## Technical Product Guide v18.2024

# Best Bricks& Pavers



**Virtual Product Guide** 



You can't produce the Best if you don't start with the Best: people; passion; ingenuity; inspiration.

Plus a multi-million dollar investment in state-of-the-art production facilities.

Welcome to the leading edge of hardflooring.

Welcome to Best Bricks & Pavers.

## **Contact Details**

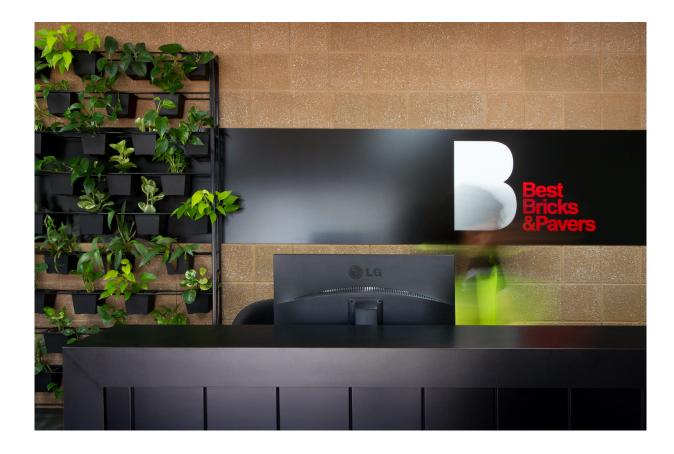


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## **Company Profile**



In 1993, Best Bricks & Pavers started with a clean slate. Travelling the world for inspiration, just as we still do. Taking the Best European style. Adding our own ingenuity. Leading the way with constant innovation. Creating pavers and tiles in new styles, new sizes, new colours and new finishes. Even giving traditional styles a technological twist.

### You only produce the Best when you start with the Best.

Our state-of-the-art, multi-million dollar production plant 10 kilometres north of Adelaide's CBD was purpose-built in Europe. On this 15,000-square-metre site, we can produce pavers the equal of any in the world. But crafted to stand up to our conditions and lifestyle. That's not just due to machines, however. It's about people.

Best Bricks & Pavers now employs a team of over 100, including some of the finest craftsmen in the industry. Men with an eye for detail and a passion for quality who turn out exquisite largeformat pavers; honed pavers of virtually any dimension; and terrazzo to match the most expensive imports.

And all of this in a clean, green facility that collects rainwater for use in a custom-made, closed-loop production system that has also eliminated waste and landfill. Our aim is to beautify your home. But not at the expense of our home planet.

#### Hardflooring: an easy decision for any décor.

In this kit, you'll discover Best's range of concrete and large-format pavers, as well as terrazzo and traditional tiles. Beautiful products for inside and out. In colours at the forefront of fashion. Unique styles, finishes and shapes. Leading-edge design. Available Australia-wide, backed by our bullet-proof reliability and knowledgeable staff.

Our products now proudly adorn architectural icons such as the stunning, 5-star boutique hotel, Blue Sydney, on Finger Wharf; the remodelled North Terrace cultural promenade in Adelaide; and the Royal Childrens Hospital in Melbourne, amongst others.

Where next? Hopefully your next project.

#### **Employing Australians**

All Best Bricks & Pavers concrete products are made in Adelaide, South Australia from locally sourced materials. In addition to our products being made locally, Best Bricks & Pavers is also owned by South Australians.

Overall Best Bricks & Pavers contribute over 500 jobs to the local community and continue to create opportunities every week for people not only working in our factory but the myriad of support industries around the state.

It is estimated that for every 900m<sup>2</sup> of Supply and Lay work that Best is engaged in, we employ 1 person in a full time position for 12 months.

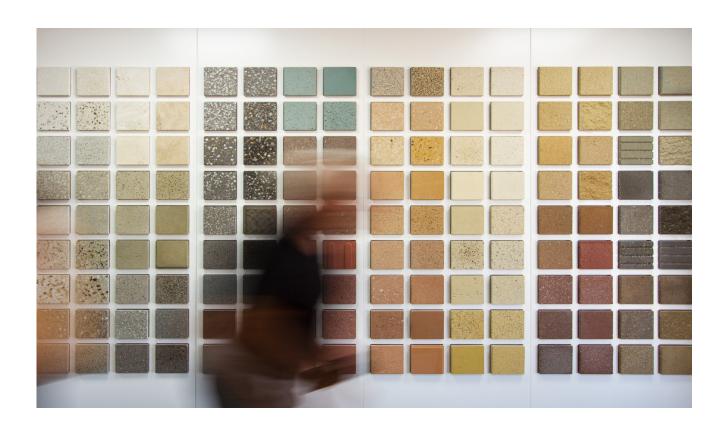
It is important to remember that by buying from Best you are contributing to the well being of the South Australian, and by extension the Australian community.

## Quality Assurance

#### Best Quality.

When you call yourself 'Best', quality isn't an option: it's an absolute expectation. So everything we do is aimed to create a true quality experience: our products, our service, our showrooms, our employment conditions and our environmental considerations.

To this end, Best Bricks & Pavers has adopted an endorsed quality system that is totally user-friendly, with a fundamental requirement to encourage customer and employee feedback. Plus, we have strict production controls that demand we only ever use the finest natural materials available, ensuring our complete range is manufactured to the highest possible standards.





### Environmental Credentials

#### We stand on our environmental credentials.

It's fashionable right now for manufacturers to claim the environmental kudos for changing their production methods to something sustainable. Customers demand it now. That wasn't the case a decade ago, however, when Best made the decision to build a better plant in order to build a better paver. It's been a massive investment in technology. But better than paying the price ecologically.

#### The Nature of Pavers.

One of the most important points to make about how Best Bricks & Pavers makes pavers is that it is, after all, a natural process using natural products. So whilst the technology has changed radically, the basic methods of production we use would not be unrecognisable to ancient paver makers. Granite, marble and limestone pavers are. of course, just natural stone that's precisely cut and exquisitely finished. But every component that goes into the manufacture of our composite pavers is natural too. There are no chemicals used in the process. Unlike most manufacturers, that means our site is free of contaminants. It also makes pavers a guilt-free purchase and a worthy addition to any green home.

#### Water Saving.

Manufacturing pavers uses water. And that's a real problem in South Australia, the driest state of the driesthabitable continent on Earth. So in 1999, we imported our first water-recycling plant from Europe. In 2016, we added a second one. On those occasions when it rains, every precious drop is collected from our factory roofs and introduced to a closed-loop system that allows us to use the same water over and over again. This has reduced our water consumption by an astonishing 5,000 litres per day.

#### Gas-Free Curing.

Even during the kiln-drying process, Best has taken every step to ensure resources are used efficiently and responsibly. As our pavers are dried, they undergo a mist-curing process. What this means is that at computer-controlled intervals, they are subjected to fine sprays of water, all of which comes from our recycling plant. Not only does this cure the pavers to ensure a strong, quality product that will endure in situ; it also ensures the drying process is successful with less wasteful rejects. Unlike other paver manufacturers, no natural gas is used in this stage.

#### Zero Waste.

Our manufacturing process produces no waste. If a product is produced that we deem unsaleable, it is simply crushed and reprocessed for use in future manufacture. So we've all but eliminated the need to send anything to landfill.

#### **Environmental Products.**

In this way, every product that comes from Best Bricks & Pavers is made in an environmentally responsible and sustainable manner. But some products go on to do even more for the environments in which they're used. For example, we've developed two permeable products, called the Bio Paver 60 and the Bio Lock 60. Extensively tested and verified by the University of South Australia, the permeable range of Pavers allow water to seep through them into the ground below, thereby reducing the amount of runoff and stormwater that pollutes our coastal waters.

#### Wooden Pallet Reuse.

An important part of enabling the transportation of our products to customers are wooden pallets. At Best we minimise the impact on the environment by reusing our wooden pallets and thereby reducing waste otherwise destined for landfill. We facilitate this by offering a free wooden pallet collection service.



## **Traditional Pavers**



#### The look is classic.

The production is state-of-the-art. Start with perfectly uniform size, designed for easy installation. A handyman's dream. Slipresistant. Maintenance-free. An anti-salt additive prevents unsightly stains from efflorescence. Built to last and take years of punishment. And so cost-effective. Join the new traditionalists.





Sahara





Charcoal





\*No two blend coloured pavers are

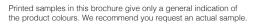


**Claret Blend\*** 

Red

Biscuit

**Bronze Blend\*** 



## **Traditional Honed\*** Pavers



Best first introduced traditional honed pavers to market in 1999 and they remain the most sought after honed product on the market.

What makes them unique? We start with a traditional-sized paver, square-cut and perfect. Then we hone the surface, exposing the aggregate. It's raw. It's real. Just as hard-wearing and maintenance-free as our traditional pavers. But with that extra texture for those who fancy a bit of rough.





Sahara



**Biscuit** 



Charcoal



**Bronze Blend\*** 



\*No two blend coloured pavers are the same



**Claret Blend\*** 

Red

\*The honing may reduce the thickness of the paver. Printed samples in this brochure give only a general indication of the product colours. We recommend you request an actual sample.



## **Traditional Pavers**

## **Specifications**

Piazza Range	•	Units per m <sup>2</sup>	m <sup>2</sup> per pallet	Strada Rang	ge
	Best Paver 40 220 x 110 x 40mm	40.34	19.8		Best Paver 60 220 x 110 x 60mm
	Flag 40 220 x 220 x 40mm	20.34	19.6		Flag 60 220 x 220 x 60mm
	Slab 40 300 x 300 x 40mm	10.98	17.4		Slab 60 300 x 300 x 60mm
V Rua Range		Units per m <sup>2</sup>	m <sup>2</sup> per pallet	$\overline{\bigcirc}$	Best Lock 60 190 x 190 x 60mm
$\frown$	Best Paver 50 220 x 110 x 50mm	40.34	19.8		
V,				$\sim$	Esse Paver 60 220 x 110 x 60mm
	Flag 50 220 x 220 x 50mm	20.34	19.6	6 CT	220 x 110 x 60mm
$\underline{\mathbb{Y}}$	Olah 50	10.00	47.4	Weathered	
	Slab 50 300 x 300 x 50mm	10.98	17.4		our exclusive weather aged appearance.
				Honing	
	Best Beton 300 x 200 x 50mm	16.20	14.8		ve process whereby p posing aggregates an
				Pebble	
<b>1A</b>		1			Pebble finish pavers a deal alternative to pou

Camion Range	e	Units per m <sup>2*</sup>	m <sup>2</sup> per pallet
	Best Paver 80 220 x 110 x 80mm	40.34	9.9
	Esse Paver 80 220 x 110 x 80	40.34	9.9
	Best Lock 80 190 x 190 x 80mm	29.48	9.7

ered finish which produces

Units per m<sup>2</sup>

40.34

20.34

10.98

29.48

40.34

m<sup>2</sup> per pallet

14.8

19.6

13.1

14.6

9.9

product face is and producing a stylish

Traditional Pebble finish pavers are very fashionable andare an ideal alternative to poured exposed aggregate concrete.



### Permeable Pavers

## **Specifications**

Permeable Pav	ver 60	Units per m <sup>2</sup>	m² per pallet
	Bio Paver 60 220 x 110 x 60mm	40.34	14.8
	Bio Lock 60 190 x 190 x 60mm	29.48	14.6

Permeable Pav	ver 80	Units per m <sup>2</sup>	m² per pallet
	Bio Paver 80 220 x 110 x 80mm	40.34	9.91
	Bio Lock 80 190 x 190 x 80mm	29.48	9.77

A permeable paver range and associated stormwater retaining sub-structure, suited to the needs of footpath construction in urban landscapes, has been developed by Best Bricks & Pavers. The benefits of the new system include:

#### **Reduced Surface Runnoff**

The Bio paver, used with 125mm sand and crushed rock base will completely accommodate (that is, no stormwater runoff) the 2 hour, 10 year ARI (Average Recurrence Interval) storm in Adelaide. Used with 75mm of sand and crushed rock, the system will completely accommodate the 2 hour, 3 year ARI storm.

#### Infiltration Between Storm Events

Cleansed storm runoff retained in the 125mm sand and crushed rock of the Bio paver will 'clear' (by infiltration) into Adelaide parent soils - including most clays - in less than two days. This is the estimated time lag between successive 10 year ARI storms.

#### **No Trip Points**

The gap through which surface runoff penetrates our permeable pavers is 5mm wide – less than the size of a stiletto heal The paver can therefore be used in footpaths and driveways without fear of tripping pedestrians.

#### **Cleansing Maintenance**

The paver can be returned to 'as new' service condition using mechanical, jet-suction cleansing equipment. The expected time between cleansing operations varies from seven years (worst suburban conditions) to 25 years (Best conditions).

#### Paving System Re-Construction

Given normal care of the paved surface, including maintenance associated with tree root uplift and reinstatement after alterations to in-ground services (gas, telephone, water, etc) there is no need for reconstruction of the pavement system for many decades.

Report prepared by John R Argue, Adjunct Professor of Water Engineering, Urban Water Resources Centre, University of South Australia.



## Traditional Pavers

## Installation

## Pedestrian Application

#### Excavation

To minimum of 120mm. (Allow for base rubble, bedding sand and paver)

#### Base

50mm deep using 10mm rubble or similar.

#### Bed

Bedding sand 25mm deep using Quartzite bedding sand or similar.

#### Product

Traditional Piazza range pavers may be used.

#### Laying

When laying Traditional pavers it is important that they be gapped. 2mm is recommended. When using the compatible Traditional Range numerous interesting paving patterns, many of which require no cutting, can be created. (see figure 1)

#### **Edge Restraint**

The paved area must be adequately restrained on all sides using a 100 x 100mm concrete edge restraint which includes 50mm galvanised mesh. (see figure 2)

#### **Grouting & Compacting**

Use a suitable vibrating machine to compact paved area. Placing a mat between machine and pavers will protect the face of pavers. Paved area should be grouted using a fine dry grouting sand. After first pass of vibrating machine sweep in more grouting sand to ensure joints are filled completely and compact again. Complete job by sweeping off any excess sand.

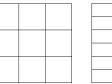
#### Sealing

Traditional pavers can be rendered stain resistant by the use of chemical sealers.

#### Important Notes

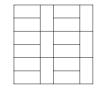
- To achieve the Best results from your Traditional pavers, it is recommended that your paving be designed by a qualified engineer
- Traditional pavers should be installed by a pavior with the necessary experience to satisfactorily complete the job
- Always ensure that the paving surface is kept below the damp course level of any building. The amount by which paving must be kept below will vary from region to region. The local authority should be consulted before commencement of paving works
- Paving must slope away from any building
- The finished job will only be as good as the preparation and base compaction

Figure 1



Stack bond with square paving units

Stack bond



Alternate coursing

Basketweave



Stretcher bond with square paving units 45° stack bond with square paving units







## Traditional Pavers

## Installation

## Light Traffic Application

#### Excavation

To minimum of 190mm. (Allow for base rubble, bedding sand and paver)

#### Base

100mm deep using 10mm rubble or similar compacted to 95%.

#### Bed

Bedding sand 25mm deep using Quartzite bedding sand or similar.

#### Product

Traditional Rua, Strada or Camion range pavers may be used.

#### Laying

When laying Traditional pavers it is important that they be gapped. 2 mm is recommended. In vehicular applications, special attention should also be given to the paving bond that is used. Stretcher bond and Herringbone bond are recommended. (see figure 1)

#### **Edge Restraint**

The paved area must be adequately restrained on all sides using a 100 x 100mm concrete edge restraint which includes 50mm galvanised mesh. (see figure 2)

#### **Grouting & Compacting**

Use a suitable vibrating machine to compact paved area. Placing a mat between machine and pavers will protect the face of pavers. Paved area should be grouted using a fine dry grouting sand. After first pass of vibrating machine sweep in more grouting sand to ensure joints are filled completely and compact again. Complete job by sweeping off any excess sand.

#### Sealing

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#### Important Notes

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Stretcher bond with square paving units

45° herringbone



Stretcher bond

Figure 2





## Traditional Pavers

## Installation

## Commercial Application

#### Excavation

To minimum of 190mm. (Allow for base rubble, bedding sand and paver)

#### Base

100mm deep using 10mm rubble or similar compacted to 95%.

#### Bed

Bedding sand 25mm deep using Quartzite bedding sand or similar.

#### Product

Traditional Rua, Strada or Camion range pavers may be used.

#### Laying

When laying Traditional pavers it is important that they be gapped. 2 mm is recommended. In vehicular applications, special attention should also be given to the paving bond that is used. Stretcher bond and Herringbone bond are recommended. (see figure 1)

#### **Edge Restraint**

The paved area must be adequately restrained on all sides using a 100 x 100mm concrete edge restraint which includes 50mm galvanised mesh. (see figure 2)

#### **Grouting & Compacting**

Use a suitable vibrating machine to compact paved area. Placing a mat between machine and pavers will protect the face of pavers. Paved area should be grouted using a fine dry grouting sand. After first pass of vibrating machine sweep in more grouting sand to ensure joints are filled completely and compact again. Complete job by sweeping off any excess sand.

#### Sealing

Traditional pavers can be rendered stain resistant by the use of chemical sealers.

#### Important Notes

- To achieve the Best results from your Traditional pavers, it is recommended that your paving be designed by a qualified engineer
- Traditional pavers should be installed by a pavior with the necessary experience to satisfactorily complete the job
- Always ensure that the paving surface is kept below the damp course level of any building. The amount by which paving must be kept below will vary from region to region. The local authority should be consulted before commencement of paving works
- Paving must slope away from any building
- The finished job will only be as good as the preparation and base compaction

Figure 1





Stretcher bond with square paving units

45° herringbone



Stretcher bond

Figure 2





## Permeable Pavers

## Installation

## Pedestrian / Light Vehicle Application

#### Excavation

To minimum of 210mm. (Allow for base gravel, bedding sand and paver)

#### **Geofabric First Layer**

A layer of Geofabric (Bidim or Bontec geotextile) should be placed over the subgrade with a minimum 600mm overlap on all fabric seams

#### Base

100mm deep using 20mm screenings. It is important to compact the newly laid gravel using a vibrating machine. At least two passes over the gravel area is required prior to laying the bedding sand.

#### Geofabric second layer

A layer of geo fabric (Bidim or Bontec geotextile) should be placed over compacted base, with a minimum of 600 mm overlap on all fabric seams.

#### Bed

Install bedding 50mm deep of 2mm to 5mm screenings

#### Product

Bio Lock 60mm, or Bio Paver 60mm pavers may be used.

#### **Edge Restraint**

The paved area should be adequately restrained on all sides using a 200 x 100mm concrete edge restraint which includes 50mm galvanised mesh. (see figure1) Ensure that the edge restraint extends to the sub-grade.

#### **Grouting & Compacting**

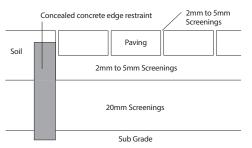
Use a suitable vibrating machine to compact paved area. Placing a mat between machine and pavers will protect face of pavers. Paved area should be grouted using 2mm to 5mm screenings. Complete job by sweeping off any excess screenings.

To maximise the effectiveness of the permeable paver, you may elect to not grout the area, allowing additional water to permeate the ground. This is at your discretion.

#### Important Notes

- To achieve the Best results from your Permeable pavers, it is recommended that your paving be designed by a qualified engineer
- Permeable pavers should be installed by an experienced pavior
- Always ensure that the paving surface is kept below the damp course level of any building. Your local council should be consulted before commencement of paving works
- · Paving must slope away from any building
- The finished job will only be as good as the preparation and base compaction

#### Figure 1



## 1Biii



## Traditional Pavers

## Performance and Testing

Description/Test Method	Best Bricks & Pavers: Test Results	Description
Dimensional Deviations AS/NZS 4456.3B	DPB4	Variation of no more than +/- 2mm
Breaking Load of Segmental Pavers AS/NZS 4456.5	40mm: Pedestrian 50mm: Light Vehicle 60mm & 80mm: Commercial	Suitable only for foot traffic Suitable for vehicles with gross weight of less than 3 tonne. Suitable for vehicles with gross weight over 3 tonne.
Slip Resistance (co-efficient of friction) AS/NZS 4586: 13	Traditional: P5	All internal and external walkways, carparks, stair treads, external ramps, swimming pool ramps and surrounds.
	Honed: P4	All internal and external walkways, carparks, stair treads, and swimming pool surrounds.
	Pebble: P5	All internal and external walkways, carparks, stair treads, external ramps, swimming pool ramps and surrounds.
Salt Resistance AS/NZS 4456.10B	Exposure	Suitable in salt water enviornments (e.g. pool surrounds)

N.B.: Performance results are typical Best Bricks & Pavers values. Best Bricks & Pavers will on request, generate specific product test results.



Think big. Live large. Start a revolution. Our Large Format pavers were the first in Australia. Big on style and European chic. Their highly resistant surface is composed of real marble, natural stone



Urban







Sandstone



**Other Finishes Available** 



Quarry



Cobble





Luna

and striking aggregates. The range of colours will floor you.





Limestone

#### Printed samples in this brochure give only a general indication of the product colours. We recommend you request an actual sample.



## Large Format Honed\* Pavers



Another first for Best Bricks & Pavers. This is smooth European styling on a grand scale. For inside or outside, show your creative side. Real marble, natural stone and cool aggregates are cut and polished to create a dazzling surface. All in a range of colours that are practically edible.

\*The honing may reduce the thickness of the paver.

Printed samples in this brochure give only a general indication of the product colours. We recommend you request an actual sample.







Limestone

Oyster





## Large Format Specifications Pavers

Large Format 40mm	Units per m <sup>2</sup>	Finish	Large Format 50mm	Units per m <sup>2</sup>	Finish	Large Format 60mm	Units per m <sup>2</sup>	Finish
300 x 300 x 40mm	10.98	Bevel Straight Edge Cobbles Honed Weathered Pebble Black Series	300 x 300 x 50mm	10.98	Bevel Straight Edge Cobbles Honed Weathered Pebble Black Series	300 x 100 x 60mm	31.75	Straight Edge Weathered Honed Black Series
400 x 400 x 40mm	6.15	Bevel Straight Edge Rustic Stone Luna S/E Cobbles	600 x 300 x 50mm*	5.47	Bevel Honed S/E Weathered Black Series	300 x 200 x 60mm	16.21	Honed S/E Black Series
500 x 500 x 40mm	3.97	Quarry Honed Weathered Pebble Black Series Bevel	Suitable for pathways, patios and passenge *Not recommended for vehicular application			300 x 300 x 60mm	10.98	Bevel Straight Edge Cobbles Honed Weathered Pebble Black Series
		Weathered				400 x 400 x 60mm	6.15	Bevel Straight Edge Cobbles Honed Weathered Pebble Black Series
Suitable for pathways and patios when laid	I to Best spec	fications				$\bigvee$		
Honing Our exclusive process whereby p exposing aggregates and produci						600 x 400 x 60mm*	4.12	Honed S/E Black Series



## Large Format Bullnose and Edging

## **Specifications**

Large Format Bullnose	Units per lineal metre	Finish	Large Format Edging	Units per lineal metre	Finish	Honing
400 x 400 x 40mm	2.5	Bevel Straight Edge Honed Weathered Black Series	400 x 380 x 40mm	2.5	Bevel Straight Edge Honed Weathered Black Series	Our exclusive proces face is polished expo producing a stylish f
Large Format Half Bullnose	Units per lineal metre	Finish				
400 x 400 x 40mm	2.5	Bevel Straight Edge Honed Weathered Black Series				
Large Format Sharknose	Units per lineal metre	Finish				
400 x 400 x 40mm	2.5	Bevel Straight Edge Honed Weathered Black Series				

our exclusive process whereby product ace is polished exposing aggregates and roducing a stylish finish.



## Installation

## Pedestrian Application

#### Excavation

To minimum of 120mm. (Allow for base rubble, bedding sand and paver.)

#### Base

50mm deep using 10mm rubble or similar.

#### Bed

Bedding sand 25mm deep using washed concrete sand or similar.

#### Product

Large Format 40mm pavers may be used.

#### Laying

When laying Large Format pavers it is important that they be adequately gapped. 4mm is recommended. This gap is to be maintained to all 4 sides of paver. When cutting Large Format pavers ensure that any resulting residue or slurry is washed off immediately with clean water.

#### **Edge Restraint**

The paved area must be adequately restrained on all sides using a 100 x 100mm concrete edge restraint which includes 50mm galvanised mesh. (see figure 1)

#### **Grouting & Compacting**

Use a vibrating machine to compact paved area making at least two passes over paving. Vibrating machine should have a plate size of no less than 500 x 600mm. Placing a mat between machine and pavers will protect the face of pavers. Paved area should be grouted using a suitable dry jointing sand. It is important that this material is applied to manufacturers instructions. Pavers must be thoroughly swept clean of any excess grouting material.

#### Sealing

Large Format pavers can be rendered stain resistant by the use of chemical sealers.

#### Important Notes

- To achieve the best results from your Large Format pavers, it is recommended that your paving be designed by a qualified engineer with reference made to the CMAA's "Concrete Flag Pavements – Design and Construction Guide".
- Large Format pavers should be installed by a pavior experienced in the use of large– format pavers.
- Always ensure that paving surface is kept below the damp course level of any building. The amount by which paving must be kept below will vary from region to region. The local authority should be consulted before commencement of paving works.
- Use of polymer based grouting sand is not recommended. Incorrect application of this product may cause discolouration. Best accepts no liability or claims resulting from the use of this type of grouting sand.
- Paving must slope away from any building.
- The finished job will only be as good as the preparation and base compaction.
- Precautions must be taken in the first two to three months of paved surface to ensure that jointing sand is not removed. If jointing sand is removed, refill immediately. Maintaining the jointing sand will protect the structured integrity of paved surface. Conduct regular inspections of paved surface to indentify any other problems. Attending to small localised problems often prevents the need for major maintenance of large areas.





## Installation

## Light Traffic Application

#### Excavation

To minimum of 190mm. (Allow for base rubble, bedding sand and paver)

#### Base

100mm deep using 10mm rubble or similar compacted to 95%.

#### Bed

Bedding sand 25mm deep using washed concrete sand or similar.

#### Product

Large Format 50mm or 60mm pavers may be used.

#### Laying

When laying Large Format pavers it is critical that the pavers be adequately gapped. 4mm is recommended. This gap is to be maintained to all 4 sides of paver. In vehicular applications, special attention should also be given to the paving bond that is used. Stretcher bond is the only bond recommended. (See figure 1.) When cutting Large Format pavers ensure that any resulting residue or slurry is washed off immediately with clean water.

#### **Edge Restraint**

The paved area must be adequately restrained on all sides using a 100 x 100mm concrete edge restraint which includes 50mm galvanised mesh. (see figure 2)

#### **Grouting & Compacting**

Use a vibrating machine to compact paved area making at least two passes over paving. Vibrating machine should have a plate size of no less than 500 x 600mm. Placing a mat between machine and pavers will protect the face of pavers. Paved area should be grouted using a suitable dry jointing sand. It is important that this material is applied to manufacturers instructions. Pavers must be thoroughly swept clean of any excess grouting material.

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Figure 1











## Installation

## Commercial Application

#### Site Inspection

Site inspection of civil works by paving supervisor. Detail any rectification work to Head Contractor prior to commencement of paving installation.

#### Setting Out

Use of string lines is important so as to assure that sand bed does not exceed 30mm. Where paving width exceeds 5 metres the use of additional string lines are required to ensure that straight paving lines are maintained.

#### **Bedding Sand**

2Bii

Where practical a bedding sand that has a low percentage of fines and that falls within the grading limits listed in the table below should be used.

Seive size	% passing
9.52 mm	100
4.75 mm	90-100
2.36 mm	80-100
1.18 mm	50-85
600 microns	25-60
300 microns	10-30
150 microns	5-15
75 microns	0-10

#### Sand Leveling

Sand leveling of bedding sand may be performed either manually or machanically with care being taken not to damage base.

#### **Bedding Sand Screening**

Sand shall be spread to a uniform layer 30mm deep. Once compacted no area should exceed 25mm.

#### Product

Large Format 40mm, 50mm or 60mm pavers may be used depending on application.

#### Laying

When laying Large Format pavers it is critical that the pavers be adequately gapped. 3 to 5mm is recommended. This gap is to be in vehicular applications, special attention needs to be given to the paving bond that is used. Stretcher bond is the only bond recommended. (see figure 1). Type of paving bond becomes less critical in pedestrian applications where virtually any paving bond may be successfully used. When laying, care should be taken so as to not pre–compact sand bed.

#### Cutting

All pavers to be cut using a diamond saw. Cuts, where possible are to be within 5mm of object and if this is not possible then pavers are to be cut 100mm from object. Concrete infill to be of same material as used to manufacture pavers. When cutting Large Format pavers ensure that any resulting residue or slurry is washed off immediately with clean water.

#### **Debris Removal**

Ensure that paved area is swept off and any debris removed before grouting and compaction take place.

#### Edge Restraint

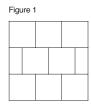
The paved area must be adequately restrained on all sides using a 100 x 100mm concrete edge restraint which includes 50mm galvanised mesh. (see figure 2)

#### Grouting & Compacting

Use a vibrating machine to compact paved area making at least two passes over paving. Vibrating machine should have a plate size of no less than 500 x 600mm. Placing a mat between machine and pavers will protect the face of pavers. Paved area should be grouted using a suitable dry jointing sand. It is important that this material is applied to manufacturers instructions. Pavers must be thoroughly swept clean of any excess grouting material.

#### Works Inspection

Assessment and inspection of finished works for general faults.



Stretcher bond with square paving units

#### Joint Filling

Check for areas where grouting material has been displaced and re-grout.

#### **Final Works Inspection**

Re-assessment and inspection for final approval of paved area.

#### Maintenance

Paved area should not be cleaned mechanically for four weeks after paving has been completed. Paved area is to be inspected at monthly intervals for 6 months. Particular attention is to be given to any grouting material loss and any other problems that may be avoided by routine general maintenance.

#### **Important Notes**

- Finished paving should be both uniform and even.
- Any lipping shall be kept to a minimum of 3mm and any deviation from a 3 metre long straight edge placed on the paved surface should be not be greater than 10mm.
- Use of polymer based grouting sand is not recommended. Incorrect application of this product may cause discolouration. Best accepts no liability or claims resulting from the use of this type of grouting sand.





## Installation

### **Using Adhesive**

#### Base

Large Format pavers may be laid using glue on a concrete slab.

#### Preperation

Ensure concrete slab is level and true. Remove any mortar dollops and make sure slab is clean of any dirt. Slab may be primed using a suitable masonry primer.

#### Paver adhesive

Use a suitable adhesive or cement glue.

#### Product

Large Format 40mm, 50mm or 60mm pavers may be used.

#### Paver preperation

Apply kemgrip to base of each paver before laying.

#### Laying

Pavers are placed into position on the adhesive and beaten into position using a rubber mallet. Adhesive screed should be between 5-15mm.

#### Joints

It is recommended that joints be at least 4mm.

#### Grout

Performed at least 24 hours after pavers laid. Grout may be mixture of cement, water and oxide (grout admixtures may be used) or pavelok may be used provided manufacturers instructions are adhered to.

#### Curing

60 to 72 hours required for pedestrian applications and at least 5 days required for light traffic applications.

#### **Important Notes**

Poor design can have serious consequences on flooring performance. Typical examples include not having sufficiently small bays, not letting dividing strips penetrate at least halfway into leveling and bedding layers and not having dividing strips over structural joints and movement joints in the base concrete.



## Installation

## **Using Mortar**



Large Format pavers may be laid using mortar on either a concrete slab or compacted road base.

#### Preperation

If laid on concrete slab then slab must be level and true but not smooth. Slab must be clean and wetted down prior to commencement of laying. If to be laid on road base ensure that road base depth is at least 100mm with a compaction of 95%.

#### **Mortar Mix**

4 : 1 sand/cement. Sand should be plasters sand. Adding kemcrete to mixture assists adhering and waterproofing properties of mortar. Mix all ingredients thoroughly, mixture should pour but still stick. (ie) similar to cake mix consistency

#### Product

Large Format 40mm, 50mm or 60mm pavers may be used.

#### Bed

Mortar bed should not exceed 25mm.

#### **Paver Preperation**

Apply kemgrip to base of each paver before laying.

#### Laying

Pavers are placed into position on the mortar and beaten into position using a rubber mallet.

#### Joints

It is recommended that joints be at least 4mm.

#### Grout

Performed at least 24 hours after pavers laid. Grout may be a mixture of cement, water and oxide (grout admixtures may be used) or pavelok may be used provided manufacturers instructions are adhered to.

#### Curing

24 hours required for pedestrian applications and at least 5 days required for light traffic applications.

#### **Important Notes**

Poor design can have serious consequences on flooring performance. Typical examples include not having sufficiently small bays, not letting dividing strips penetrate at least halfway into leveling and bedding layers and not having dividing strips over structural joints and movement joints in the base concrete.



## Large FormatPerforPaversand Te

## Performance and Testing

Description/Test Method	Best Bricks & Pavers: Test Results	Description
Dimensional Deviations AS/NZS 4456.3B	DPB4	Variation of no more than +/- 2mm
Breaking Load of Segmental Pavers AS/NZS 4456.5	300x300x40mm: Pedestrian 400x400x40mm: Pedestrian 500x500x40mm: Pedestrian	Suitable only for foot traffic
	300x300x50mm: Commercial 600x300x50mm: Pedestrian	Suitable for vehicles with gross weight over 3 tonne Suitable only for foot traffic
	300x300x60mm: Commercial 400x400x60mm: Commercial	Suitable for vehicles with gross weight over 3 tonne.
Slip Resistance (co-efficient of friction) AS/NZS 4586: 13	Honed: P4 Bevel / Straight Edge: P4 All other finishes: P5	All internal and external walkways, carparks, stair treads, and swimming pool surrounds. All internal and external walkways, carparks, stair treads, external ramps, swimming pool ramps and surrounds.
Salt Resistance AS/NZS 4456.10B	Exposure	Suitable in salt water enviornments (e.g. pool surrounds)

N.B.: Performance results are typical Best Bricks & Pavers values. Best Bricks & Pavers will on request, generate specific product test results.



Only one flooring product improves with age and wear. Terrazzo. Created by the artisans of Venice, terrazzo owes its renaissance to Best Bricks & Pavers's 21st-century style and technology. Granite, marble and coloured stones are set into the surface, then polished to reveal their beauty to striking effect.



**Ingle White** 

**Porto Grenada** 



**Charles Sturt Grey** 

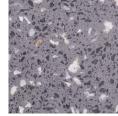
Wharf Tan

Granite Nuit

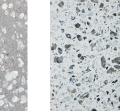




Vecchia Scuola Nero



**Flinders Charcoal** 



Printed samples in this brochure give only a general indication of the product colours. We recommend you request an actual sample.



Woolloomooloo Ash

Valentino Light

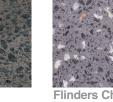
Notte Stella

Valentino Sera

25.







**Riverina Granite** 



## **Specifications**

Terrazzo Tiles 40mm	Units per m <sup>2</sup>	Finish	Terrazzo Tiles 50mm	Units per m <sup>2</sup>	Finish	Terrazzo Tiles 60mm	Units per m <sup>2</sup>	Finish
300 x 300 x 40mm	10.98	Honed S/E Black Series	300 x 300 x 50mm	10.98	Honed S/E Black Series	300 x 200 x 60mm	16.21	Honed S/E Black Series
400 x 400 x 40mm	6.15	Honed S/E Black Series	600 x 300 x 50mm*	5.47	Honed S/E Black Series	300 x 300 x 60mm	10.98	Honed S/E Black Series
Suitable for any residential, commapplications. Internal or external i pool surrounds	nercial, or i ncluding a	ndustrial Il swimming	*Not recommended for vehicular applicatio	ns		400 x 400 x 60mm*	6.15	Honed S/E Black Series
						600 x 400 x 60mm	4.12	Honed S/E Black Series



## Installation

## External Pedestrian Application

#### Excavation

Excavation to minimum of 120mm. (Allow for base rubble, bedding sand and paver)

#### Base

50mm deep using 10mm rubble or similar.

#### Bed

Bedding sand 25mm deep using washed concrete sand or similar.

#### Product

Terrazzo Tiles may be used.

#### Laying

When laying Terrazzo tiles it is important that they be adequately gapped. 4mm is recommended. This gap is to be maintained to all 4 sides of tile. When cutting Terrazzo tiles ensure that any resulting residue or slurry is washed off immediately with clean water.

#### Edge Restraint

The paved area must be adequately restrained on all sides using a 100 x 100mm concrete edge restraint which includes 50mm galvanised mesh. (See figure 1.)

#### **Grouting & Compacting**

Use a vibrating machine to compact paved area making at least two passes over paving. Vibrating machine should have a plate size of no less than 500 x 600mm. Placing a mat between machine and pavers will protect the face of pavers. Paved area should be grouted using a suitable dry jointing sand. It is important that this material is applied to manufacturers instructions. Pavers must be thoroughly swept clean of any excess grouting material.

#### Sealing

Terrazzo tiles can be rendered stain resistant by the use of chemical sealers.

#### Important Notes

- To acheive the best results from your Terrazzo tiles, it is recommended that your project be designed by a qualified engineer with reference to the CMAA's :Concrete Flag Pavements – Design & Construction Guide".
- When Used in external application, Terrazzo tiles should be installed by a pavior experienced in the use of large–format pavements.
- Always ensure that finished surface is kept below the damp course level of any building. The amount by which pavement must be kept below will vary from region to region. The local authority should be consulted before commencement of works.
- Use of polymer based grouting sand is not recommended. Incorrect application of this product may cause discolouration. Best accepts no liability or claims resulting from the use of this type of grouting sand.
- Pavement must slope away from building.
- The finished job will only be as good as the preparation and base compaction.





## Installation

## Internal Application with Post Laying Polishing

#### Floor Slab

Concrete slab to receive tiles must be level and true but not smooth. Slab must be clean and is wetted down prior to laying of underbed.

#### Bed

4:1 sand, cement mixed with water to semidry consistency.

#### Tile

Nominal 36mm (300x300mm or thickness 400 x 400mm).

#### **Bed Depth**

Minimum 25mm to a maximum 70mm. (40mm nominal is adequate for most uses).

#### **Tile Laying**

The tiles are placed into position on the bed and beaten into position using a rubber mallet.

#### Joints

4mm

#### Grout

Performed at least 24 hours after tiles laid. Grout is a mixture of cement and water, colour oxide may be added to match tiles (grout admixtures may also be used). For grouting, grout is poured over floor flooding tiled area then broomed and squeezed into joints to ensure complete penetration of joints. Grouted tiling should be left for a period of between 3–5 days to cure.

#### Finishing

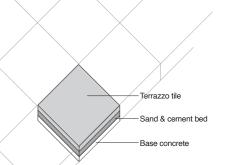
Carried out using a multi-headb grinding machine, commencing with first grind using either 16 or 36 grit stones to remove any slight lips from tiles, then the polishing process performed using 60 grit and 120 grit. Tiles then re-grouted to fill any voids or pin holes. Final polish with 220 grit stones usually achieves the required polished surface finish. Floor is then washed thoroughly to remove any residue and protective sealer is applied.

#### Aftercare

Regular cleaning using clean water and a neutral (pH7) detergent.

#### **Important Notes**

- It is advisable that accurate measurements are taken when ordering and allowance made for wastage to ensure sufficient quantities for the area to be covered.
- Poor flooring design can have serious consequences on Terrazzo performance. Typical examples include not having sufficiently small bays, not letting dividing strips penetrate at least halfway into levelling and bedding layers and not having dividing strips over structural joints and movement joints in the base concrete.





## Installation

## Internal Application without Post Laying Polishing

#### Floor Slab

Concrete slab to receive tiles must be level and true but not smooth. Slab must be clean and may be primed using a suitable masonry primer.

#### Tile

Terrazzo tiles may be adhered adhesive to slab using a suitable adhesive or cement glue. Terrazzo tiles are of a consistent thickness however it is recommended that an adhesive of no less than 5mm in thickness be used.

#### **Tile Laying**

The tiles are placed into position on the adhesive and beaten into position using a rubber mallet.

#### Joints

It is recommended that joints be of at least 4mm.

#### Grout

It is recommended that freshly laid tiles be allowed at least 24 hours to cure prior to grouting.

Terrazzo tiles are porous and care needs to be taken when grouting. Completely fill the joints using an appropriate grout for the application. Dark or contrasting grouts are not recommended. Completely cover the entire surface of the tile with grout to avoid "framing" and ensure that all grout residue is thoroughly removed. Do not allow grout to dry on surface of tile as it will become difficult to remove. A suitable pre-sealer can be applied to tiles prior to grouting to assist with grout removal.

Grouted tiles should be left for at least 24 hours to cure.

Tiles are then cleaned using a neutral detergent. Do not use harsh chemicals, acid or alkaline.

The porous nature of terrazzo tiles leads to a recommendation that a reputable sealing contractor carry out all cleaning and sealing applications.

Whether a sealant is applied and the sealing method engaged depends on the expected conditions the terrazzo tiles will be exposed to as well as the maintenance regime that will be implemented.

#### Aftercare

Regular cleaning using clean water and a neutral (pH7) detergent.

#### **Important Notes**

- The standard factory finish of Terrazzo tiles is such that post laying polishing is required only if a high–polish finish is desired.
- It is advisable that accurate measurements are taken when ordering and allowance made for wastage to ensure sufficient quantities for the area to be covered.
- Poor flooring design can have serious consequences on Terrazzo performance. Typical examples include not having sufficiently small bays and not having dividing strips over structural joints and movement joints in the base concrete.

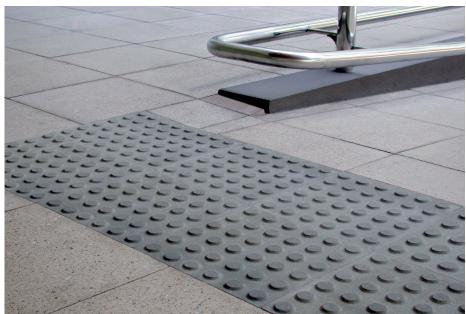


## Performance and Testing

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Breaking Load of Segmental Pavers AS/NZS 4456.5	300x300x40mm: Pedestrian 400x400x40mm: Pedestrian 300x300x50mm: Commercial 600x300x50mm: Pedestrian 300x300x60mm: Commercial 400x400x60mm: Commercial	Suitable only for foot traffic Suitable for vehicles with gross weight over 3 tonne Suitable only for foot traffic Suitable for vehicles with gross weight over 3 tonne.
Slip Resistance (co-efficient of friction) AS/NZS 4586: 13	Honed: P4 Black Series: P5	All internal and external walkways, carparks, stair treads, and swimming pool surrounds. All internal and external walkways, carparks, stair treads, external ramps, swimming pool ramps and surrounds.
Salt Resistance AS/NZS 4456.10B	Exposure	Suitable in salt water enviornments (e.g. pool surrounds)

N.B.: Performance results are typical Best Bricks & Pavers values. Best Bricks & Pavers will on request, generate specific product test results.

## Tactile Indicators



Best Bricks & Pavers believe it integral that their product range be designed to reflect the needs of all members of our community. Manufactured in accordance with AS/NZS 1428.4.1:2009 the Best Bricks & Pavers Tactile range of surface indicator pavers aid those that are vision impaired. Their application assists in enabling these people to distinguish the exact location of their surroundings and increase confidence of their mobility.



Cantional Slate A state of the state of the

Directional

## Tactile Indicators

## **Specifications**



#### **Tactiles Range**

Surface indicator pavers to aide the visually impaired.

	Dimensions	Units per m <sup>2</sup>	Туре	Detail (mm)	Cross section (mm)
C C C C C C C C C C C C C C C C C C C	300 x 300 x 40mm	10.98	Cautional		
	300 x 300 x 40mm	10.98	Directional	Guidance direction	¢

In accordance with AS/NZS 1428.4.1:2009.



## Retaining Wall Systems



Best manufacture a range of retaining wall systems that are ingenious, versatile and stylish.

Our systems offer mortar free installation for quick and orderly construction making them the ideal choice for either the contractor or the DIY project.

All Best retaining wall systems offer a durable textured finish with elegant, defining bevel edges on all four sides of the product face.

When teamed with Best's extensive and complimentary range of locally made paving options, maximum effect is achieved with minimum effort and the possibilities for unique garden design become endless.



#### Muro

A simple and user friendly system providing flexibility to create corners and softly curved walls. The only retaining wall system available in the stylish Honed or Weathered finishes.

#### Stone Wall

A mid-sized, yet easy to install option that produces a vertical finish. Suitable for straight walls, and can be used as either a decorative or structural unit.

#### Stone Hedge

A light weight, easy to use option, ideal for domestic projects. Suitable for straight or curved walls perfectly suited for the construction of terracing, planters, tree rings and garden edges.

#### Stone Max

A sturdy structural unit that goes together easily and stays together permanently. Equally suited to either domestic or large scale civil projects.



Printed samples in this brochure give only a general indication of the product colours. We recommend you request an actual sample.



## Retaining Wall Systems

## Stone Hedge

**Specifications** 

	Dimensions (mm)	Units per pallet	Unit weight (kg)	Units per m <sup>2</sup>	Units per lineal metre
140 120 140 1210	Stone Hedge	216	7.0	38.74	4.8
120	Stone Hedge Cap	192	7.4	38.74	4.8

Colour Range: Charcoal, Sahara & Beach Sand



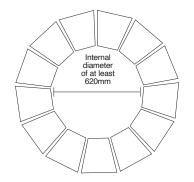
## Retaining Wall Systems

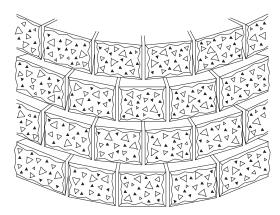
## Stone Hedge

## Installation

#### How to assemble a Stone Hedge wall.

- 1. Clear and level area along which Stone Hedge is to be laid. Depth to which you should excavate depends on number of courses you intend constructing your Stone Hedge wall. Should your wall be from 1 to 3 courses then excavate to a depth of 85mm. This allows for a 20-25mm leveling bed of washed concrete sand and for half of first course to be buried below surface level. Should your wall be 4 or more courses high then excavate to a depth of 145mm. This allows for a 20-25mm leveling bed of washed concrete sand and for the first course to be completely buried below surface level. Ensure that sand base is compacted and level.
- 2. Commence wall by laying Stone Hedge units. It is important that level of base course is checked. In some instances it may be advisable to remove locking mechanism of base course units.
- 3. Backfill each completed course before proceeding to next course. Weed mat or shade cloth may be used at back of wall to retard staining.
- 4. Construct wall by laying Stone Hedge units in a stretcher bond pattern.
- 5. Where applicable wall may be completed by using a course of Stone Hedge Cap units.
- 6. Final course may be glued in place by using a masonry adhesive.
- 7. Best Stone Hedge walls should not exceed a height of 600mm.







# Stone Wall

**Specifications** 

 Dimensions (mm)
 Units per pallet
 Unit weight (kg)
 Units per m<sup>2</sup>
 Units per lineal metre

 Stone Wall
 90
 14
 25.0
 3.5

 140
 220
 280
 140
 140
 17.8 (Solid)

Each pallet includes 15 solid blocks for use as finishing ends, or to be mitre cut for 90 degree corners.

Colour Range: Charcoal, Sahara & Beach Sand

## Stone Wall

### Installation

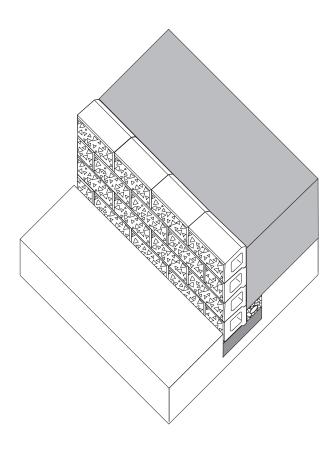


### How to assemble a Stone Wall retaining wall\*

- 1. Clear and level area along which Stone Wall is to be laid. Excavate to a depth of 130mm. This allows for a 25-30mm leveling bed of washed concrete sand and for half of first course to be buried below surface level. Ensure that sand base is compacted and level.
- 2. Commence wall by laying Stone Wall units side by side, using a string line along the back of the unit. It is important that level of base course is checked. In some instances it may be advisable to remove locking mechanism of base course units.
- 3. Lay an agricultural drainpipe behind the first course of Stone Wall blocks.
- 4. Use free-draining gravel (at least 10mm in size) to cover the pipe.
- 5. Backfill each completed course before proceeding to next course. Weed mat or shade cloth may be used at back of wall to retard staining.

- 6. Construct wall by laying Stone Wall units in a stretcher bond pattern.
- 7. Final course may be glued in place by using a masonry adhesive.
- 8. Best Stone Wall retaining walls should not exceed a height of 600mm.

\* Best recommend that any wall should be designed per industry specifications by a certified engineer.





# Stone Max

Installation

	Dimensions (mm)	Units per pallet	Unit weight (kg)	Units per m <sup>2</sup>	Units per lineal metre
280	Stone Max	48	27	13.19	2.3
200	Stone Max Corner Block	60	22	-	2.3
50 220	Bullnose Cap	240	7	-	4.5

Bullnose Cap is bevelled on one side but turned upside it is straight edged. Either finish may be used.

Colour Range: Charcoal, Sahara & Beach Sand



# Stone Max

### How to assemble a Stone Max wall.

Before you start

- We recommend you get a qualified engineer to draw up your retaining wall plans. That way, you will be assured they comply with all the relevant regulations
- If you intend to work to your own plans, contact your local council to find out what these regulations are for height and construction

#### Assembly

- 1. Mark a line exactly where you want the base of your retaining wall to be.
- 2. Excavate a trench along this line about 200 mm deep and 350 mm wide. (see figure 1)
- 3. Lay a sub-base of compacted quarry rubble 100 mm thick in the bottom of the trench.
- 4. Over the rubble, lay 10 mm of washed concrete sand and make sure this is smooth and level. If this base is prepared properly, your first course of Stone Max blocks will be buried to approximately half their depth below ground level. (see figure 2)
- 5. Set up a string line along the trench as a guide to keep your base course of Stone Max blocks in line.

- 6. Start at one end placing your Stone Max blocks side by side on the washed concrete sand. The lip at the rear of each block should face down. Use a spirit level to ensure the blocks are true.
- 7. Lay an agricultural drainpipe behind this first course of Stone Max blocks.
- 8. Use free-draining gravel (at least 10 mm in size) to cover the pipe, fill the cavity of the blocks and to pack between them. (see figure 3)
- 9. Now backfill behind the gravel using either sand or the existing site's soil, so long as it does not have a high clay-content. Always backfill each completed course before proceeding to the next one. Weed mat or shade cloth is advisable at back of wall to retard staining. (see figure 4)
- 10. Brush the top of the laid blocks to clean away any soil and gravel and ensure a good, level contact with the next course.
- With each course of Stone Max blocks, you need to make sure the vertical joints never align with the previous course. (This would weaken the integrity of the construction.) So lay your next course offset half a block from the end to form a stretcher bond pattern. (see figure 4)
- 12. Fill the block cavities, between them and behind them with gravel up to the second course height. Then backfill behind the gravel using sand or existing site soil.

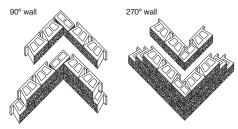
13. Continue to construct your wall in this way (as per steps 10 to 12) until you reach your desired wall height.

Installation

14. Finally, complete your wall with bullnose caps. Glue the caps in place with masonry adhesive to make sure they do not move. (see figure 5)

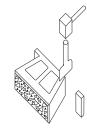
### Constructing Corners

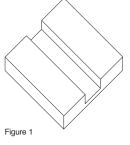
You can construct corners that are either indented 90° or extended 270° by using Stone Max Corner Blocks.

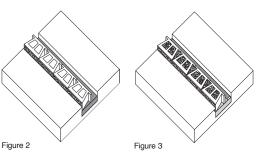


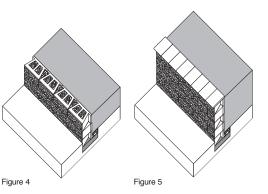
### **Curved Walls**

To achieve curves that bow outwards, you will need to remove the 'wings' of the Stone Max blocks.











# Muro

#### Dimensions (mm) Units per pallet Unit weight (kg) Units per m<sup>2</sup> Units per lineal metre 90 15.2 12.5 2.5 **Muro Block** 90 12.5 2.5 Muro 16.8 **Corner Block** Muro Cap 216 7.0 2.5

Colour Range: Charcoal, Beach Sand, Sarhara

### Weathered

Ask about our exclusive weathered/shot blast finish which produces a textured aged appearance.

### Honing

Our exclusive process whereby product face is polished exposing aggregates and producing a stylish finish.

### Before you start assembling a Muro Retaining Wall.

**Specifications** 

- To ensure that the overall retaining wall structure complies with current, relevant regulations and Australian Standards, we recommend that a qualified engineer be engaged to design your retaining blockwall system. It is also recommended that you check with your local council for any mandatory requirements regarding height restrictions, along with any engineering, construction and certification-planning requirements.
- Best Muro retaining block-wall system must be filled and packed with freedraining gravel (at least 10mm in size) and should not exceed a height of 850 mm without consulting a qualified engineer.



# Muro

### Installation

### How to assemble a Muro retaining wall system.

#### Assembly

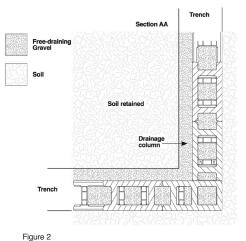
5Di

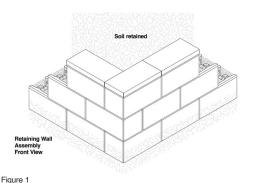
- 1. Mark a line using a string line and marking paint to locate exactly the base of your retaining wall.
- 2. Excavate a trench along this line approximately 200 mm deep and 400 mm wide to allow to fit a plate compactor into the trench. Ensure the trench is level. Always call Dial Before You Dig before excavating.
- 3. Lay a sub-base of compacted quarry rubble 100 mm thick in the bottom of the trench by using a plate compactor.
- 4. Over the 100mm thick layer of compacted quarry rubble, lay a 10mm layer of washed concrete sand. Make sure this layer is smooth and level. If the base is prepared correctly, your first course of Muro blocks will be buried to approximately half their height below ground level (see figures).
- 5. Set up a string line along the trench as a guide to keep your base course of Muro blocks in line against one side of the trench wall (see figures).
- 6. Start at one end placing your Muro blocks side by side on the washed concrete sand. The interlocking lugs must face up. Use a spirit level to ensure the blocks are true.

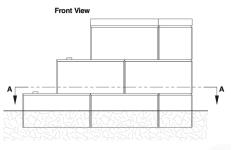
- 7. Lay an agricultural drainpipe behind the first course of Muro blocks on the side the soil is to be retained. Drainage points and flow direction is the responsibility of the customer/design professional. Ensure water is diverted away from the back of your wall, removing water pressure building up behind it. Water must not be directed into your neighbours property.
- 8. Using free-draining gravel (at least 10 mm in size) to cover the agricultural drainpipe, fill all the cores of the blocks and firmly pack between them (also adjoining block core ends created when placed side by side). Each two placed course high all block cores must be firmly packed and completely filled. You must also backfill with the same free-draining gravel (at least 10 mm in size) behind your wall to form a drainage column.
- Now backfill behind the wall either using sand or the existing site's soil, ensure it does not contain high clay-content. Always backfill each completed course before proceeding to the next one.
- 10. Brush the top of the laid blocks to clean away any existing soil, gravel etc. to ensure a good, level contact with the next course.
- 11. With each course of Muro blocks, you need to make sure the vertical joints never align with the previous course, this would weaken the integrity of the construction. Lay blocks using the interlocking lugs on

top of the blocks/ courses below to stack the blocks. Your wall must use a stretcher bond pattern so the blocks are offset and do not sit directly on top of the one below (see figures).

- 12. Each course high, ensure to use freedraining gravel (at least 10 mm size) to firmly pack and completely fill in the block cores and backfill behind the wall with the free-draining gravel. Then backfill with sand or existing soil. Repeat for each course high.
- 13. Continue to construct your wall (as per prior steps) until you reach your desired wall height.
- 14. Finally, complete your wall capping with a range of Best options (i.e. Muro caps 220 mm x 220 mm x 40 mm thick). The Muro block top facing interlocking lugs can be gently chiseled off leaving a flat top block surface for the gluing of the capping with a suitable masonry adhesive.







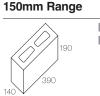


### Blocks and Bricks

# **Specifications**

Page 1

100mm Range		Number of units per pallet
190 390	Partition No. 10-01	180
190	Solid Partition No. 10-31	144
90 90 90	Half Height Partition No. 10-71	360



 Double Corner
 120

 No. 15-01
 1

Our exclusive process whereby product face is polished exposing aggregates and producing a stylish finish. Thickness may be reduced due to honing. Blocks and bricks honed to order.

### Weathered

Ask about our exclusive weathered/shot blast finish which produces a textured aged appearance.

### **Coloured Masonry**

Ask about our coloured range of masonry blocks and bricks. We are able to produce our masonry units in the same range of colours as the Traditional Paver range. Made to order, minimum quantities apply.

200mm Range		Number of units per pallet
190	Double Corner No. 20-01	90
190	Double Corner No. 20-42 (notch)	90
190	Double U Block No. 20-91	90
190	Knock-out Bond Beam No. 20-20	75
40	Capping Tile No. 50-31	216



### Blocks and Bricks

# Specifications

Page 2

Number of units per pallet

450

200mm Lintels		Number of units per pallet
190	Deep Lintel Sash No. 20-14	110
190 190	Lintel Sash No. 20-15	240

Bricks	
75 110 230	

Traditional Brick With Frog 450 No Code

**Bestex with Frog** 

No. 120-75

Footing blocks		Number of units per pallet
90 190	Pier Block No. 10-33	216
190 190	Pier Block No. 20-33	108
290 290	Base Block No. 30-350	80
40	Spacer No. 50-33	576



### **Description** and Mechanism



#### **Definition & Description**

Efflorescence is the term that describes the formation of salt deposits, usually white, on the surface of concrete products causing a change in appearance.

Apart from the unsightly discolouration, efflorescence is generally harmless. It is described as "a skin trouble and not a deep– seated disease".

There are three forms of efflorescence that can develop on concrete pavers, primary, secondary and crypto-florescence. Primary efflorescence occurs during the curing or hardening phase of concrete pavers. Secondary efflorescence is the efflorescence resulting from the weathering of the cured concrete pavers. Crypto-florescence is the deposition of salt within the pores of concrete pavers below the exposed surface. The force of crystallisation growth may cause disintegration.

With time, efflorescence becomes less extensive. Efflorescence is most obvious in winter but may be observed throughout the year after a heavy rain and drop in temperature.

#### Mechanism – Physical Process

The formation of efflorescence depends on a number of natural physical processes involving both salt and water transfer in and out of concrete. Specific conditions may dictate the extent to which any of the many processes involved may take place and hence may dictate the extent of efflorescence occurrence. Various physical processes are involved. In practice, these are inter-related creating a complex mechanism.

#### Mechanism – Chemical Processes

Alkalis in the concrete react with carbon dioxide to produce two forms of efflorescence, sodium and potassium carbonate and calcium carbonate. Alkalis and calcium hydroxide in solution in the pores are able to migrate to the surface. This migration depends on permeability, voids and moisture content. At the waterair interface, atmospheric carbon dioxide reacts with these hydroxides to form calcium, sodium and potassium carbonate. Penetration of water can cause efflorescence in the same way.

Sodium and potassium carbonates appear on the concrete products as a soft white fluff that can be easily removed (although it may appear again). This type of efflorescence usually appears if the product is exposed to wetting and slow drying.

Calcium carbonate appears usually as white "bloom" diffused over certain areas. In severe cases it appears as a hard white crust. It is most troublesome and difficult to remove. Calcium carbonate efflorescence is likely to form on concrete products in which hydration is interrupted by premature drying and which has been subsequently wetted.



### Efflorescence

### Prevention, Removal and Summary

#### **Contributing Factors – General**

Efflorescence is caused by multiple factors acting in combination and usually triggered by climatic and environmental conditions. Views vary as to which factors are the major culprits and it is usually impossible to determine the exact causes of a specific case with absolute certainty.

#### Prevention

There is as yet no single concrete additive that will reliably prevent efflorescence. It is generally accepted that there are various processes that when employed can reduce the likelihood of efflorescence. These include but are not limited to –

- a reduction in the water/cement ratio of product mix
- produce a highly compacted product which is very dense and thus difficult for moisture to penetrate
- ensure product cures slowly by using curing chambers that are high in humidity
- after production, if only for a short while, product should be stored protected from weather

Best Bricks & Pavers employs these and other preventative measures and is forever conscious of the need to ensure that efflorescence not become a concern with its products.

#### **On Site Causes**

Efflorescence may also have its origin in the material upon which concrete pavers are laid. If the material used to construct the base and the bedding sand used for any paving project has a high sodium content then these naturally occurring salts can migrate to the surface of the pavers.

Special consideration should be given to selection of base and bedding material to reduce the possibility of efflorescence.

#### **Removal of Efflorescence**

As a rule, efflorescence will weather away naturally within one or two years. If immediate removal is required, this can be achieved by washing with a solution of diluted hydrochloric acid. Generally a 3% solution of hydrochloric acid is used. Before acid is applied, paved area should be dampened with water to kill the initial suction. This prevents acid from being sucked into pavers before it has a chance to react with the surface deposit. Acid washing should be followed by washing pavers with water, in order to prevent continued action of the acid on the pavers.

When acid washing, always start with a trial on an inconspicuous area.

#### Summary

Efflorescence is a complex but natural phenomenon which whilst unsightly, is generally harmless and of no risk to the integrity of the concrete product affected.

Efflorescence must be taken for what it is a natural occurrence in a product made from natural raw materials.



### Maintenance and Cleaning



### General



When designed and constructed correctly, concrete segmental paving will generally require less structural maintenance than other forms of surface.

The information provided here is intended to be used as a guide only and Best Bricks & Pavers shall accept no responsibility for any losses or damages incurred as a result of the implementation of any remedial action as detailed herein.

#### Importance of Design

In landscape design, aesthetically the architectural style, colours and materials of the structure should always be complemented and be of paramount importance. Ideally house designers and landscape designers would work together to produce cohesive living spaces that take into account both indoor and outdoor environments. In reality landscape design is often neglected and in a practical sense aesthetic requirements may not always provide an optimal solution.

In vehicular applications special consideration needs to be given to the paving bond which is employed as some aesthetically pleasing options are not recommended. In these cases practicality needs to take precedence over design and aesthetic requirements.

Type of paving bond employed becomes less critical in pedestrian applications where virtually any paving bond may be used successfully.

#### Trouble–Free Maintenance

Often the surest way to guarantee ease of maintenance is by selecting the right product for the right application and by ensuring that the project is designed and constructed to industry best standards. For example it is often overlooked that dark or blended colour pavers are to be preferred for use in driveways or areas where food may be consumed as they are effective in disguising any unsightly staining.

Even when consideration has been given to product selection it is generally accepted that a maximum of 2% of paved surface may need replacement every service year. This compares most favorably with alternative surface forms.

### Routine preventative maintenance

#### Cleaning

Concrete pavers may be cleaned as can other surface forms. Many materials (eg leaves) will only stain pavers if they are allowed to remain in contact with pavers for prolonged periods. Frequent sweeping and flushing of pavers will help maintain its excellent aesthetic appeal. When sweeping or flushing, precautions must be taken in the early life of paved surface to ensure that jointing sand is not removed. Unless pavers have been sealed, the use of vacuum sweepers and water jets should be avoided until joints have become naturally clogged which normally occurs two to three months into paved surface life.

#### Weed control

Most effective when controlled by periodic applications of weedicide. It is recommended that weedicide be applied in dry weather when pavers are also dry.

#### **Regular inspection**

Should be made to establish integrity of paved surface. By identifying and attending to small localised problems then often the need for major maintenance of large areas can be avoided.

#### Joint maintenance

Maintaining the jointing sand will protect the structural integrity of paved surface. Segmental pavements develop their structural capacity by the wedging action caused by traffic. It is critical that joints be refilled immediately where any cleaning action has resulted in jointing sand removal and usually this will only be necessary during first few months of paved surface life.



### Maintenance and Cleaning

**9A**i



### **Stain Removal**

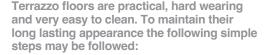
Type of Stain	Suggested Removal Method	
Moss, fungi & mould	Dry brushing with or without application of clean sharp sand. OR High pressure water jetting with or without detergent. OR Apply fungicides.	W sta Al
Leaf mould & wood rot	Use ordinary bleach or calcium chloride followed by sodium hypochlorite dissolved in water (1kg in 5 litres) then scrub with stiff brush.	pro
Tobacco	Use ordinary bleach then scrub with stiff brush.	
Tomato sauce, mustard & oil	Apply undiluted liquid detergent for 15–30 minutes, then scrub and wash with hot water.	
Chewing gum	Scrape off excess material and apply poultice of methylated spirit.	
Tyre marks	Scrub using stiff brush with aid of water, detergent and scoring powder or sharp sand.	
Oil or vehicle grease	Apply dry absorbents such as Fullers earth, talc, diatomaceous earth or kitty litter for at least 24 hours to remove excess oil, then sweep up.	
Dry paint	Scrape off excess paint, apply paint remover for 15 to 30 minutes, loosen with gentle scrubbing and absorb loosened material with paper or cloth. Do not rub.	
Fresh mortar	Cover with clean damp sand. Sweep off with stiff broom. Repeat as necessary. Apply clean dry sand and allow to dry.	
Hardened mortar	Remove lumps of hardened material by chiseling, scraping or grinding. Wet surface & apply dilute hydrochloric acid (1 part acid to 20 parts of water) & scrub vigorously for 2–3 minutes. Thoroughly hose down immediately after scrubbing.	
Clay	Scrape off lumps then scrub with hot water and strong detergent.	
General grime	Scrub with poultice of talc and bleach diluted in water (1:5) & wash with water.	
Efflorescence	Please refer to 9ii "Efflorescence – prevention and removal" contained in this kit.	

When engaging in stain removal always start with a trial in an inconspicuous area. Always observe safety instructions and wear protective clothing at all times.

47.

### Maintenance and Cleaning

Terrazzo



#### Day to Day Care

- Remove stains as soon as possible before they dry out. Stubborn areas of dirt caused by sticky sweets or chewing gum should first be removed with a knife or similar utensil.
- Sweep all loose surface dirt and debris with a large, soft broom.
- Scrub the floor using clean water and neutral cleaning agent (ie. with a pH of less than 10.0) mixed strictly in accordance with the manufacturers instructions. If possible two buckets should be used – one for clean water and one for soiled water. If this is not possible, cleaning water should be changed regularly to ensure complete removal of dirt. Best results are obtained using automatic scrubbing pads, which must be cleaned and checked regularly to prevent damage to the surface floor.
- It is also a good idea to polish the floor to enhance the shine, using a high speed polishing machine.

NB: Terrazzo floors will outlast most other types of hard flooring providing the correct cleaning products are used. The use of incorrect cleaning products or lack of correct maintenance may damage the floor, causing pitting or damage to the cement grout in the joints. Acid or alkaline–based cleaning products may damage the floor surface or destroy the cement base.

#### Sealing

When dealing with terrazzo, the use of a pure surface coating, (sealing or waxing) is unnecessary and ordinarily not recommended. This is because the seal can wear differentially, particularly in areas of heavy foot traffic, causing an unsightly finish. Removal of these surface sealers can potentially damage the finish of the floor. Terrazzo doesn't need protection from wear, it needs protection to further minimize absorption. To achieve this, at time of installation a penetrating sealer is normally applied after polishing to seal off the pores and improve resistance to staining.

#### Refurbishment

Unlike other surfaces, after many years of use, Terrazzo's attractive appearance can be restored, if required, by re–grinding, re–grouting and re–polishing, returning it to pristine condition.