inconsistency of shade/light may mean that two pours of the same mix appear different. Comparing variances in shade on a coloured cobblestones is similar to comparing full, half or even quarter tints of paint.
- 5. Always follow the coloured cobblestones supplier guidelines on how to lay, clean and polish them.
- 6. All coloured cobblestones may at some time exhibit cracking in some form. Whilst there are several procedures, which should be practiced by your placer to lessen the likelihood of cracking, crack-free slabs cannot be guaranteed.
- 7. The appearance of a coloured cobblestone will be enhanced significantly once acid washed using diluted acid mixture.
- 8. A coloured cobblestone spanning from an internal area to an external area will appear different inside than out due to the differing light.
- Use Eurocon Fabriglaze to polish the coloured cobblestones after they have been acid washed to add sheen, highlight colour, protect and prevent stains such as oil leaks.

<sup>\*</sup>All samples, photographs and brochures should be used as an indication only, not a direct comparison.

www.eurocon.co.ke

#### **ACCESSORIES FOR USE WHEN CLEANING COLOURED COBBLESTONES**



Note: Please take exceptional care when handling Hydrochloric Acid (HCL).

Always use suitable Personal Protective Equipment (PPE).

**Recommended ration for cleaning:** Mix 1/2 liter of acid to 10 liters of clean water.

(Always add HCL acid to water to create an acid wash mixture.)

# TOOLS FOR USE WHEN LAYING/RELAYING COLOURED COBBLESTONES



#### **RECOMMENDATIONS FOR REPAIRS & RELAYING COLOURED COBBLESTONES**

- » Remove the sand from joints around the first block and level it out. Remove and stack further blocks until the working area is exposed.
- » Using suitable excavated or new material, backfill the excavation and compact sufficiently to avoid subsequent settlement. Before the original cobblestones are re-laid, clean of all loose and extraneous material.
- Re-lay the cobblestones and bond them into the existing pavement.
- » Use compacting equipment & transmit a frequency of vibration in the range 75 100Hz.

#### **COLOURED COBBLESTONES LAYING GUIDELINES**

# 1. Subgrade, subbase and road-base

It is necessary to prepare subgrade and subbase so that the surface levels are within the tolerance. Preparation of the sub material provides a surface that is dense enough to prevent laying course material being lost into it during construction.

# 2. Edge Restraints

Should be adequate to support traffic loads and to prevent loss of laying course material beneath the surface course. Examples are kerbs and channels, established structures or rigid abutments such as cobblestones fixed vertically and bedded and haunched.

#### 3. Surface Course

It is important to lay cobblestones and make minor adjustments to maintain the bond pattern and ensure that the joints remain wide enough for sand filling. Cobblestones is designed to function with sand - filled joints. The joint width will be influenced by cobblestones shape and bond pattern.

**4. Compaction, Joint Filling & Vibrating of Paving Blocks**Use compacting equipment with a rubber mounted plate and transmit a frequency of vibration in the range 75 - 100Hz. After compaction of the surface course, spread sand or crushed rock fines over the surface and brush it into the joints. Do not use sand which might stain pavement surface, if this is an important consideration.

#### **MAINTENANCE**

A properly designed, located, and constructed cobblestones pavement will perform well for many years. A combination of regular inspection & light maintenance will ensure long term durability and performance.

\*For cobblestones base layer design, layout and construction consult a qualified professional or contact our technical department for guidance.

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Natural Stone



Makos Stone



Mazeras Stone

#### **CORAL STONE**

When cut into smaller pieces, the Coral stones bring out the coastal dusty and sandstone texture when laid well. They are available in three colour variations that can be mixed and / or used separately to achieve harmonious colour effect.

#### **NATURAL STONE**

These stones have distinct colour and texture depending on place of origin and transformation process. When these colours are arranged together they bring out the stone's natural finish.

Cobblestones from natural stone have sharp colours which often contrast effectively when they are mixed in a pattern.

#### **MAKOS STONE**

Makos stone has natural texture usually with tiny dotted patterns on the stone surface that help bring out the natural feel of the stone. These stones generally have a shiny surface. They are best used on interior and exterior walls to allow for creation of harmonious mosaic patterns.

#### **MAZERAS STONE**

These stones have distinct colour variations and unique natural finishes. They bring out the best natural colour and texture when utilized well. When cut into small sizes, Mazeras stone allows for creation of neat patterns and mosaic creations.

\*Colour shades may vary as these are natural products. The images presented above are for reference purpose only.

Surfaces and Texture NATURAL STONES



# **POLISHED FINISH**

Polishing process makes rough surface smooth and shiny. The shine depends on the hardness of stones.

It is with the use of abrasive disk that the stones achieve its shine.

# **NATURAL FINISH**

Surface of stone in its original form from the mines. It is usually rough, and the degree of roughness depends on the nature of the stones.

# **SAND BLASTED FINISH**

Sand blasting is done by blowing sand with high speed on the surface to give matte and grainy texture to the stone.

<sup>\*</sup>Colour shades may vary as these are natural products. The images presented above are for reference purpose only.

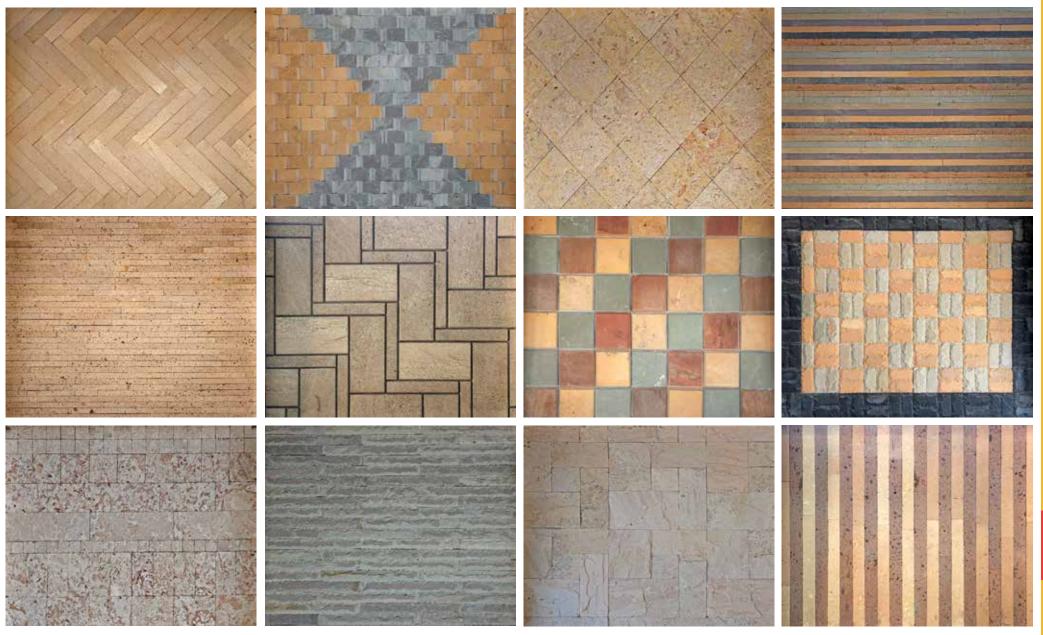
**NATURAL STONES** 

Wall Cladding effect



\*Colour shades may vary as these are natural products. The images presented above are for reference purpose only.

Natural Stone Mosaic NATURAL STONES



Stone Mosaics involve utilization of pieces of stone to create patterns for walls or floors. The stone tiles utilized on walls or floors could be of various shapes or the shapes can be mixed to blend and create unique mosaic patterns. Stone mosaic patterns create unique ambiance to feature walls.

<sup>\*</sup>Colour shades may vary as these are natural products. The images presented above are for reference purpose only.

NATURAL STONES

Stone Accessories



During the cladding process on exterior walls, Natural Stone Window Cills are used to drain rain water away from the window.

When they have been used with marching colour combination they create a neat finish of the exterior walls.





#### **GARDEN STONE TILES**

Stones tiles can be used to create unique patterns in the garden area.

#### **STONE KERBS**

Stones kerbs are stone accessories used in the garden area or pavement area f or s oil retention.

#### **STONE CHANNELS**

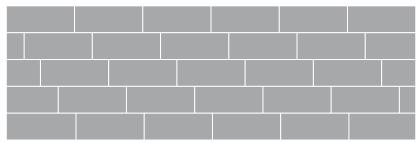
Nicely cut and shaped stones which are used as channels to direct surface water into the drainage systems. They also create a neat view of the pathway where they have been utilized.



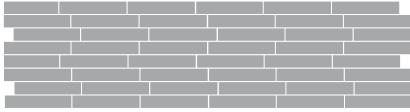
\*Colour shades may vary as these are natural products. The images presented above are for reference purpose only.

Stone Tiles Wall Patterns

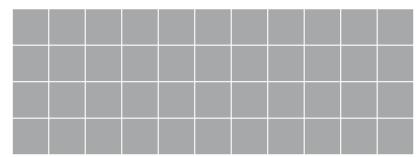
NATURAL STONES



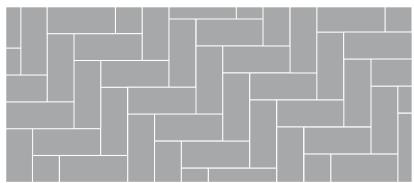
Third Bond (100mm x 50mm x 15mm)



Stitch Bond (100mm x 25mm x 15mm)



Stacker Bond (100mm x 100mm x 15mm)



Herringbone (100mm x 500mm x 15mm)

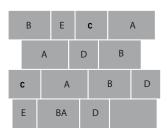


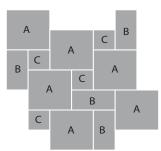
# **CORAL, NATURAL, MAKOS & MAZERAS STONE PATTERNS**

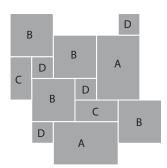
## **PATTERN CREATION**

Patterns can be easily created by the use of colour, size or orientation chang es. Some tiles express when they are used in a simple but elegant pattern. Features of some tiles are perfect for intricate patterns on walls.

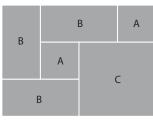
\*Colour shades may vary as these are natural products. The images presented above are for reference purpose only.











## Free Length Pattern

**A** 500 mm x 450 mm x 15mm **B** 450 mm x 450 mm x 15mm **C** 400 mm x 450 mm x 15mm **D** 300 mm x 450 mm x 15mm **E** 200 mm x 450 mm x 15mm

# **Opus**

**A** 400 mm x 400mm x 15mm **B** 200 mm x 400mm x 15mm **C** 200 mm x 200mm x 15mm

# Classic Opus

**A** 300 mm x 450 mm x 15mm **B** 300 mm x 300 mm x 15mm **C** 150 mm x 300 mm x 15mm **D** 150 mm x 150 mm x 15mm

# **Grand Opus 1**

**A** 200 mm x 200 mm x 15mm **B** 200 mm x 400 mm x 15mm **C** 400 mm x 400 mm x 15mm **D** 400 mm x 600 mm x 15mm

# **Grand Opus 2**

**A** 200 mm x 200 mm x 15mm **B** 200 mm x 400 mm x 15mm **C** 400 mm x 400 mm x 15mm



# **CORAL, NATURAL, MAKOS & MAZERAS STONE PATTERNS**

#### **PATTERN CREATION**

Patterns can be easily created by the use of colour, size or orientation changes. Some tiles express when they are used in a simple but elegant pattern. Features of some tiles are perfect for intricate patterns on floors.

\*Colour shades may vary as these are natural products. The images presented above are for reference purpose only.



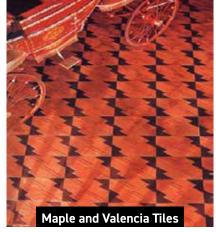


**EUROCON TILES** Areas of Application

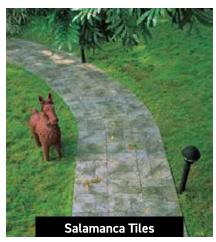
Eurocon Tiles are engineered tiles made of distinct shapes, colours and texture. The tiles are used for internal & external application in landscape areas, walls and floors of buildings.



**Corridor Tiles** 



**Driveway Tiles** 



**Landscaping Tiles** 



**Swimming Pool Tiles** 



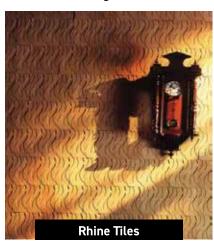
Sit-outs Tiles



**Stairway Tiles** 



Walkways Tiles



**Wall Cladding Tiles** 

# **EUROCON TILES KEY FEATURES**



## **Easy Installation and Maintenance**

Easy to install as they require only tile adhesive.



Provide hard-wearing & textured surface thus an all weather option for tiling or cladding.



Available in a variety of designs & colours.



Distinctive Patterns

Arranged in varied patterns to create unlimited expressions of child 2 had a limited expressions of style & build unique ambiance spaces.



#### **Environment Friendly**

Manufactured from natural & recyclable materials.



#### **Water Ingression Protection**

Designed to reduce water ingression from the ground, wall or floor.

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Floor & Wall Tiles EUROCON TILES





<sup>\*</sup>All samples, photographs and brochures should be used as an indication only, not a direct comparison.

#### **IMPORTANT NOTES ON COLOURED EUROCON TILES**

- 1. A number of variables will mean that no two Eurocon tiles look the same specifically:
  - » The tiles are made from natural raw materials.
  - » Weather and site conditions differ at the time of placing.
  - » Placing and curing methods vary.
- 2. Coloured Eurocon tiles will often exhibit uneven shading of aggregates and or oxide, giving a look which is sometimes referred to as 'mottled' or 'aged'. This is the expected finish with decorative concrete and should be considered part of its character.
- 3. Use of a damp-proof membrane (e.g. polythene) over the subbase may limit the appearance of mottling (more noticeably so on coloured floor tiles) by providing a consistently dry subbase and therefore more even curing.
- 4. The inconsistency of shade/light may mean that two pours of the same mix appear different. Comparing variances in shade on a coloured Eurocon tiles is similar to comparing full, half or even quarter tints of paint.
- 5. Always follow the Eurocon tiles supplier guidelines on how to lay, clean and polish the coloured tiles.
- 6. All Eurocon tiles may at some time exhibit cracking in some form. Whilst there are several procedures, which should be practiced by your placer to lessen the likelihood of cracking, crack-free slabs cannot be guaranteed.
- 7. The appearance of a coloured Eurocon tile will be enhanced significantly once acid washed using diluted acid mixture.
- 8. A Eurocon tile spanning from an internal area to an external area will appear different inside than out due to the differing light.
- 9. Use Eurocon Fabriglaze to polish the Eurocon tiles after they have been acid washed to add sheen, highlight colour, protect and prevent stains such as oil leaks.













#### POWERGROUTS1 KG& 3KG



## **MATERIAL DESCRIPTION**

- » Type: Non-shrinking, flexible cement-based grout.
- » Composition: Cement, fillers, and performance-enhancing additives.
- » Purpose: Durable jointing for tiles or stone installations.

#### **TYPICAL APPLICATIONS**

Interior and exterior surfaces, for joints up to 6mm. Suitable for:

- » Ceramic tiles, marble, natural or stone glass.
- » Residential structures, swimming pools, commercial buildings, and fountains.

## **KEY FEATURES AND BENEFITS**

Feature	Benefit
Mold and water resistant	Reduces moisture-related issues
Excellent workability	Easy to apply
Smooth finish	Uniform color and appearance
Crack resistant	Low shrinkage ensures durability

# **PACKAGING**

- » Available in 1KG, 3KG, and 5KG packages.
- » Colors: White, Ivory and Beige.

## **TYPICAL PROPERTIES**

Property	Details
Appearance	Free-flowing powder
Water Demand	25 - 30%
Pot Life	1 - 2 hours
Drying Time	16 - 24 hours
Flexural Strength	> 3.5 MPa
Application Temp1	0 - 38°C

#### **APPLICATION GUIDLINES**

#### **SURFACE PREPARATION**

- » Ensure all joints are clean, dust-free, and free of excess adhesive or bedding mortar.
- » Remove all spacers, and verify tiles (especially textured or matte) are easy to clean before grouting.

#### **MIXING**

Item	Quantity
Power Grout Powder	10KG
Clean Water	2 - 3 Litres

- » Mix using a powered mixer until achieving a lump-free, creamy mortar.
- » Let the mixture rest for 5 minutes before application.

## **APPLICATION**

- 1. Pour Power Grout into tile joints using a rubber trowel.
- 2. Firmly compact the grout into joints while minimizing excess on tile surfaces.
- 3. Wipe tile surfaces diagonally with a damp sponge after grout firms up.
- 4. Use minimal water to prevent shade variations, efflorescence, or shrinkage.
- 5. Polish hardened grout with a dry cloth to remove smears.



Coverage varies according to tile size, joint width and depth, as well as the method of application and on site conditions. Therefore, it is recommended to allow up to additional 15 % for wastage.

Tile Size (mm)	Joint Width (1.5mm - 3.0mm) Coverage (Kg/m³)
30 - 50	0.6 - 1.2
60 - 100	0.3 - 0.6
100 - 150	0.2 - 0.4
200 - 300	0.1 - 0.3
350 - 600	0.1 - 0.2
Application Temp	10 - 38°C

# **STORAGE AND HEALTH**

- **» Shelf Life**: 12 months when stored in a dry place, away from sunlight.
- » **Safety**: Wear protective gear and ensure proper ventilation during use.





#### **POWERTILE 2000**



# **MATERIAL DESCRIPTION**

- » Type: Cement-based tile adhesive for ceramic tiles.
- » Color: Grey.
- » Purpose: Designed for a wide range of ceramic tile installations.
- » Applications: Ideal for indoor use on floors, walls, kitchens, and showers in both residential and commercial spaces.

# **KEY FEATURES AND BENEFITS**

Feature	Benefit
Suitable for floors and walls	Versatile application
Economical	Cost-effective
Easy to mix and use	Convenient
Excellent bonding strength	Ensures durability

#### **TYPICAL PROPERTIES**

Property	Details
Color	Grey
Appearance	Free-flowing powder
Water Demand	25 - 30%
Workability	Easy to notch
Bonding Strength	< 0.5 mm² (after 28 days)
Yield	3 - 5 Kg/m³

## **APPLICATION GUIDLINES**

#### **SURFACE PREPARATION**

- » Ensure the surface is clean, stable, and free from debris, paint, oil, or other contaminants.
- » Verify tiles are dry and free of adhesion-hindering substances.

## **MIXING**

Item	Quantity
Powertile 2000	25KG
Water	5.0 - 6.25L

- » Mix using a power mixer for at least 5 minutes to form a lump-free paste.
- » Allow the mixture to rest for 5 minutes before application.

## **APPLICATION**

- 1. Apply the mortar to a uniform thickness of 3 6mm using a notched trowel.
- 2. Solid bed installation is recommended for wet or heavy-duty vertical applications.
- 3. Leave at least a 2mm joint around tiles.
- 4. Allow a minimum of 24 hours before grouting.

Note: Maximum application thickness: 6mm horizontal, 4mm vertical.



# **PACKAGING AND STORAGE**

- » Packaging: Available in 25KG sealed bags.
- » **Shelf Life**: 12 months if stored in a dry place away from sunlight and rain.

Note: Failure to follow recommendations may degrade product quality.

Standards: Conforms to KS 2129 (Kenya) and EN 12004 (European)

# **HEALTH & SAFETY**

Risk	Precaution
Contact with eyes/skin	Wash thoroughly with water
Accidental ingestion	Seek medical advice immediately
General use	Avoid contact with food or mouth



#### **POWERTILE 3000**



## **MATERIAL DESCRIPTION**

- » Type: High-performance cement-based adhesive.
- » Usage: Thin-bed or thick-bed fixing for non-water-absorbing tiles.
- » **Applicable Substrates**: Concrete, plaster boards, sand-cement screeds, gypsum, and plaster boards.

# **TYPICAL APPLICATION**

- » Tiling swimming pools, bathrooms, kitchens, and wall cladding.
- » Ideal for:
  - Non-porous surfaces.
  - Constantly wet environments.
  - Areas with heavy traffic (e.g., public institutions, commercial buildings).
- » Suitable for glass mosaics and high-density tiles.



# **KEY FEATURES AND BENEFITS**

Feature	Benefit
Submerged condition use	Adhesion unaffected
Reduced slip	Suitable for vertical surfaces
Easy to mix and use	Convenient application
Flexible	Thick-bed or thin-bed application
High bonding strength	Reliable and long-lasting
Chemical/environment resistant	Handles heat, freeze & thaw

#### **PACKAGING AND STANDARDS**

- » Packaging: 25KG bags, available in grey and white.
- » Standards: Conforms to KS 2129 (Kenya) and EN 12004 (European).

# **TYPICAL PROPERTIES**

Property	Details
Color	Grey and white
Appearance	Free-flowing powder
Water Demand	25 - 30%
Workability	Easy to notch
Bonding Strength	> 1.0 N/mm² (after 28 days)
Slip	< 0.5 mm
Yield	3 - 5 Kg/m³

## **APPLICATION GUIDLINES**

# **SURFACE PREPARATION**

- » Ensure the surface is clean, stable, and free from loose debris, paint, oil, or other contaminants.
- » Tiles should be dry and free from any material that could hinder adhesion.

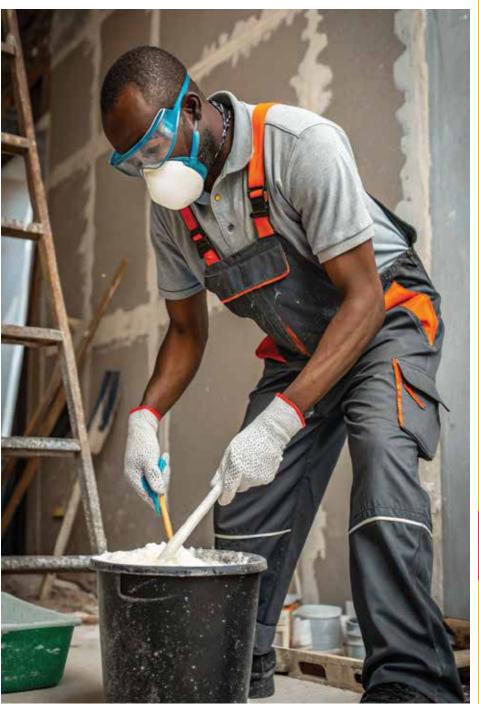
## **MIXING**

Item	Quantity
Water	6.25 - 7.5L per 25KG bag
Adhesive to Water Ratio	25 - 30%

- » Mix for at least 5 minutes to achieve a lump-free mortar.
- » Allow the mixture to rest for 5 minutes before application.

## **STORAGE & HEALTH**

- » **Storage**: Keep dry, away from sunlight. Shelf life of 12 months under optimal conditions.
- » **Safety**: Avoid skin, eye, and food contact. Seek medical advice in case of accidental ingestion.



## **POWERTILE 4000**



## **MATERIAL DESCRIPTION**

PowerTile 4000 is a high-performance cement-based adhesive designed for thin-bed or thick-bed installation of non-water-absorbing tiles. It is suitable for both interior and exterior surfaces and can be applied on substrates such as: Concrete, Plasterboards, Sand-cement screeds & Gypsum.

# **TYPICAL APPLICATIONS**

PowerTile 4000's exceptional characteristics make it suitable for:

- » Tiling in swimming pools, bathrooms, kitchens, and wall cladding projects.
- » Non-porous surfaces and environments exposed to constant wet conditions.
- » High-traffic areas such as public institutions and commercial buildings.
- » Glass mosaics and high-density tiles.



## **KEY FEATURES AND BENEFITS**

Feature	Benefit
Application in submerged conditions	Adhesion remains unaffected in wet environments
Reduced slip	Suitable for vertical surfaces in high-rise buildings.
Resistant to environmental factors	Withstands chemicals, heat, freezing, and thawing.

#### **TYPICAL PROPERTIES**

Property	Details
Color	White
Appearance	Free-flowing powder
Water Demand	25 - 30%
Slip	∢ 0.5 mm
Bonding Strength	> 1.0 N/mm² (After 28 days
Yield	3 - 5 Kg/m²

#### **APPLICATION GUIDLINES**

#### **SURFACE PREPARATION**

- » Ensure the surface to be tiled is stable, clean, and free of debris, grease, or contaminants that may affect curing.
- » Confirm tiles are dry and free from substances that could hinder adhesion.

#### **MIXING**

Material	Water Quantity
PowerTile 4000	6.25 - 7.5L per bag
Smaller amounts	25 - 30% of adhesive weight

- » Mix PowerTile 4000 with clean, potable water using a power mixer for at least 5 minutes to achieve a lump-free paste.
- » Allow the mixture to rest for 5 minutes before application.

#### **APPLICATION**

- 1 Spread adhesive to a thickness of 3–6mm using a notch ing trowel, covering no more than 1 m<sup>2</sup> at a time.
- 2 For wet or vertical heavy-duty applications, use a solid bed installation to ensure proper adhesion.
- 3 Leave a 2mm minimum joint around tiles to avoid butt-jointing.
- 4 Allow a minimum of 24 hours post-installation before grouting.



#### **PACKAGING AND STORAGE**

- » Packaging: Available in 25KG sealed bags.
- » Shelf Life: 12 months
- » Avoid excessive compaction during storage.
- » Store on pallets in a dry place, away from sunlight or rainfall.

Note: Failure to follow recommendations may degrade product quality.

#### **HEALTH & SAFETY**

- Avoid contact with eyes, skin, and food.
- · In case of contact, wash thoroughly with water.
- If ingested, seek immediate medical attention.

RiskP	recaution
Contact with eyes/skin	Wash thoroughly with water
Accidental ingestionS	eek medical advice immediately
General use	Avoid contact with food or mouth

#### **QUALITY & CARE**

PowerTile 4000 is manufactured with strict adherence to national standards and customer requirements. Eurocon Tiles & Products Ltd ensures that all products add maximum value to its customers.

Standards: Conforms to KS 2129 (Kenya) and EN 12004 (European)

**Statement of Responsibility**: The technical information provided here is based on the company's current scientific and applied knowledge. The suitability of the product for specific purposes should be confirmed by the final user.





**KENYA**BUILDERS

CIVIL WORKS

We offer value-added civil work solutions which include earthworks, pavements, stormwater drainage and sewerage systems that are within budget and surpass our client's expectations.

The fact that we have received multiple awards of excellence from ourc lients and affiliations over they ears is testament that his approach is successful.

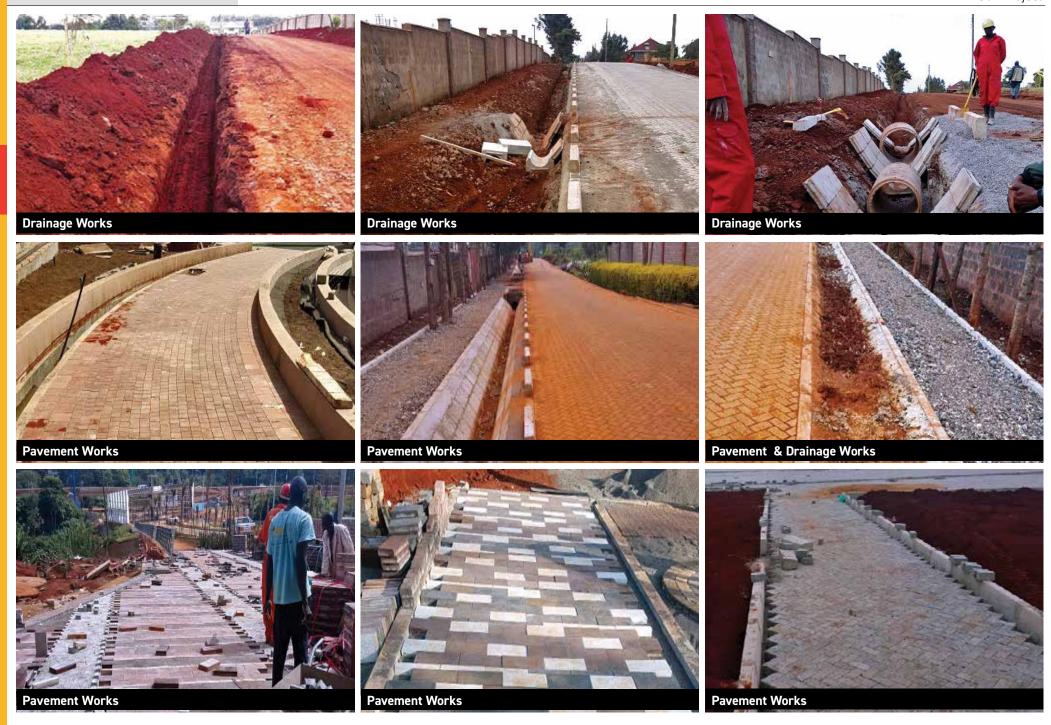
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AGGREGATES PAVING BLOCKS MASONRY BLOCKS PRECAST PRODUCTS CONCRETE PIPES ROOFING TILES NATURAL STONES COBBLESTONES EUROCON TILES CONSTRUCTION CHEMICALS CIVIL WORKS

#### **DISCLAIMER**

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