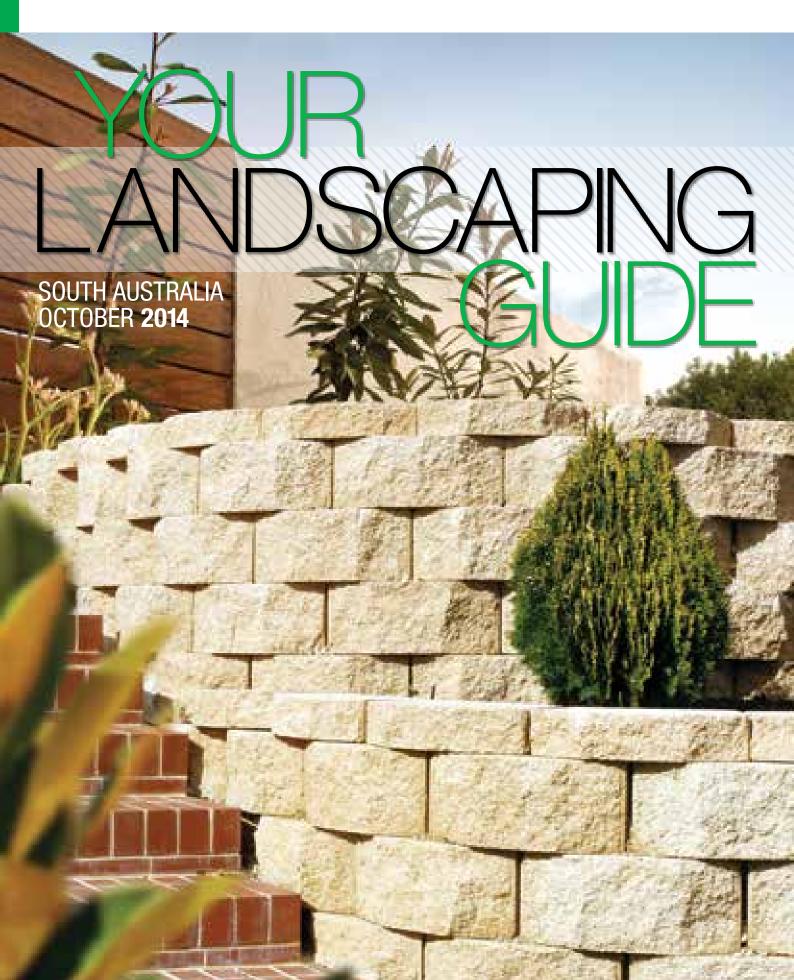
BORAL PAVERS AND RETAINING WALLS Build something great<sup>™</sup>





## welcome to pavers & retaining walls

#### contents

How to choose pavers	04
Promenade™	06
Handipave,™ Classicpave™ and Wisebuy™	80
Quick guide to laying pavers	10
Caring for pavers	11
How to choose retaining walls	12
Heathstone <sup>®</sup> , Heathstone <sup>®</sup> Grande, and Heathstone <sup>®</sup> Regal	13
Keystone®	14
Pyrmont®	15
Gardenwall®	16
Litewall®	17
How to build a wall	18



Discover a range of small and large format pavers to create stylish patios, courtyards, pathways and driveways. These pavers offer character and charm with their rustic appearance. If you are looking for paver options with a more refined finish, check out Boral's premium large format paver range in the National Landscaping Guide.



Boral's retaining wall selection can transform your outdoors. With options for both straight and curved walls, the textured surfaces, colours and sizes are varied providing homeowners with an array of choice.



# DOSE DAVERS

### step

Look through this brochure and the Boral website to gather ideas on the look you want to achieve. Try Boral Sampler at www.boralsampler.com.au, a great new tool for selecting Boral products and colours.



### step2

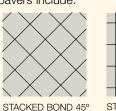
Using the table on the right hand page, choose a style and size of paver to suit your needs. Boral offers large format pavers.

### step3

Select a colour that complements your area, home and surroundings. Remember to try the Boral Sampler to give you an idea of how colours look together. The way you lay the pavers also affects the overall aesthetic.

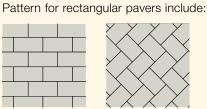
Pattern for square pavers include:











HERRINGBONE 45°

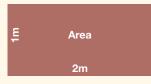


HERRINGBONE 90°

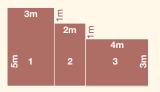
### step 4

Measure your area to be paved to determine quantity of pavers required.

This area is simply calculated by length (m) x width (m) = area (m<sup>2</sup>) for basic square or rectangular spaces (m = metres).



For odd shapes, break your area into sections.



1) 5m x 3m = 15m<sup>2</sup> 2) 4m x 2m = 8m<sup>2</sup> 3)  $3m \times 4m = 12m^2$  $Total = 35m^2$ 

For triangular areas:



 $1/2 \times base (m) \times height (m) = area (m<sup>2</sup>)$ e.g. 1/2 x 4m x 3m = 6m<sup>2</sup> (Allow up to 5% extra pavers for wastage such as cuts and breakages.)

You can also measure your area using our on-line calculator. Go to www.boral.com.au/pavingcalc

step5

Choose to D.I.Y., or hire a professional contractor. Refer to Page 18 for a basic guide to laying pavers. A more comprehensive "Boral Guide to Laying Pavers" as well as videos are available at:

www.boral.com.au/pavers

Stockists can also be found at this website.



This is general information and should be viewed as a guide only. Boral urges you to ensure that you obtain appropriate professional advice tailored to your circumstances before commencing paving projects.

## general tips

- Always look at pavers outside in the natural light.
- Select pavers that match internal floor coverings to ensure the transition from indoor out is subtle and blends with your decorating style.
- When paving a small space keep the design simple and use a neutral coloured, large format paver to create a sense of space.
- Combining large and small format pavers can add textural qualities for a more distinctive space.
- Having trouble growing grass in heavy traffic areas? Consider a paved garden path. Paved paths also help direct foot traffic and can reduce the amount of dirt carried into your home.
- To make a path appear more substantial, use a stretcher bond laying pattern across the width of the path.



- If paving a slope, it is important to start at the bottom and pave up the slope.
- Paved areas should fall away from buildings and towards areas where run-off can be absorbed by plants.
- Keep labour cost down by clearing the area first by removing grass and existing pavers, and potting any plants you want to keep.

Page number	06	08	08	08
Product name Typical applications	Promenade™	Handipave™	Classicpave™	Wisebuy™
Pedestrian (paths, patios, courtyards)	<b>İ</b>	Ĥ	Î	<b>İ</b>
Domestic driveways (under 3 tonne mass weight)				
Pools				
Paver shape				
Paver size (L X W in mm)	large 300 x 300	small 240 x 240	small 240 x 120	small 190 x 190

a. Pavers with 50mm or 60mm thickness.

b. Promenade 300mm x 300mm x 50mm only.



## oromenade

The Promenade<sup>™</sup> large square format paver features simple, clean lines to enhance everyday living.





STANDARD/50 11.11 units per m<sup>2</sup> (Also available as salt resistant)

300

40

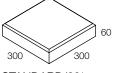
50

300

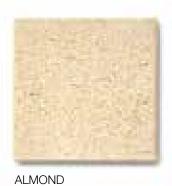
300

300

STANDARD/40 11.11 units per m<sup>2</sup>



STANDARD/60\* 11.11 units per m<sup>2</sup>









CHARCOAL

PAPERBARK



TUSCAN

^ 50mm and 60mm thickness only.

# 300mm X 300mm X 50mm thickness only. \* Made to order.

Shade variation can occur from batch to batch.

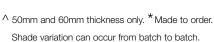
## handipave, classicpave

These small format pavers are a practical, affordable and verstatile choice.



classicpave<sup>™</sup> in charcoal

CHARCOAL









40

50

60

30 190

240

240

240

240

240

240

190

WISEBUY™ 27.7 units per m<sup>2</sup> - Paperbark - Heritage Red - Charcoal

HANDIPAVE<sup>™</sup> 40

17.36 units per m<sup>2</sup>

HANDIPAVE<sup>™</sup> 50 17.36 units per m<sup>2</sup>

HANDIPAVE<sup>™</sup> 60 17.36 units per m<sup>2</sup>







PAPERBARK

TUSCAN

)9



CLASSICPAVE<sup>™</sup> 60\* 34.72 units per m<sup>2</sup>



CLASSICPAVE<sup>™</sup> 50 34.72 units per m<sup>2</sup>



120 CLASSICPAVE<sup>™</sup> 40 34.72 units per m<sup>2</sup>



## quick guide to laying pavers

#### O1 prepare the site

Excavate the area to be paved to allow for the base layer (generally 100 -150mm thick of road base), bedding sand (generally 30mm thick coarse washed river sand) and the paver thickness. Establish falls and levels using a spirit level on the screen board. Spread the road base to an even thickness and compact using a mechanical plate compactor.



### O2 add the bedding sand

Spread and screed the bedding sand. The easiest way to screed sand is to use two guides (screed rails) and a screeding board (e.g. a flat piece of timber). Establish bedding tracks with the screeding board.



#### $\bigcirc \bigcirc$ level the surface

Bed the screed rails into the bedding sand. Drag the screeding board in a sawing motion from side to side across the rails to create a firm, flat laying surface.



#### 04 set the lines

Set string lines at right angles to establish paving lines. These will help keep the joints straight for that truly professional look.



#### 05 begin the laying

Start laying along the longest straight edge of the designated area and lay whole pavers first. Leave 3-5mm between pavers to allow for jointing sand (unless the pavers have nibs).



### 06 cut pavers

Cut and position part-pavers if the job requires them. Edge restraints prevent the pavers from moving – refer to the "Boral Guide to Laying Pavers" for more details.





#### 07 fill the joints

Sweep jointing sand over the finished dry paving, ensuring that all joints are full. As an alternative, use Geo-fix™, a ready-to-use joint mortar.



#### $\bigcirc \bigcirc$ finishing touches

Compact the surface, add more jointing sand, sweep off excess and repeat.

#### sand filled joints:

**a.** Pavers 50mm thick or greater Surface to be plate compacted. Always remember to use a rubber mat or carpet beneath the plate compactor to prevent damage to the pavers.

**b.** Pavers 40mm thick or less Surface to be hand compacted with a rubber mallet.

Geo-fix<sup>®</sup> mortar Surface to be hand compacted with a rubber

mallet prior to Geo-fix® application.



### caring for pavers

#### prevention is better than cure

- Sweep regularly with a stiff bristled broom to keep pavers free from debris.
- To minimise the impact of staining we suggest pavers are sealed after installation with a quality penetrating sealer. (Please check with a reputable sealing company for advice.)
- Re-seal pavers as required taking special care in heavy wear areas and salt-water locations.
- During construction, cover the paved areas to protect against damage.
- Protect your pavers against possible staining from mortar, oxides, cement and rust.
- The use of acid and chemically-based cleaning agents should be undertaken by a professional. They can be hazardous if used incorrectly.
- In all cases, attempt to clean a stain before it hardens or dries up.

#### If a stain occurs, follow some simple steps:

- 1 Assess type of stain carefully before taking action (incorrect assessment of stain can cause the stain to be more difficult to remove).
- 2 If stain cannot be accurately assessed, conduct a trial process on a small portion of stained area to determine most appropriate action.
- 3 Utilise the guide below and on our website for some stain removal solutions. www.boral.com.au/pavers

#### stain removal solution examples

problem	suggested cleaning method
Efflorescence* (White powdery deposit)	Brush first with a stiff bristled broom. Then hose <sup>^</sup> with clean water. Weathering will eventually stop this process from occurring.
Leaves, bark, algae, food and wine stains	Use 10 part water to 1 part bleach, then wash <sup>^</sup> down.
Chewing gum	Freeze with dry ice and remove with a spatula.
Ivy suckers	Apply a heat gun to the suckers until they go hard. Allow them to cool and dry, then scrub them off with a stiff bristled broom.

Efflorescence occurs naturally in cement based products.
 Subject to water restrictions in your area.

This information should be viewed as a guide only. The particular circumstances of paving projects vary significantly in ways that often dictate the use of particular materials and techniques to address challenges presented by those circumstances. Boral urges you to ensure that you obtain appropriate professional advice tailored to your circumstances before commencing paving projects.

## how to choose retaining walls



### step 1

Gather ideas on the look you want to achieve. Look through this brochure and the Boral website for inspiration www.boral.com.au/retainingwalls

### step2

Use the table to the right to determine which retaining wall is most suitable for your particular application.

- 1 Determine the height you want to achieve.
- 2 Determine which design you want do you want curves corners or a straight wall?

### step3

Select a colour that complements your area, home and surroundings such as other homes in your street.

### step4

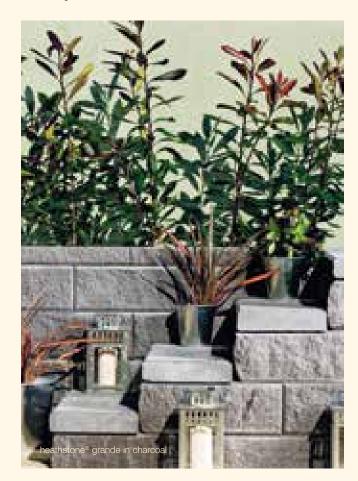
Choose to D.I.Y. or hire a contractor. Refer to page 18 for tips on installing a retaining wall.

This is general information and should be viewed as a guide only Boral urges you to ensure that you obtain appropriate professional advice tailored to your circumstances before commencing retaining wall projects.

Prior to erecting a walling system, consult with your builder, engineer, supplier and local council to obtain construction data and the required approvals.

Page no.	13	13	13	14	15	16	17
Product Name Typical Applications	Heathstone®	Heathstone <sup>®</sup> Grande	Heathstone <sup>®</sup> Regal	Keystone®∗∗	Pyrmont <sup>®**</sup>	Gardenwall®	Litewall®
Max wall height (mm)*	972	972	1000	1200	1200	1125	600
Straight walls	✓	✓	✓	✓	✓	✓	✓
Curved walls	^	^	^	^	**	✓	×
Corners	✓	✓	<ul> <li>Image: A start of the start of</li></ul>	×	×	×	✓
Flushface profile	P	P	P		P		~
Angled face profile							
Block face size	medium	large	large	large	large	medium	medium

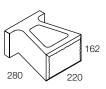
- Maximum wall heights in good soils (gravels, sandy gravels, crushed sandstone).
   Permost and Kaustana control to a pulity in to 10m birth whom designed by a pulity in the same set.
- \*\* Pyrmont<sup>®</sup> and Keystone<sup>®</sup> can be built up to 12m high when designed by a suitably qualified engineer and combined with soil reinforcement. Please contact your Boral representative for more information.
- Applies to minimum radium of 10m.
- To achieve tighter convex curves, bolster the back of the blocks.



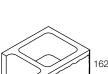
## heathstone®

This refined range with a sharp framed splitface, is ideal for creating smart contemporary lines.

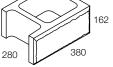




STANDARD UNIT

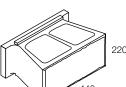








STANDARD CORNER UNIT



HEATHSTONE® REGAL STANDARD UNIT – Almond – Tuscan

440

HEATHSTONE® REGAL

CORNER UNIT – Almond – Tuscan

220

280

300

275

220

162

440

HEATHSTONE<sup>®</sup> GRANDE UNIT

300

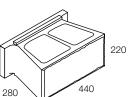
300

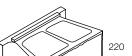
BULLNOSE CAP

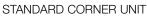
SPLIT FACE CAP



220









PAPERBARK\*



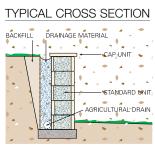




ALMOND



TUSCAN



Note: Backfill should be no higher than the top of the retaining wall.

\* Except Heathstone Regal.

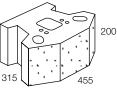
Shade variation can occur from batch to batch.



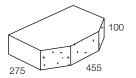
RECOMMENDED FOR:

## keystone®

Keystone<sup>®</sup> is a strong and secure walling option featuring a unique interlocking pin system. It can be used in professionally designed walls up to 12m high:



STANDARD UNIT



STRAIGHT-SIDED CAP UNIT



ALMOND

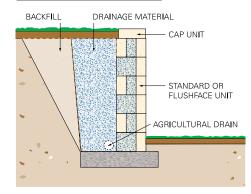


PAPERBARK



TUSCAN

#### TYPICAL CROSS SECTION



Note: Backfill should be no higher than the top of the retaining wall.

^ When designed by a suitably qualified engineer and combined with soil reinforcement

Shade variation can occur from batch to batch.

keystone® in tuscan

RECOMMENDED FOR:

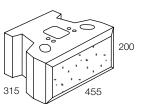
IAX. WALL HEIGHT 1200r TRAIGHT WALLS 🗸 URVED WALLS 🗸

## oyrmont®

Combining elegance with durability, the unique interlocking system makes Pyrmont® suitable for professionally designed walls up to 12m high:



pyrmont<sup>®</sup> in paperbark



STANDARD UNIT



STRAIGHT-SIDED CAP UNIT



ALMOND

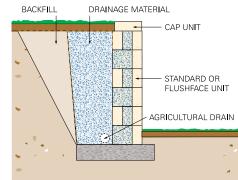


PAPERBARK



TUSCAN

#### TYPICAL CROSS SECTION



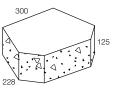
Note: Backfill should be no higher than the top of the retaining wall. • Applies to minimum radius of 10m.

^ When designed by a suitably qualified engineer and combined with soil reinforcement

Shade variation can occur from batch to batch.

## gardenwall®

A vertical stepped design with splitface blocks suitable for both straight and curved walls.



STRAIGHT SIDED UNIT

ANGLE SIDED UNIT

300



HAWKESBURY YELLOW

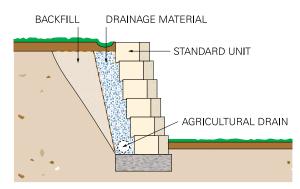


PAPERBARK



TUSCAN

#### TYPICAL CROSS SECTION

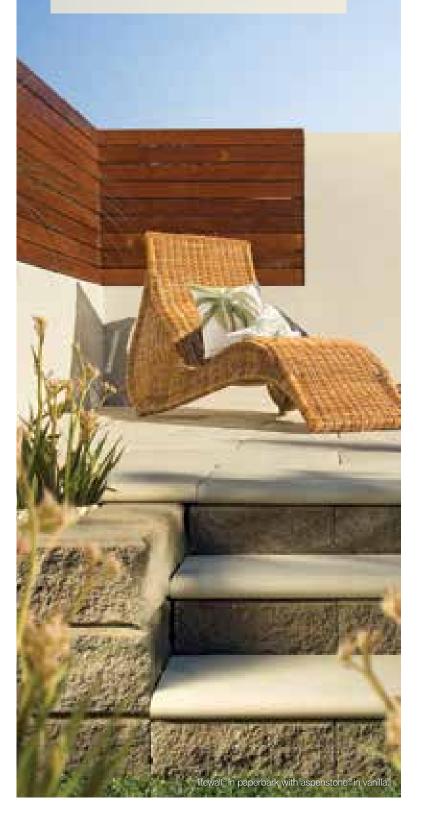


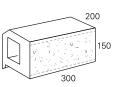
Note: Backfill should be no higher than the top of the retaining wall. Shade variation can occur from batch to batch.



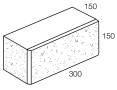
## litewall®

Achieve a linear look with Litewall<sup>®</sup> the lightest blocks in the Boral range.





STANDARD UNIT



CORNER UNIT



ALMOND

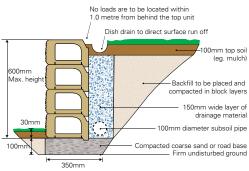


PAPERBARK



CHARCOAL

#### TYPICAL CROSS SECTION



Note: Backfill should be no higher than the top of the retaining wall.

Shade variation can occur from batch to batch.

# how to



## 01 locate your wall

Mark out the ground where your wall will be located (either by marking with stakes and a string line or by marking a line on the ground with spray paint). Excavate trench then compact roadbase to form a levelling pad. Go to www.boral.com.au/wallcalc to calculate how many blocks you require.



### 02 prepare the site

Place blocks side by side on the levelling pad using a string line along the back of the units for alignment. Level each unit side to side and front to back using your spirit level. Spend time making sure the first course of units is level, otherwise all ensuing courses and ultimately the entire wall will not be level.



#### 03 backfill and compact

Install an agricultural drain 150mm behind your first course and surround with gravel (12-20mm sized gravel, e.g. blue metal). Shovel and compact your backfill behind the drainage material. (Backfill consisting of heavy clays or organic soils is not recommended due to water holding properties).



#### RECOMMENDED FOR:

CONCRETE PAVERS RETAINING WALL FACE STONE SETS COBBLES NATURAL STONE

#### O4 additional courses

Sweep the top of the previous course clean. Place the next course of units in a running half bond pattern (i.e. with the vertical joints from the first course units halfway across the second course units). Pull each unit forward until it locks with the nib on the unit below. Place the drainage material behind the second course of units. Stack units, placing drainage material and compact backfill for each block height layer until your wall is complete.



### 05 fixing capping units

Place capping units, if required, on the top course. It is recommended that caps be secured using a construction adhesive such as liquid nails. Some capping may require the removal of nibs from the top course of blocks.

This information should be viewed as a guide only. The particular circumstances of retaining wall projects vary significantly in ways that often dictate the use of particular materials and techniques to address challenges presented by those circumstances. Boral urges you to ensure that you obtain appropriate professional advice tailored to your circumstances before commencing retaining wall projects.

## accessories

For more information visit www.boral.com.au /geofix

### Geo-Fix®

Ready to use, air-cured permanent joint filler for pavers and retaining wall faces. No need to mix or dilute, simply scatter, sweep and leave.





## contact us

To locate your nearest Boral stockist, to receive brochures or to learn more about our products, call **1300 134 002** or visit our website at: **boral.com.au/landscaping** 



#### YOUR NEAREST RETAILER

Shade variations occur from batch to batch. Colours shown are indicative only and should not be used for final selection. Not all colours are available in every region for each product. See your retailer for colours available in your region. Products ordered should be chosen from actual samples current at the time of order and are subject to availability. Photographs in this brochure are only representative of Boral products and the appearance and effect that may be achieved by their use. Some images are computer generated. Samples, brochures and displays should be viewed as a guide only. Customers should ensure all delivered products are acceptable, and any concerns about products are made prior to laying. © Copyright Boral Hollostone Masonry (South Aust.) Pty Ltd – all rights reserved 2014. Boral, the Boral logo, boral.com.au, Boral Wisebuy, P Promenade Pavers, Handipave, Classicpave, Litewall, Heathstone, Heathstone Masonry (South Aust.) Pty Ltd in Australia, other countries, or both. If these and other Boral trade marked terms are marked on their first occurrence in this information with a trade mark symbol (® or ™), these symbols indicate Australian registered or common law trade marks owned by Boral at the time this information was published. Such trade marks may also be registered or common law trade marks in other countries. Other product, company or service names may be trade marks or service marks of others. Keystone® and Gardenwall® are registered trademarks of Keystone Retaining Wall Systems LLC, used under licence by Boral Masonry Limited. Boral Masonry Limited. Boral Hollostone Masonry (South Aust.) Pty Ltd ABN 14 007 604 033. Correct as at October 2014.