

+concepts

Designer Brick
+ Architectural Masonry



+ Stand out from the crowd with a feature design from Firth's range of Designer Brick & Architectural Masonry.

Designer Brick

Designer Masonry are solid "stone-like" masonry units, designed and engineered to meet the New Zealand Building Code and withstand New Zealand's harsh climate. Designer Brick is available in a range of fashionable colour tones that complement an array of outdoor environments and construction styles. All Designer Masonry products are developed using a veneer construction design, which includes a cavity, allowing moisture to escape and assuring weathertightness.

Architectural Masonry

The Architectural Masonry structural and non structural blocks are coloured concrete blocks. These blocks have a unique mix design, combined with oxides and performance additives that set them apart from ordinary grey masonry. When honed and sealed, the unique aggregate mix is exposed, transforming these blocks into a granite-like look. Create magnificent external or internal Architectural Masonry features by mixing and matching textures, colour tones and block face sizes – your options are virtually endless.



+ Designer Brick

- 4 Manorstone®
- 6 Devonstone®
- 8 Avonstone
- 10 Summit Stone®
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Manorstone®

Manorstone® is a larger masonry brick with a pleasant, almost soothing appearance resembling natural stone. This combined with Manorstone's clean straight lines, enables the construction of a modern and durable home. Selecting either a complementary or contrasting coloured mortar from Dricon® will further enhance the appearance of Manorstone®.

BRICK SIZE

S

M

L ✓

See page 16-19 for dimensions
& colour specifications

Note: South Island colour tones and face textures may vary due to locally sourced materials. Colours depicted are subject to the limitations of colour printing process. Visit your nearest Firth stockist to view samples before ordering.





Devonstone®

This earth-style masonry brick has a charm all of its own. Devonstone® combines warmth and natural charm, together with the durability and strength of concrete. They provide a natural look that will suit many building styles in both urban and rural environments. The strength and natural lines of Devonstone® provide a superior appearance. Selecting either a complementary or contrasting coloured mortar from Dricon® will further enhance the appearance of Devonstone® built homes.

BRICK SIZE

(S)

(M) ✓

(L)

See page 16-19 for dimensions & colour specifications

Note: South Island colour tones and face textures may vary due to locally sourced materials. Colours depicted are subject to the limitations of colour printing process. Visit your nearest Firth stockist to view samples before ordering.

Avonstone

Firth Avonstone is a durable, mid-sized brick with smooth textured, clean, contemporary lines. Selecting either a complementary or contrasting coloured mortar from Dricon® will further enhance the sharp finished look of this modern veneer.

BRICK SIZE

S

M ✓

L

See page 16-19 for dimensions & colour specifications



Note: South Island colour tones and face textures may vary due to locally sourced materials. Colours depicted are subject to the limitations of colour printing process. Visit your nearest Firth stockist to view samples before ordering.



Summit Stone®

Summit Stone® captures the timeless durability and striking beauty of natural stone. You'll love the warm look and reap the functional benefits of accuracy and consistency that high manufacturing standards bring. The look and feel of Summit Stone® can be further emphasised by bolstering the four edges of the face, giving the stone a natural, handcrafted appearance. Selecting either a complementary or contrasting coloured mortar from Dricon® will further enhance the look of Summit Stone®.

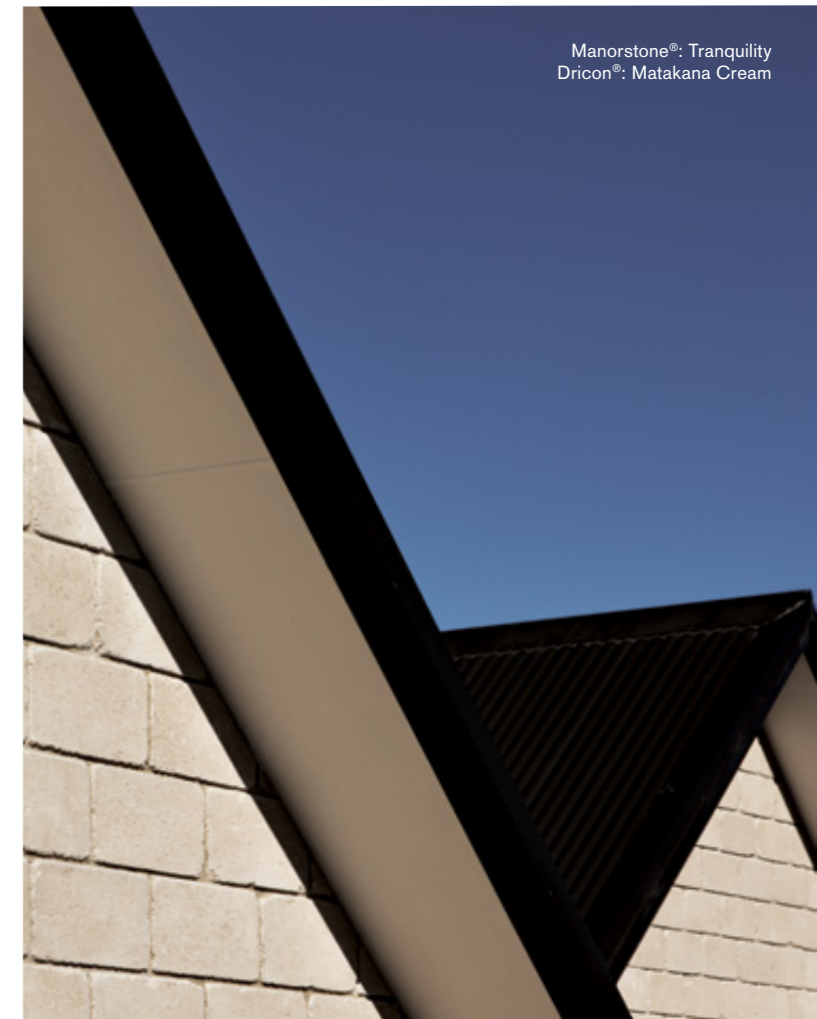
BRICK SIZE	RANGE
M ✓	R1 + R7
L ✓	R4

See page 16-19 for dimensions & colour specifications

Note: South Island colour tones and face textures may vary due to locally sourced materials. Colours depicted are subject to the limitations of colour printing process. Visit your nearest Firth stockist to view samples before ordering.



Devonstone®: Antique White
Dricon®: Antique White



Manorstone®: Tranquility
Dricon®: Matakana Cream



Devonstone®: Antique White
Dricon®: Premium White

design cues

- a) For a traditional look, keep your colour palette simple and choose colours that in combination compliment each element of the building ie roof, joinery and gutters.
- b) Choose the area of the building you want to be the most dominant visual feature and then ensure other elements are secondary, supportive features.
- c) A change of cladding in this home draws the eye to the two main entrance ways of this building - the garage and the front door portico. The concrete brick in this instance is the secondary visual element, sitting back exuding a 'solid base'.



Devonstone®: Serenity
Dricon®: Cream



Devonstone®: Antique White
Dricon®: Antique White

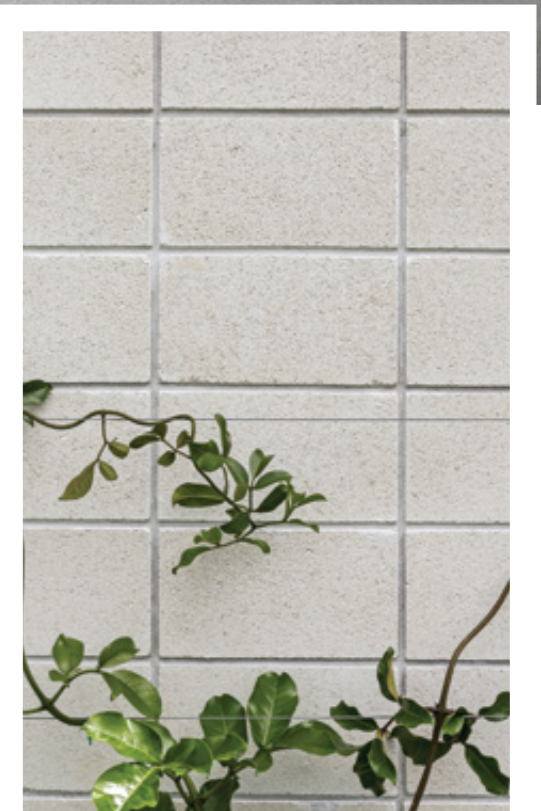
design cues

a) Utilise a range of complimentary cladding types to add dimension to a building project. Unpainted, stack-bonded concrete block will draw attention to an area and express its strength.

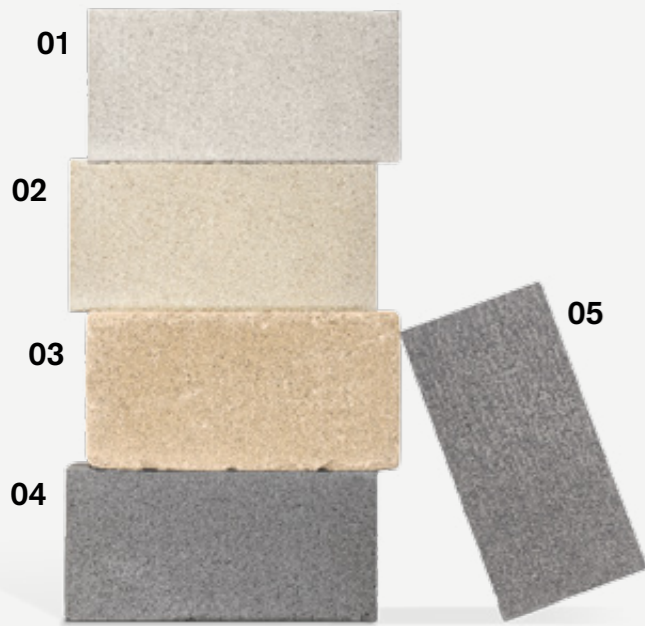
In the driveways, the speckled effect offered by an exposed aggregate concrete driveway contrasts beautifully against the smoother more structured form of the unpainted concrete block.

b) Concrete brick has been adopted as a feature in this home rather than the dominant cladding. It provides a visual break from the horizontal weatherboard lines and provides an area where vegetation can integrate with the home.

c) A natural stone coloured concrete wall works beautifully with the organic form of the creeper, acting as a nondescript canvas for the plant to 'shine'.



Manorstone®



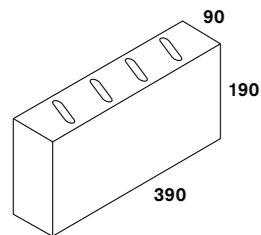
AVAILABLE COLOUR TONES

- 01 Antique White **S**
- 02 Tranquility **S**
- 03 Serenity **R M**
- 04 Graphite **S**
- 05 Urban Grey **S**

BRICK SIZE

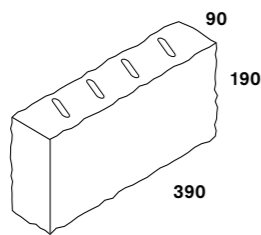


STRAIGHT EDGE

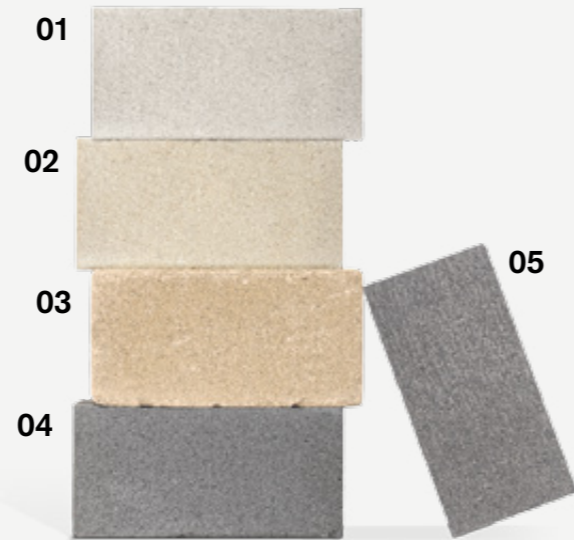


SIZE
390x190x90mm
UNITS PER M²
12.5

RUMBLED



Devonstone®



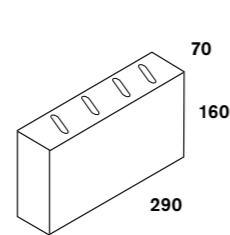
AVAILABLE COLOUR TONES

- 01 Antique White **S**
- 02 Tranquility **S**
- 03 Serenity **R M**
- 04 Graphite **S**
- 05 Urban Grey **S**

BRICK SIZE

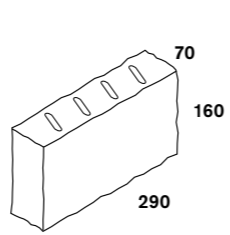


STRAIGHT EDGE

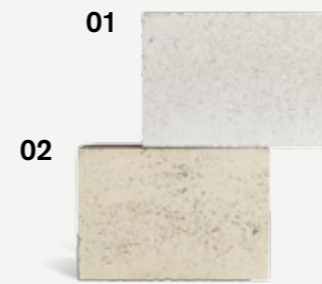


SIZE
290mm x 160mm x 70mm
UNITS PER M²
20

RUMBLED



Avonstone



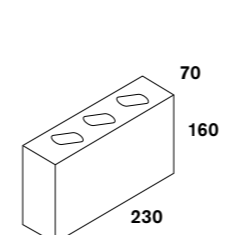
AVAILABLE COLOUR TONES

- 01 Antique White
- 02 Tranquility

BRICK SIZE

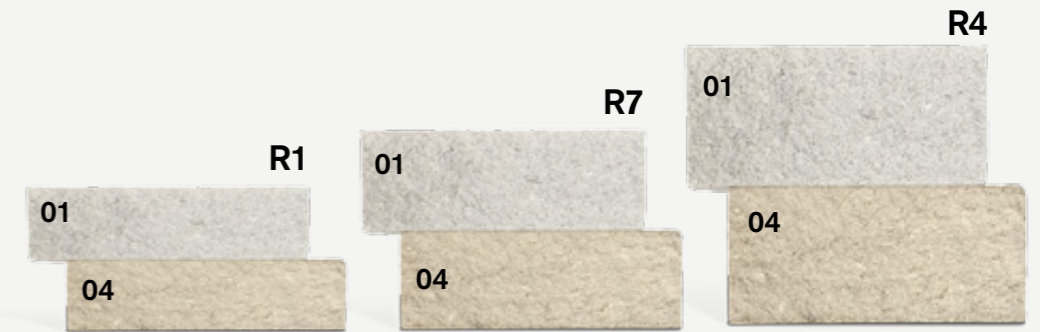


STRAIGHT EDGE



SIZE
230mm x 160mm x 70mm
NUMBER PER M²
25

Summit Stone®



AVAILABLE COLOUR TONES

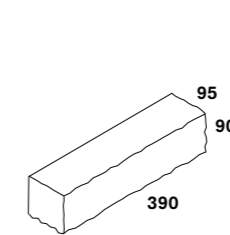
- 01 Antique White
- 04 Tranquility

R1

BRICK SIZE



SPLIT FACE



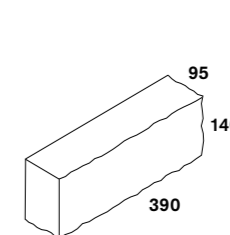
SIZE
390mm x 90mm x 95mm
UNITS PER M²
25

R7

BRICK SIZE



SPLIT FACE



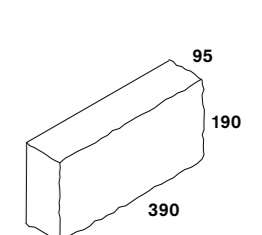
SIZE
390mm x 140mm x 95mm
UNITS PER M²
17

R4 (made to order)

BRICK SIZE



SPLIT FACE



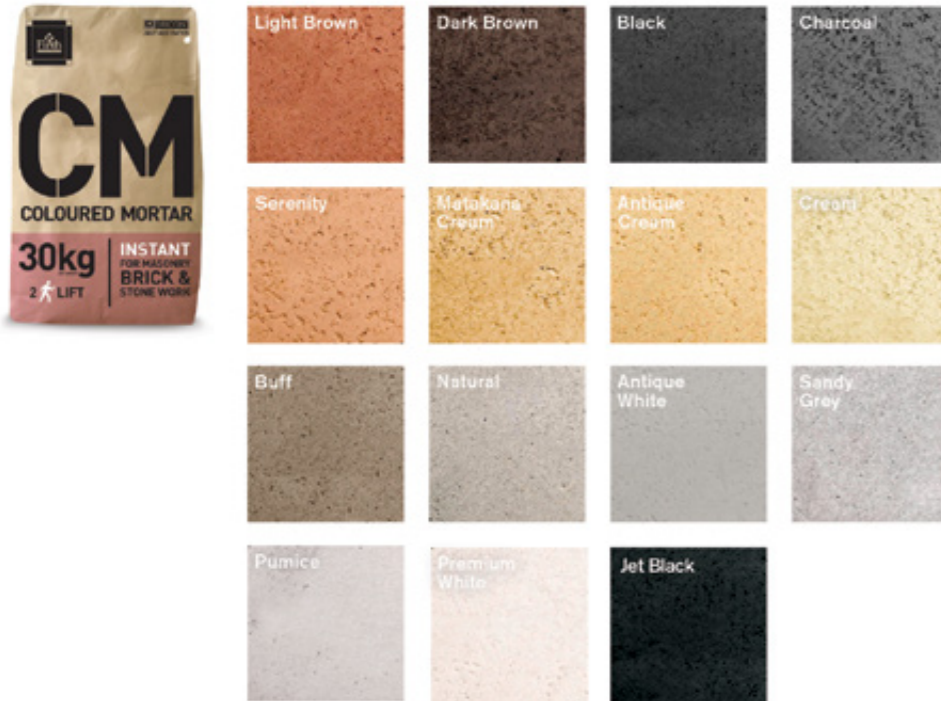
SIZE
390mm x 190mm x 95mm
UNITS PER M²
12.5

S = Straight edge option shown
R = Rumbled option shown
M = Make to order - not held in stock but colour available on request

Additional colours available. Please contact your local Firth Representative for more details.

Note: South Island colour tones and face textures may vary due to locally sourced materials. Colours depicted are subject to the limitations of colour printing process. Visit your nearest Firth stockist to view samples before ordering.

Dricon® Coloured Mortars



Coloured mortar joints can further transform your design. Choose from Firth's comprehensive range of Dricon® mortar colours which have been designed to complement the Designer Brick Series range.

Coloured Trade Mortar

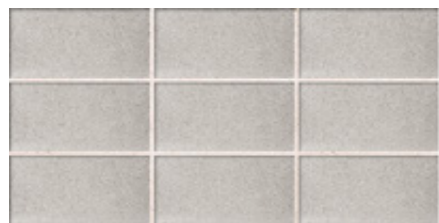
Once you have selected your colour you can select the style for the mortar joint - concave, raked or flush - each of these will alter the architectural appearance of the mortar joint.

For more detailed information and to gain best results from Dricon® Mortars view Firth's Architectural Masonry Best Practice Guide or download a copy of the Dricon® brochure.

Mortar examples

Manorstone® Antique White designer brick in a stack bond layout with 3 different mortar colours:

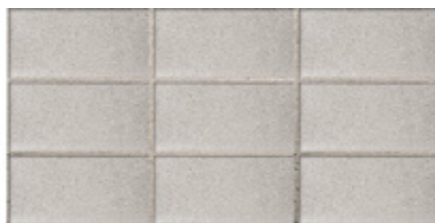
Dricon® Premium White



Dricon® Charcoal



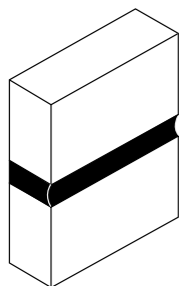
Dricon® Natural



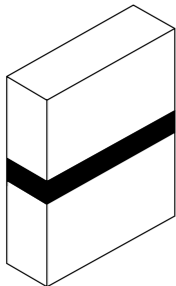
Visit firth.co.nz for our mortar render tool

Mortar Joints

Concave

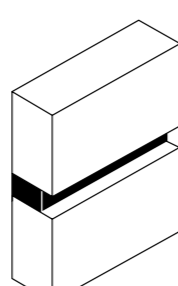


Flush



Raked

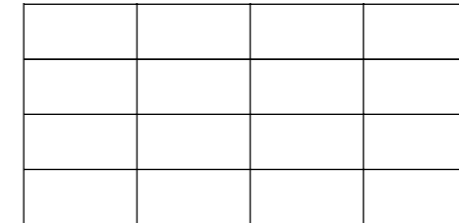
Raked joints are not recommended for exterior.



Architectural Designs

Different layouts can transform the look and feel of the entire design. Create vertical clean straight lines with the stack bond design or take on a more traditional look with the stretcher bond design.

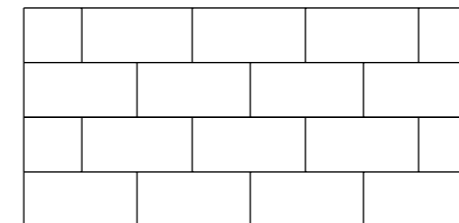
Stack Bond



Stack bond is outside the scope of NZS4229 and NZ3604 and therefore requires a specific engineer's design.

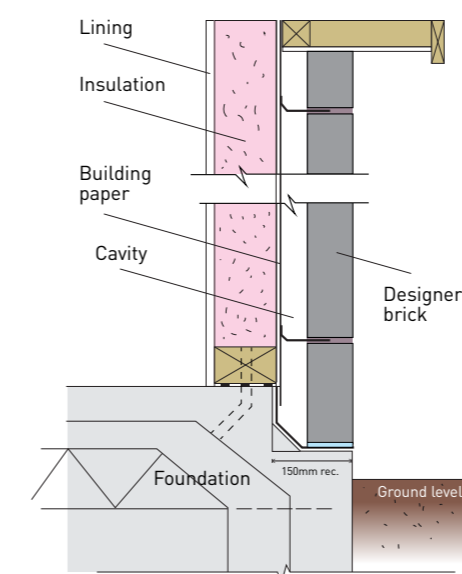
10 Series Veneer stack bonded construction guide is available from the NZCMA website NZCMA.org.nz veneers section.

Stretcher bond



The stretcher bond is also known as running bond and is the standard method of masonry construction.

Construction



Online Tools

www.firth.co.nz

Firth, Masonry Veneers Planner

Our Masonry Veneers Planner is a handy online tool that let's you choose your preferred style and colour of brick and match it with your choice of coloured mortar.

Efflorescence

Efflorescence is a dry powdery deposit of white salts carried to the surface of the blockwork by water. The calcium or hydroxide salts may originate from the:

- cement used in the mortar or grout
- sand used in the mortar or grout
- concrete masonry units
- sea spray
- garden fertilisers being absorbed into the masonry

Salts can be removed by dry brushing and disposal, well clear of the wall. Salts may reappear until the wall is completely dry.

If efflorescence is not removed when it appears it will carbonate and the residue will need to be removed by mechanical abrasion or the use of a proprietary (acidic) cleaning system.

Calcium carbonate may leach from Portland cement and from hydrated lime and is often known as 'leaching'. It is insoluble in water, although it becomes invisible when wet.



To clean, use a proprietary masonry cleaning product. Firth recommends Dricon CT®.

Annual Cleaning

As best practice, throughout its life exterior concrete masonry will require:

- Annual exterior washing down – when washing down use a low pressure wash with natural detergent added to the water
- Removal of organic growths – lichens and mosses are cleaned by applying, a proprietary moss remover.



+Architectural Masonry

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- 24 20 Series
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- 30 Specification + Dimensions

10 Series

Let your creativity run wild with the beauty, flexibility and durability of Firth's 10 Series Architectural Masonry range which is suitable for non-structural features. Honed walls transform into a granite look and there is a wide choice of ultra modern colours and finishes to choose from, depending on your taste and design requirements.

Stack bonding design creates a modern designer look of clean straight lines. As with all Firth products, Architectural Masonry is advanced masonry that integrates the use of high-performance materials with good design detailing and workmanship.

**See page 30-33 for dimensions
& colour specifications**

Disclaimer: Colours may vary from region to region as all Firth Masonry products are made from natural materials which are locally sourced. Firth recommends viewing actual product, produced in your region, before making your final purchase decision. Special colours and mixes must comply with Firths "Made to Order" policies which vary from region to region. Contact your local Firth office and they will be happy to assist.



20 Series

If you design something beautiful using quality products you will get an exceptional result which is why the 20 Series is the perfect solution for unique structural designs. If you are after a feature wall, mix and match the different colour blocks and face texture options to create a bespoke finish. This product is now available in a range of fashionable colour tones and the various mortar joint options further enhance your feature providing endless options for those looking for a unique look.

See page 30-33 for dimensions & colour specifications

Disclaimer: Colours may vary from region to region as all Firth Masonry products are made from natural materials which are locally sourced. Firth recommends viewing actual product, produced in your region, before making your final purchase decision. Special colours and mixes must comply with Firths "Made to Order" policies which vary from region to region. Contact your local Firth office and they will be happy to assist.



design cues

- a) Stack-bonding v Stretcher bond: One offers a contemporary look while the other a more traditional feel.
- b) Honed, coloured concrete block can be utilised to wonderful effect, equally, in exterior or interior situations.



Honed 20 Series: Stone
Dricon®: Stone
Stack bond design



Half High 10 Series: Onyx
Dricon®: Onyx
Stretcher bond design

As seen on 'The Block'



Honed 10 Series: Onyx
Dricon®: Onyx
Stack bond design



Honed 20 Series: Stone
Dricon®: Stone
Stack bond design



Honed 20 Series: Stone
Dricon®: Stone
Stack bond design

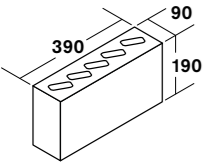


Honed Half High 10 Series: Onyx
Dricon®: Onyx
Stretcher bond design

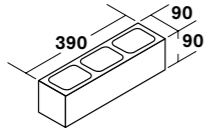
Dimensions

10 Series

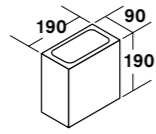
Non-structural/veneer construction as per NZS3604 or supported by NZS4229 and NZS4230.



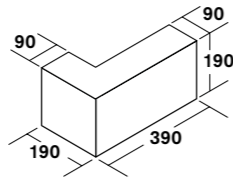
10.01
Standard Whole
(also supplied as two core
in some areas)



H10.01
Standard Whole
Half High
(also supplied as two core
in some areas)



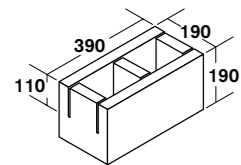
10.02
Half
(Made to order)



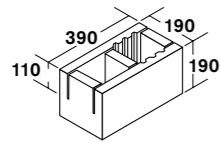
10.03
Corner

20 Series

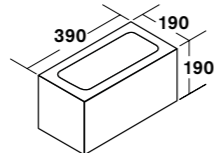
Structural design as per NZS4229/4230.



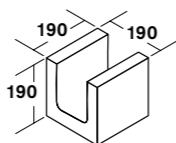
20.14
Knock-In Bond Beam



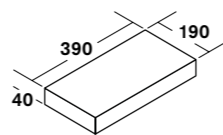
20.15
Corner Bond Beam



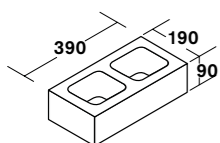
20.30
Standard Column



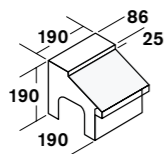
20.12
Lintel and Half
End-Closer



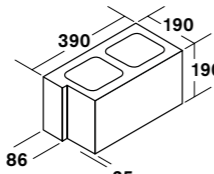
05.17
Capping



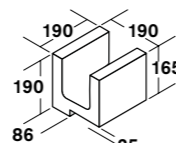
H20.04
Plain End Half High



20.08
Sill (projecting)
(flush available in Auckland
only)



20.09
Rebate Whole



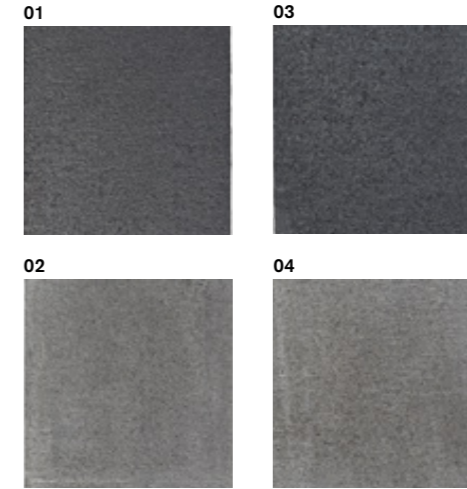
20.11
Rebate Lintel

Note: 20 Series: Weathertightness of exterior structural design masonry must comply with Weathertightness of Masonry Code of practice CP01.2011. This includes performance of clear sealers and floor rebate.

Colours

Sealed
01 Onyx
02 Stone

Unsealed
03 Onyx
04 Stone



Disclaimer: Colours may vary from region to region as all Firth Masonry products are made from natural materials which are locally sourced. Firth recommends viewing actual product, produced in your region, before making your final purchase decision. Special colours and mixes must comply with Firth's "Made to Order" policies which vary from region to region. Contact your local Firth office and they will be happy to assist.

Finishes

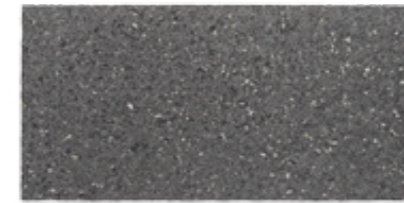
Available in Onyx and Stone.



Fair Face

A standard "off the mould" finish, which, by adding colour to standard blocks, transforms them into something quite spectacular.

Image depicted is half sealed and half unsealed.



Honed

By grinding the outer few millimetres of the block's surface, the richness of the recipe is exposed creating an appealing, smooth, exposed aggregate finish that highlights the natural ingredients of the mix.

Not all blocks are available ex-stock honed. Check with Firth for availability.



Split Face

By its very nature split face architectural masonry suggests the random patterns found in natural stone. Each unit splits in a slightly different way revealing the ingredients from which the block was made – creating a textured look.

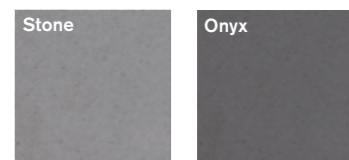
Not all blocks are available in a split face finish. Check availability in your region prior to ordering.

Dricon® Architectural Mortar



Coloured mortar joints can further transform your design. Choose from Firth's comprehensive range of Dricon® mortar colours which have been designed to complement the Architectural Masonry range.

Colours



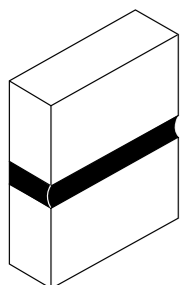
The Dricon® Architectural Masonry Mortars have been specifically created to be water resistant and to match the Architectural Masonry colours.

Once you have selected your colour you can select the style for the mortar joint - concave, raked or flush - each of these will alter the architectural appearance of the mortar joint.

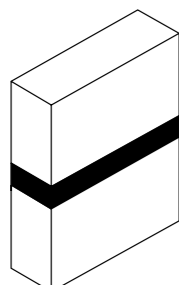
For more detailed information and to gain best results from Dricon® Mortars view Firth's Architectural Masonry Best Practice Guide or download a copy of the Dricon® brochure.

Mortar Joints

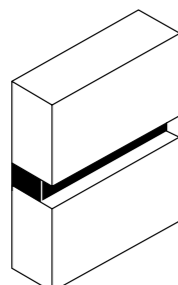
Concave



Flush



Raked

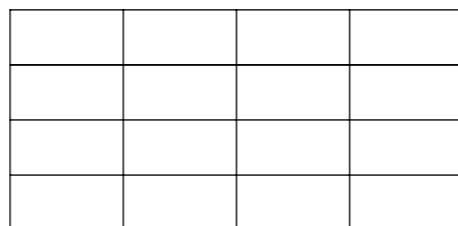


Raked joints are not recommended for exterior.

Architectural Designs

Different layouts can transform the look and feel of the entire design. Create vertical clean straight lines with the stack bond design or take on a more traditional look with the stretcher bond design.

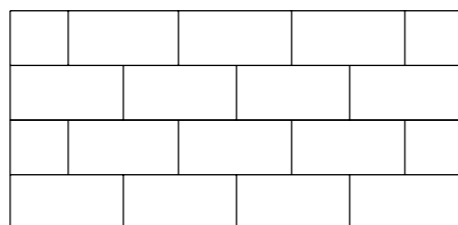
Stack Bond



Stack bond is outside the scope of NZS4229 and NZ3604 and therefore requires a specific engineer's design.

10 Series Veneer stack bonded construction guide is available from the NZCMA website NZCMA.org.nz veneers section.

Stretcher bond



The stretcher bond is also known as running bond and is the standard method of masonry construction.

Honing Grey Masonry

If deciding to hone or polish ordinary grey masonry walls, when constructed, its likely there will be medium to extreme colour variation between units. This variation can result in overall colour variation across the wall, which becomes enhanced, when honed or polished and sealed. Firth recommends Architectural Masonry when deciding to construct feature walls or masonry walls that require a honed or polished finish. Architectural masonry has been specifically designed and manufactured to be honed or polished to achieve the architectural look across the wall.

Efflorescence

Efflorescence is a dry powdery deposit of white salts carried to the surface of the blockwork by water. The calcium or hydroxide salts may originate from the:

- cement used in the mortar or grout
- sand used in the mortar or grout
- concrete masonry units
- sea spray
- garden fertilisers being absorbed into the masonry

Salts can be removed by dry brushing and disposal, well clear of the wall. Salts may reappear until the wall is completely dry.

If efflorescence is not removed when it appears it will carbonate and the residue will need to be removed by mechanical abrasion or the use of a proprietary (acidic) cleaning system.

Calcium carbonate may leach from Portland cement and from hydrated lime and is often known as 'leaching'. It is insoluble in water, although it becomes invisible when wet.



To clean, use a proprietary masonry cleaning product. Firth recommends Dricon CT®.

Annual Cleaning

As best practice, throughout its life exterior concrete masonry will require:

- Annual exterior washing down – when washing down use a low pressure wash with natural detergent added to the water
- Removal of organic growths – lichens and mosses are cleaned by applying, a proprietary moss remover.

Specification

PRODUCTSPEC

SMARTSPEC
specification writing made simple

masterspec

Best Practice Guide



Firth has put together a comprehensive Architectural Masonry best practice guide for using Architectural Masonry products. The guide is packed with helpful hints and tips. It also makes reference to a number of important New Zealand standards and codes, including a control joint overview.

20 Series: Weathertightness

The Weathertightness of exterior structural design masonry must comply with Weathertightness of Masonry Code of practice CP01.2014. This includes performance of clear sealers and floor rebate.

Tip

To ensure a uniform colour finish Firth recommends purchasing your masonry from one location, preferably from the same batch as minor colour variations do occur due to natural variance in raw materials. When installing masonry, mix and match units from each pallet to ensure a uniform mix of colours.



**For further information & product samples please contact
Firth on 0800 FIRTH 1 or visit www.firth.co.nz**

Printed December 2014. Colours and finishes are subject to change.

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Please keep in mind when you are choosing Designer Concrete, 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 the Firth Designer Brick and Architectural Masonry samples are natural products and as a result some variations will occur. ©Firth Industries 2014. All rights reserved. Content in this document is protected under the Copyright Act 1994. No material may be reproduced in whole or in part without the written consent of the copyright holder.

