

JUNE 2018

# paving + retaining



## WHY FIRTH PAVING & RETAINING?



#### **90 YEAR PROUD HISTORY**

We've been developing, making and delivering concrete and concrete products to New Zealanders for almost a century.

#### **7** INDUSTRY LEADING

• Our technical team ensure you get top quality product that you can rely on.

#### **CONSISTENT PRODUCT STRENGTH**

Engineered and manufactured to ensure consistency of strength and durability.

#### 4 HIGHEST RATING All of our products are formulated to meet strict NZ standards.

Our pavers and retaining blocks are all made from locally sourced materials.

#### **TRADE TRUSTED**

So you can be sure what we make, makes the grade. Always.

#### 7 INNOVATION THAT ENDURES

Our designers work closely with our engineers to ensure new designs will stand the test of time.

#### MADE TO ORDER



If you can't find a colour or design mix that you're looking for, please contact your local stockist or Firth Sales representative. For Made To Order stock, minimum order quantities will apply.

## A BEAUTIFULLY NATURAL PRODUCT

The appeal of concrete masonry is the natural characteristics and variation of aggregates featured within the mix. Similar to the features of real stone, our concrete products will have natural variation in colours and characteristics. So when choosing Firth Concrete Paving and Retaining products, please expect colour hue variations and regional differences due to locally sourced materials. It's all part of a beautifully natural product.

We advise viewing our products before making your final decision. Contact your local merchant, they'll be happy to help.



OUR PAVING COLLECTION IS ON TREND WITH THE LATEST IN INTERNATIONAL ALFRESCO DESIGN. BRING THE BEST OF THE WORLD TO YOUR BACKYARD, WITH FIRTH.

> 4 6

## paving

#### +designer series

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## retaining

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COVER Firth Designer Paving **Colour:** Avon **Size:** Forum and Piazza (sealed) THIS SPREAD Firth Designer Paving Colour: Avon Size: Forum

# +designer series

A STYLISH HONED PAVING RANGE THAT ALLOWS YOU TO ACHIEVE A PREMIUM FINISH. AND IS COMPLEMENTARY IN SIZE AND COLOUR, OFFERING YOU MORE FLEXIBILITY & CREATIVITY.

#### HONED

For a high-end look at an affordable cost. Pavers are honed to expose the beautiful aggregate.

#### **NEW COLOURS**

Drawing inspiration from leading designers and home living trends.

#### SQUARE EDGE

Get a modern tile look.

## SPACING LUGS

Evenly space out your pavers with ease.

#### **NEW STANDARD 50MM**

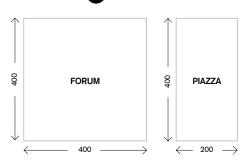
Paver depths make it easy to lay different paver sizes.

#### NANO-TECHNOLOGY

Our pavers have a protection coating system which acts like a shield against the elements, keeping them looking newer for longer.

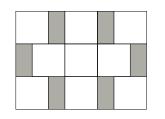
NEW INTERCHANGEABLE SIZING Designer Series pavers are available in three compatible

sizes to make designing easy: 400x400, 400x200. Look for the



#### PLAY WITH PATTERNS

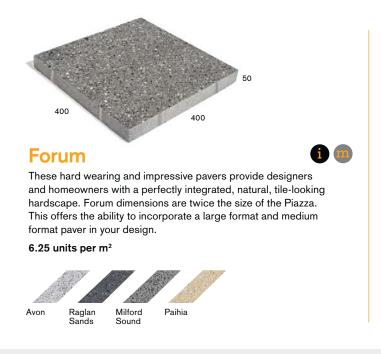
Blend colours, mixes and sizes to create designer landscapes.













### Piazza™



With its medium size and nicely balanced dimensions, the Piazza paver is perfect for making smaller areas appear visually larger without distracting from the living space. Get creative by partnering with the Forum paver or Holland pavers.

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







"HOW TO" LAY PAVERS See page 30

## +designer series 7

Firth is proud to launch its most premium residential paving range to date, featuring technological innovation & on-trend design to give you the best in dry cast paving.

 $\mathbf{1}$ 

**Colour:** Avon **Size:** Forum and Piazza

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Colour: Avon, Milford Sound and Raglan Sands (sealed) Size: Forum



HONING: \*Designer Series pavers must be sealed once laid as it is a honed product. As well as increasing long term durability and colour retention sealing reduces maintenance required for stains and cleaning. All Designer Series pavers are delivered unsealed. It is the responsibility of the installer to seal this range with water based acrylic sealant. COLOUR: Please keep in mind when you are choosing Firth Paving and retaining products, you are dealing with a natural material that can be influenced by a number of factors. While every care has been taken to obtain an accurate representation, the aggregates and ouides used to create these products are natural products and as a result som evariations will occur. Variations between North and South Island manufactured products will occur due to locally sourced materials.









#### 1

Colour: Avon and Milford Sound Size: Forum (Milford Sound), Piazza (Avon) (Image: Zones Landscaping / Jules Moore)

#### 1

**Colour:** Avon **Size:** Forum and Piazza

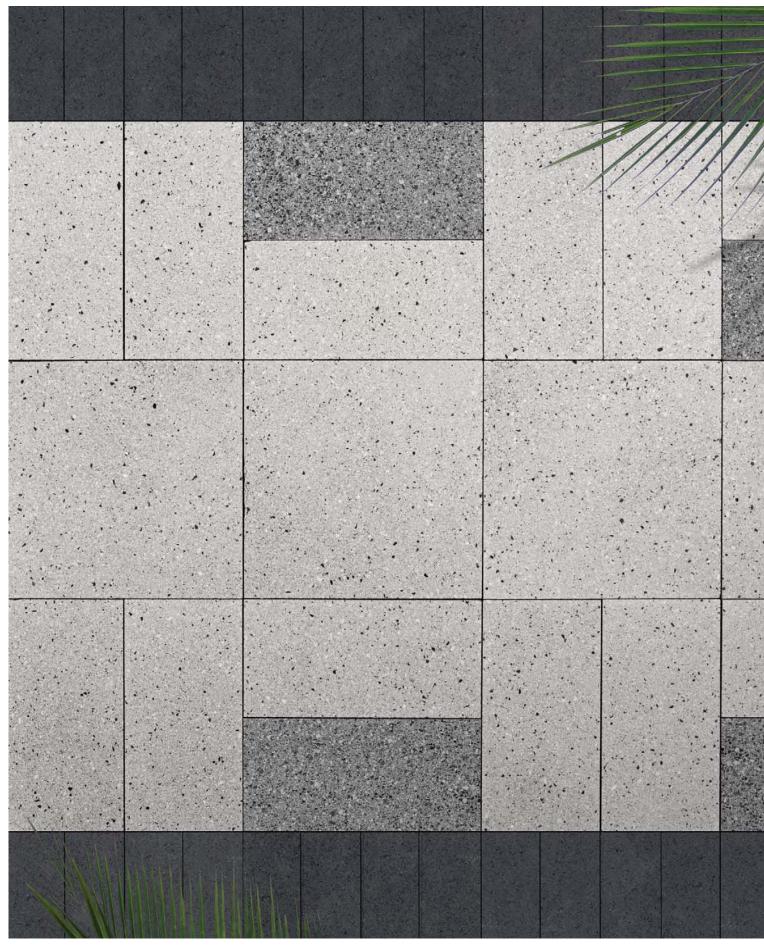
#### •

Colour: Milford Sound and Raglan Sands (sealed) Size: Piazza

## gallery

## layout ideas

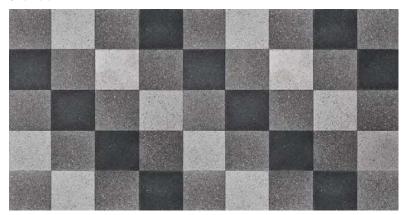
**Colour:** Avon, Milford Sound and Black Sands **Size:** Piazza, Forum and Holland



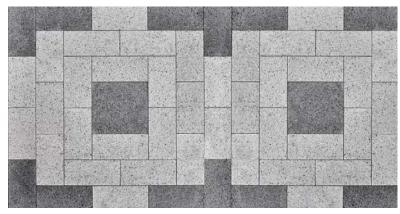
## +designer series 11



Colour: Avon, Milford Sound and Raglan Sands Size: Forum



**Colour:** Avon and Milford Sound **Size:** Piazza and Forum



**Colour:** Avon and Milford Sound **Size:** Piazza and Forum

**Colour:** Avon and Paihia **Size:** Piazza and Forum



# +classic collection

THE FIRTH CLASSIC COLLECTION SHOWCASES STANDARD FINISH (FAIRFACED) PAVERS IN BOTH CLASSIC AND CONTEMPORARY COLOURS TO CREATE UNIQUE LIVING SPACES THAT TRULY REFLECT YOUR TASTE & STYLE.

5

NEW COLOURS
 Drawing inspiration from leading designers and home living trends.

 ANGLED EDGE
 For a classic paving look.

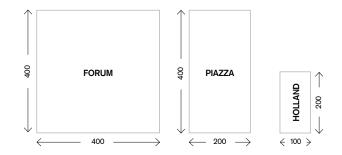
SPACING LUGS

Evenly space out your pavers with ease.

NEW STANDARD 50MM

Paver depths make it easy to lay different paver sizes.

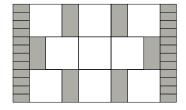
Applies to Forum, Piazza & Holland only. Look for the **i** 

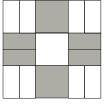


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#### PLAY WITH PATTERNS

Blend colours, mixes and sizes to create designer landscapes.

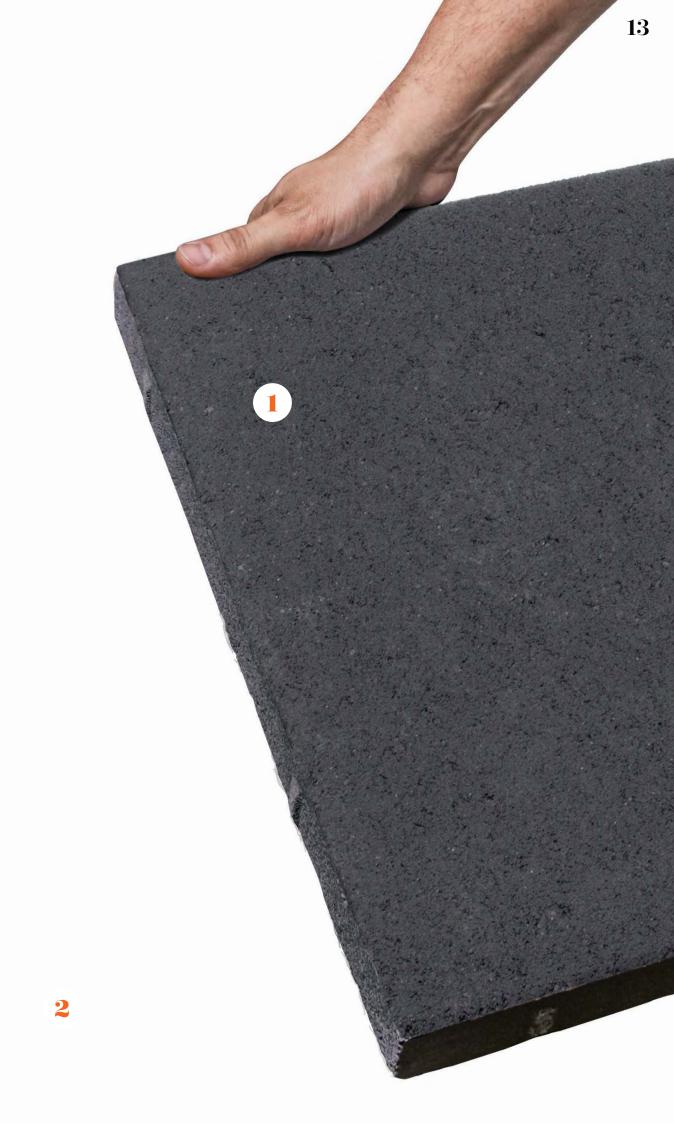




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3

### PERFECT FOR: PATIOS / PATHS







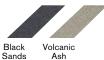


## **Chancery**®

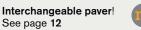
14

Firth Chancery pavers are a larger format paver in a range of vibrant, fashionable colours - providing a versatile way to bring your indoors outside. Chancery pavers' larger size make them more economical and faster to lay, requiring only four pavers per square metre.

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



ands

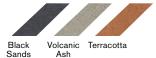




## **Courtyard Flagstone™**

Firth Courtyard Flagstones are a classically attractive option for outdoor areas. They are suitable for covering larger areas, as well as for pathways.

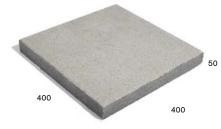
5 units per m<sup>2</sup>



-

## +classic collection 15

50



## Forum

These hard wearing and impressive pavers provide designers and homeowners with a perfectly integrated, natural, stone-looking hardscape. dimensions are twice the size of the Piazza. This offers the ability to incorporate a large format and medium format paver in your design.

#### 6.25 units per m<sup>2</sup>





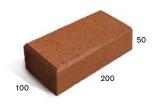
Piazza™

With its medium size and nicely balanced dimensions, the Piazza paver is perfect for making smaller areas appear visually larger without distracting from the living space. Get creative by partnering with the Forum Paver or Holland pavers.

400

#### 12.5 units per m<sup>2</sup>





## Holland®

The economical and highly versatile Holland paver offers a hard wearing solution for any footpath or patio need. Pair with Forum or Piazza pavers to create interest with striking patterns.

#### 50 units per m<sup>2</sup>





### **Walkway**<sup>™</sup>

With their traditional look, Firth Walkway pavers are an economical and good-looking option for paving different areas around your home.

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





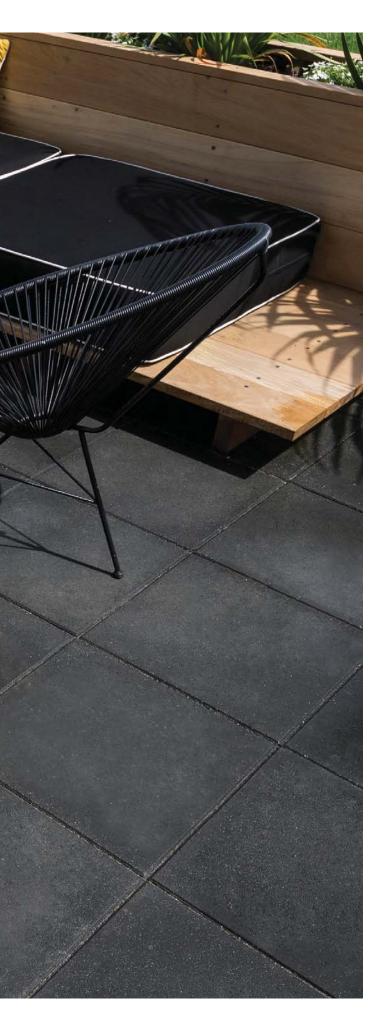
Colour: Volcanic Ash Size: Forum and Piazza (Image: Zones Landscaping / Jules Moore)

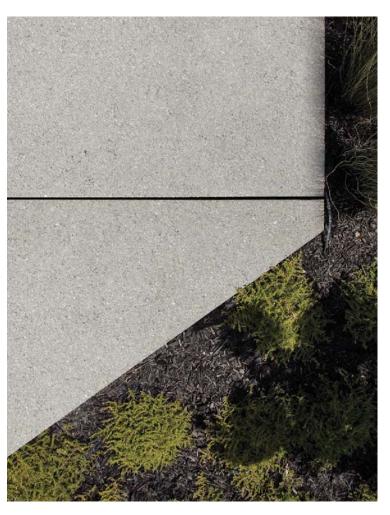
SEALING: Sealing the paver will enhance durability, colour and the ease of cleaning and maintenance. All Classic Collection pavers are delivered unsealed. Firth recommends using a water based acrylic sealant. It is the responsibility of the installer to seal this range **COLOUR:** Please keep in mind when you are choosing Firth Paving and retaining products, you are dealing with a natural material that can be influenced by a number of factors. While every care has been taken to obtain an accurate representation, the aggregates and oxides used to create these products are natural products and as a result some variations will occur. Variations between North and South Island manufactured products will occur due to locally sourced materials.

## gallery



## +classic collection 17





Colour: Black Sands (sealed) Size: Courtyard Flagstone Colour: Volcanic Ash Size: Chancery

# -driveway paving

**NEW!** NOW AVAILABLE IN DIFFERENT DEPTHS, WITH AN ANGLED, 'LOW CHAMFER' EDGING TO REDUCE PAVER BREAKAGE AND DAMAGE.



## Holland®

18

The clean lines of the Firth Holland paver offer a flexible, stylish paving solution that is ideal for domestic driveways and parking areas. **50 units per m**<sup>2</sup>





## Holland<sup>®</sup> Set

The trademark cobbled-looking surface of the Holland Set gives you the ability to create a traditional stone look. Holland Sets are robust enough for a number of different design applications from urban vehicular rumble strips to parking bays. For upmarket bespoke concrete driveways you can incorporate bands of Holland Sets.

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









### Walkway™

Now offered in the thicker 50mm depth, you can use the economical Walkway paver for light vehicle driveways as well as foot traffic areas.

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



## +driveways 19

Holland Set: Black Sands Holland: Black Sands and Volcanic Ash



**COLOUR:** Please keep in mind when you are choosing Firth Paving and retaining products, you are dealing with a natural material that can be influenced by a number of factors. While every care has been taken to obtain an accurate representation, the aggregates and oxides used to create these products are natural products and as a result some variations will occur. Variations between North and South Island manufactured products will occur due to locally sourced materials.

# EcoPave Permeable Raving

FIRTH'S ECOPAVE® RANGE PROVIDES PERMEABLE PAVING SOLUTIONS TO ASSIST STORM WATER MANAGEMENT, REDUCE RUN OFF, AND FILTER POLLUTANTS FROM THE WATER.

PERMEABLE PAVING MUST BE LAID BY TRAINED PAVIOURS. FIRTH OFFERS FREE TRAINING ON HOW TO LAY PERMEABLE PAVERS. FOR FURTHER DETAILS PHONE 0800 FIRTH 1 STORM WATER MANAGEMENT - THIS PRODUCT RANGE IS ONE OF THE SOLUTIONS FOR STORM WATER MANAGEMENT IN THE PROPOSED UNITARY PLAN



## **PorousPave**

Firth PorousPave is one of the paver options in the Firth EcoPave Range. The paver has a very open texture which allows water to filter through it to the underlying drainage medium. 80mm paver ideal for paths, patios, light residential traffic areas and public footpaths.

Permeability rate = 1200mm/hr, as installed 50 units per m<sup>2</sup>







## FlowPave & Flowpave Set

Firth FlowPave is another option in the Firth EcoPave Range. The paver has enlarged nibs on all four sides which creates wider than usual gaps around each paver. This space allows water to filter through to the underlying drainage medium. Ideal for light to medium residential traffic areas including car parks. Nib spacers create wide gaps around paver to allow water drainage.

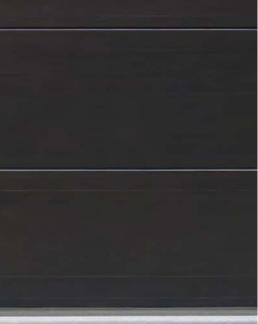
Permeability rate = 3600mm/hr, as installed 50 units per m<sup>2</sup>

Natural Black Sands

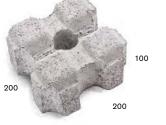
#### HOW TO LAY PERMEABLE PAVERS

See Firth Permeable Paving Installation Guide available at firth.co.nz / Contact 0800 FIRTH 1 for training

## +driveways 21







## **Gobi® Block**

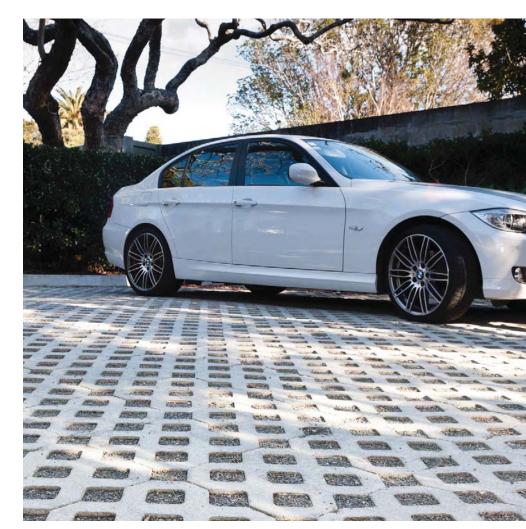
A heavy-duty paved surface that's up to the task for high-traction requirements. It's also ideal for places where you want to retain a semi-grassed look; as the design allows grass to grow through. Permeability subject to top soil and type of grass.

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





Grass Paver: Natural





## Grass Paver<sup>™</sup>

Firth Grass Pavers combine the natural and welcoming look of a grass lawn with the strength and durability of a paved surface. Permeability subject to top soil and type of grass.

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





Firth Euro Kerbs are a popular domestic kerb, creating an attractive edge in colours that complement your paving. These interlocking kerbs are 150mm high.

2.5 units per lineal metre

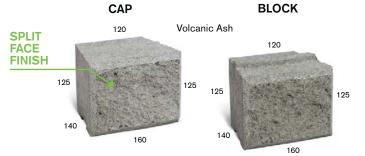


**COLOUR:** Please keep in mind when you are choosing Firth Paving and retaining products, you are dealing with a natural material that can be influenced by a number of factors. While every care has been taken to obtain an accurate representation, the aggregates and oxides used to create these products are natural products and as a result some variations will occur. Variations between North and South Island manufactured products will occur due to locally sourced materials.



WITH FIRTH'S LARGE RANGE OF CONCRETE RETAINING WALLS, YOUR OUTDOOR LIVING DESIGN POSSIBILITIES ARE VIRTUALLY ENDLESS. ELEGANT DESIGNS AND EXCEPTIONAL PERFORMANCE MAKES FIRTH RETAINING WALLS PERFECT FOR ANY PROJECT, NO MATTER HOW BIG OR SMALL.

👃 Ezi Wall: Rockface



#### Rockface







Ezi Wall<sup>™</sup>

Firth Ezi Wall is one of the lightest segmental wall systems available. Minimal foundation preparation is required, so walls are easily constructed using the unique interlocking system.

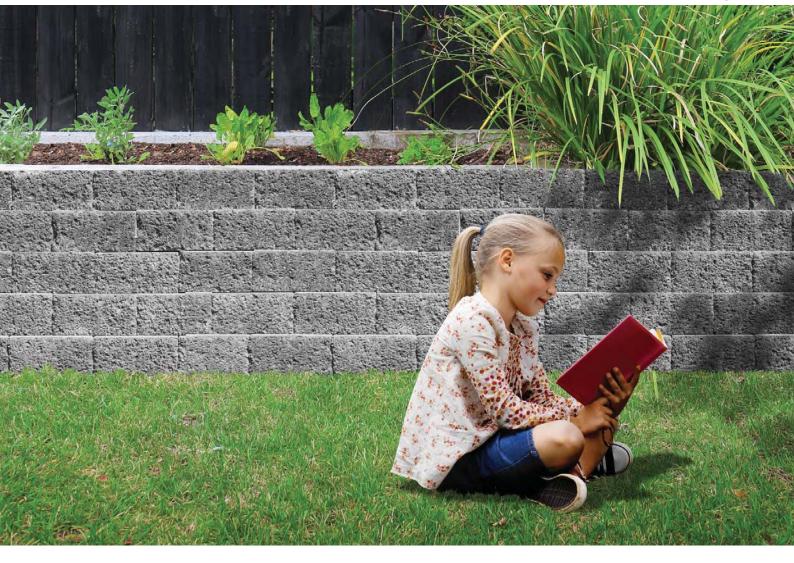


- Small size block: approx 5.6kgs
- Interlock system makes for easy installation
- Build curved, straight or terraced walls
- Easy to install
- Available in three colours

57 units per m<sup>2</sup> / 7.14 units per lineal metre



## +low retaining 25



## Sedona Stone®

Keystone Sedona Stone is ideal for creating low DIY walls, decorative tree rings, planters, raised garden beds or finishing your lawn edge.

- Lightweight weighs approx 5kgs\*
- Build straight, curved or terraced walls
- Secure interlock system
- Easy to install

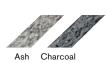


50 units per m<sup>2</sup> / 5 units per lineal metre



#### STRAIGHT FACE





## TRI-FACE





200



And don't forget... check with your council! Before you start any landscaping or building project, it's important you make sure the finished job will comply with the appropriate building codes and council regulations. For full information on the regulations applying in your area, call the engineer's office at your local council.



## **Garden Wall**

Keystone Garden Wall has the natural look of quarried stone and earth tone colours allowing it to blend in with any landscape. Perfect for landscape retaining walls, tree rings, patio, lawn edging and garden or flower borders.

- Medium size block: approx 13kgs\*
- Interlock system makes for easy installation
- Build curved, straight or terraced walls
- Easy to install

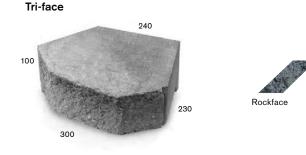


33.3 units per m<sup>2</sup> / 3.3 units per lineal metre



#### Straight face





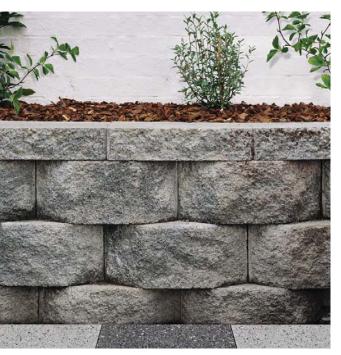


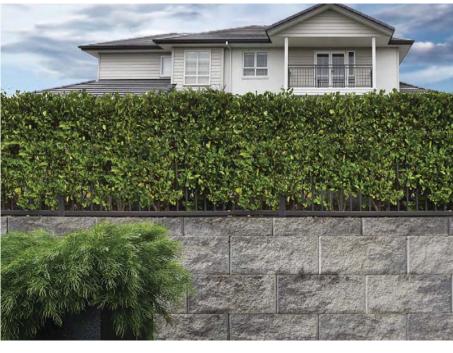
This guide has been produced to illustrate the options available. It does not provide detailed design and construction information. Further information can be obtained from the website firth.co.nz or by contacting the Firth help line. It is the responsibility of the user of the products to determine the appropriateness for their particular use and site conditions.



## +medium to high retaining 27

Compac IV: Straightface - Rockface





## Compac IV

Although the Keystone Compac IV range is predominately designed for commercial applications, the large and rugged units are also popular in DIY landscaping applications for domestic retaining walls up to 1m.



- Near vertical or two battered setback options
- Large units with split face finish
- 2 x stabilising pin positions per unit provides accurate alignment of each row/unit
- Bevelled/Tri-Face or straight face units

#### 11 units per m<sup>2</sup> / 2.19 cap units per lineal metre





 Tri-face
 33kg\*

 200
 305



Straight Face

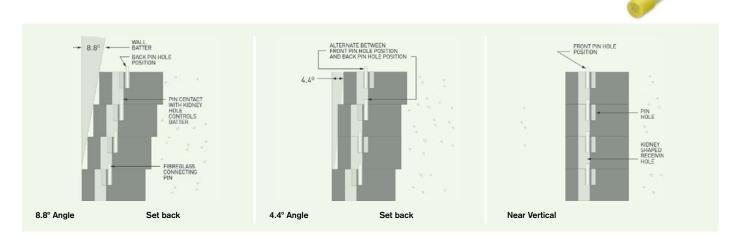


34kg\*



100 270 455

Fibreglass Pin Connector





And don't forget... check with your council! Before you start any landscaping or building project, it's important you make sure the finished job will comply with the appropriate building codes and council regulations. For full information on the regulations applying in your area, call the engineer's office at your local council.





PREPARE THE BASE LEVELLING PAD



INSTALL ADDITIONAL COURSES (NO MORTAR REQUIRED)



INSTALL THE FIRST COURSE & PINS



CAP THE WALL



BACKFILL & COMPACT

#### AND DON'T FORGET... CHECK WITH YOUR COUNCIL!

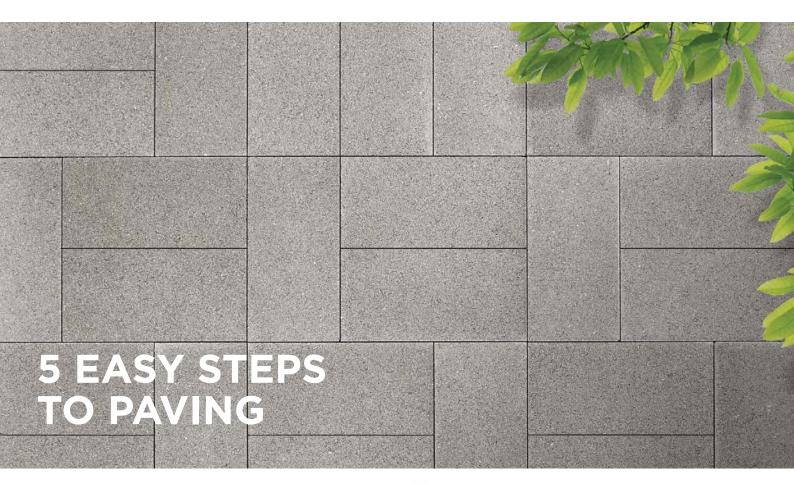
Before you start any landscaping or building project, it's important you make sure the finished job will comply with the appropriate building codes and council regulations. For full information on the regulations applying in your area, call the engineer's office at your local council.





|                  | SMALL        |   | MEDIUM                                  | LARGE  |  |
|------------------|--------------|---|---|--|--|
|                  | Ezi Wall™    | Sedona Stone                            | Garden Wall                             | Compac IV*   |  |
|                  |              | Available in Tri-Face,<br>Straight Face | Available in Tri-Face,<br>Straight Face | Available in Tri-Face,<br>Straight Face  |  |
| Max height       | 0.5m         | 0.5m                                    | 0.7m                                    | lm*  |  |
| Straight wall    | $\checkmark$ |   | 1                                       |  |  |
| Curved walls     | $\checkmark$ |   | $\checkmark$                            | $\checkmark$   |  |
| Vertical         | $\checkmark$ | ×                                       | ×                                       | <ul> <li>Image: A second s</li></ul> |  |
| Battered/Setback | ×            |   | $\checkmark$                            |  |  |
| Corners          | ×            | ×                                       | ×                                       | <ul> <li>Image: A second s</li></ul> |  |
| Step option      | ×            | ×                                       | ×                                       |  |  |
| Block face size  | Small        | Small                                   | Medium                                  | Large  |  |
| Per m2           | 57 units     | 50 units                                | 33.3 units                              | 11 units   |  |
|                  |              | CONTRACTOR OF THE STATE                 | STONE<br>Contraction                    | VIENCE AND   |  |

Maximum domestic height in good soil measured from base to top of the wall. Maximum domestic height assumed good soil and gravity conditions, where seismic performance is important, in high seismic zones, reduce maximum height by one module. \*Height recommended for non specific design. We recommend contacting Firth should you require any further advice. \*Compac IV can be built higher when designed by a suitable, qualified engineer & combined with soil reinforcement.





EXCAVATE & PREPARE THE SUB-GRADE



PREPARE THE BASE COURSE



PREPARE THE SAND BASE



LAY THE PAVERS



HAUNCH & COMPACT THE PAVERS

+Firth EcoPave

1.0



This step-by-step guide does not apply to Firth EcoPave Permeable Paving Installation Guide. For a detailed installation guide, view the 'Firth EcoPave Permeable Paving Installation Guide' on FIRTH.CO.NZ. This can be copied and submitted along with your consent form when applying for Council Approval.

FOR MORE DETAILS & 'HOW TO' VIDEOS, VISIT: FIRTH.CO.NZ

## CARING FOR YOUR PAVERS

#### **INITIAL MAINTENANCE**

During the early life of flexible pavement, the jointing sand may settle in the joint with the natural action of rain water. It is important that the joints are topped up as required to maintain



full lock up of the paving units and jointing sand may need to be reapplied during the first three months. Loss of jointing sand can contribute to chipping of edges on some paving types. **Firth recommends Dricon® Pavesand.** 

#### CLEANING



Regular sweeping of the paved area with a stiff brush is recommended to remove the natural build-up of detritus. This

action also helps with weed control, removing the young weeds before their roots establish in the joints. Weeds rarely grow up through the paver but rather airborne seeds settle in the sand joints. If dirt has built up and reduces the colour of the paving this can be regained with a wash using warm water and a mild detergent. Apply the mixed water and simply scrub the paving with a stiff broom and wash away the dirty water with a hose. Ensure all detergent has been thoroughly washed away upon completion of the cleaning. Power washes are a popular alternative to scrubbing. If using a power wash hold the lance at approx 30 degrees to the paving and use a fan spray not a pencil spray. This will help reduce the loss of jointing sand and minimize the likelihood of leaving "clean line" markings on the pavers. Upon completion of the cleaning, check the joint sand levels and replenish if necessary.

#### WEED CONTROL



If weeds become established in the paving joints they can be removed by hand, hot water, steam waterblaster or controlled

with the use of a weed killer. If weeds are removed by hand be aware that often the roots will pull out some of the jointing sand. If there are a lot of weeds and this occurs check the joint sand levels and replenish if required. If using a weed killer look for a product that has been specifically designed for use with paving. These weed killers are generally more selective and are less likely to stain or discolour the paving. Always follow the manufacturer's directions on use and application.



MOSS & ALGAE

Moss, lichens and algae should only occur if the paved area is shaded or inadequately drained. If such growths

do occur they can be controlled with a 1:1 dilution of bleach/water. Simply apply over the affected area using a water can and leave for 2-3 minutes then wash off with a hose and brush. Use lots of water to dilute the residue as the bleach will not only kill the moss and algae but other plants as well. It may take 2 or 3 applications to fully control the occurrence. Lichens are a little more stubborn and may require a stiff brush to encourage them to move on along with the bleach mixture. There are also products specifically designed to deal with lichens on the market, but check that they do not contain ferrous sulphate - this can react with the concrete product leaving a brown stain. Specific cleaning agents are available from various distributors. Firth do not recommend the use of high pressure water blasters as they can damage the paving surface and do not kill all the moss and algae spores thus encouraging early regrowth. Always keep spare or unlaid pavers dry, covered and out of direct sunlight to avoid condensation and minimise the development of discoloration, moss and algae.

#### EFFLORESCENCE

Efflorescence usually presents as a whitish deposit or stain on the surface of the paving, often giving the paver colour a washed out appearance. The occurrence of efflorescence is spasmodic and unpredictable most often presenting in the winter months within the first year of installation. Efflorescence is a temporary phenomenon and will generally disappear in time through weathering, but this may take from some months to several years. There are several products on the market that may assist in the removal of efflorescence, most of these products contain acids so it is important that all manufacturer's instructions and relevant environmental regulations are followed. Incorrect or careless application may result in injury or damage and discolouration to the paving units being treated. We would strongly recommend a test panel be applied in an inconspicuous area before treating the site. For heavy deposits it may require more than one treatment. Never exceed recommended mix rates in an effort to speed up the process, over application will alter the colour / texture of the paver. If applying an acid wash we recommend soaking the paving prior to its



application and waiting until the surface has dried to damp condition. This limits the depth of penetration and minimizes potential loss of surface durability. Efflorescence is transparent when wet - wait for pavers to dry before sealing to make sure all efflorescence is removed. **Firth recommends Dricon® CT.** 

#### SEALING

Sealing can improve the paver's appearance and help to reduce maintenance. A sealer can often assist in sealing the joint sand inhibiting weed growth, assist in keeping the pavers clean by creating a barrier for dirt, moss and algae and if applied correctly can reduce the likelihood and appearance of efflorescence. There are several types of sealers on the market, broadly broken into a penetrating sealing type and a surface coating sealing type. Different types will enhance the paver colour to different degrees and some sealants will affect the paver's slip resistance. As suitability varies, please contact Firth (0800 347 841) to discuss the best sealant type for your paver. Consultation with a sealing supplier is then recommended to select the brands and options best suited to that guidance. When applying it is important to read the manufacturer's instructions prior to commencing the job and abide by any relevant environmental guidelines.

#### HEALTH AND SAFETY



Certain cleaning and sealing methods as listed involve the use of chemicals. All safety warnings provided by the supplier should be read,

understood and adhered to at all times. Always work in an adequately ventilated area. When diluting acids always add acid to water not water to acid to reduce the risk if splashing occurs. Before starting any cleaning or sealing a trial should be undertaken on a small inconspicuous area to determine the effects on the paving.



Please keep in mind when you are choosing Firth paving and retaining products, you are dealing with a natural material that can be influenced by a number of factors. While every care has been taken to obtain an accurate representation, the aggregates and oxides used to create these products are natural products and as a result some variations will occur. Variations between North and South Island manufactured products will occur due to locally sourced materials.

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