

BRUHN



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BRUHN

80+

Years quarrying &
supplying limestone

7000+

Homes built nationally

3x

The thermal quality of
brick

A LEGACY IN LIMESTONE.



Hand-finishing limestone

01 About Bruhn Limestone

Bruhn Limestone has been quarrying and supplying premium limestone for over 80 years. With over 7,000 homes now built nationally, the Bruhn business and their quality SA limestone products are respected by architects, designers and builders all over Australia.

The Stone

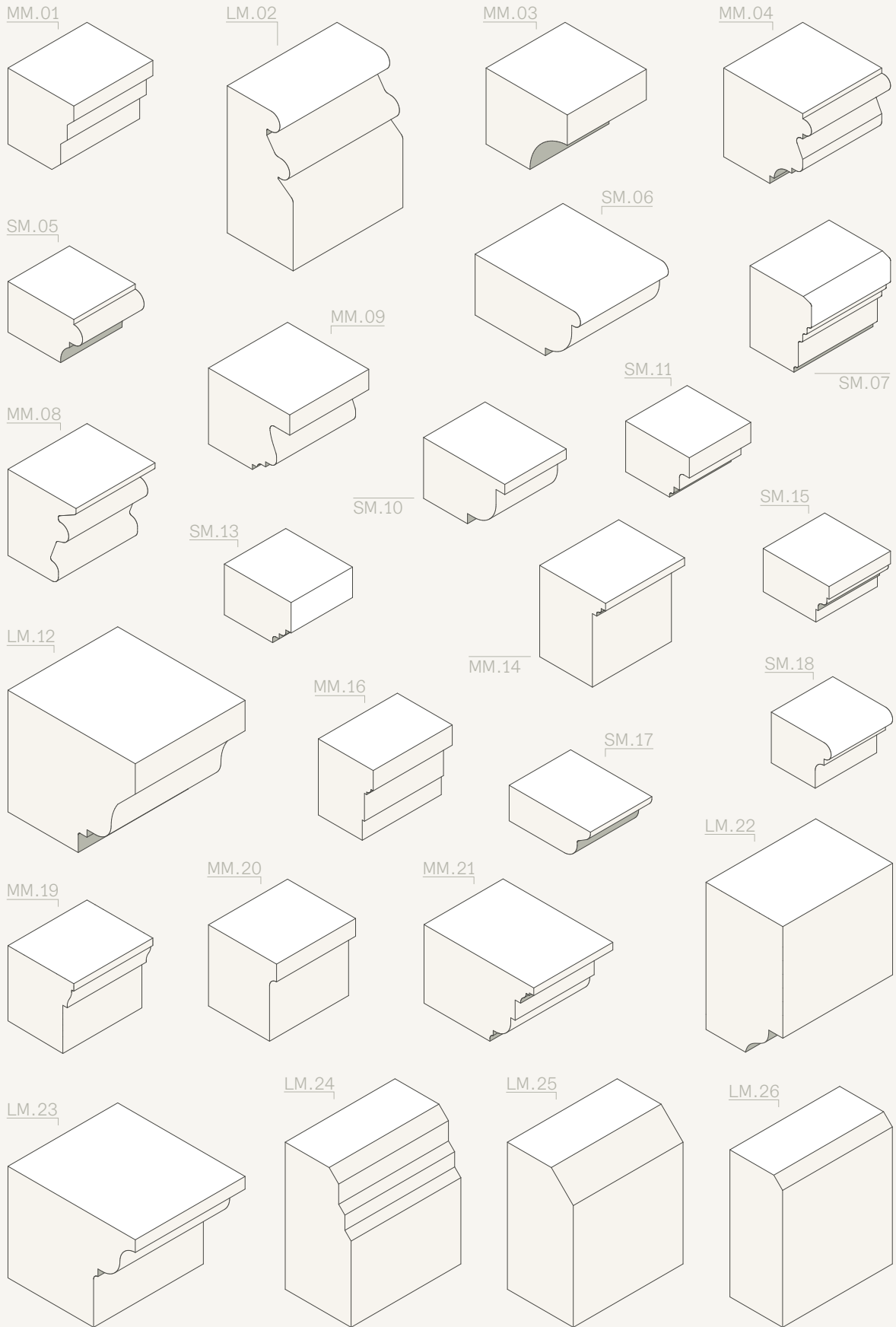
Mount Gambier Limestone is a fossiliferous limestone located and quarried from the Martre deposits, 10 km west of Mount Gambier in the South-East of South Australia.

Our SA Limestone comes in both full block and cladding sizes, offering a dense 'tight grain finish' varying in colour from light cream to more biscuit tones. Supplied in Plainface, Rockface and Bevel Edge finishes, complemented by a broad range of decorative mouldings and columns.

Performance

All limestone products have high insulating, acoustic and fire resistant qualities that ensure all projects are energy conscious and support government Green Star ratings.

BRUHN



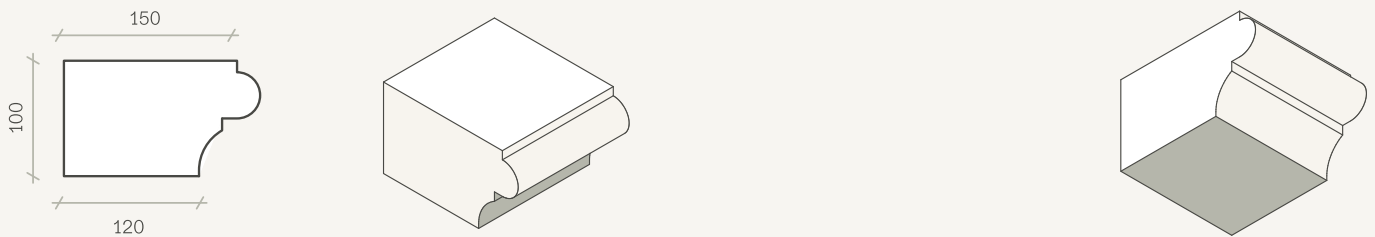
A LEGACY IN LIMESTONE.

Bruhn Limestone offers a range of solid natural moulds that can be used in a variety of ways; plinths, eaves, architraves, lintels, skirting blocks, wall bands, cornices and corbels.

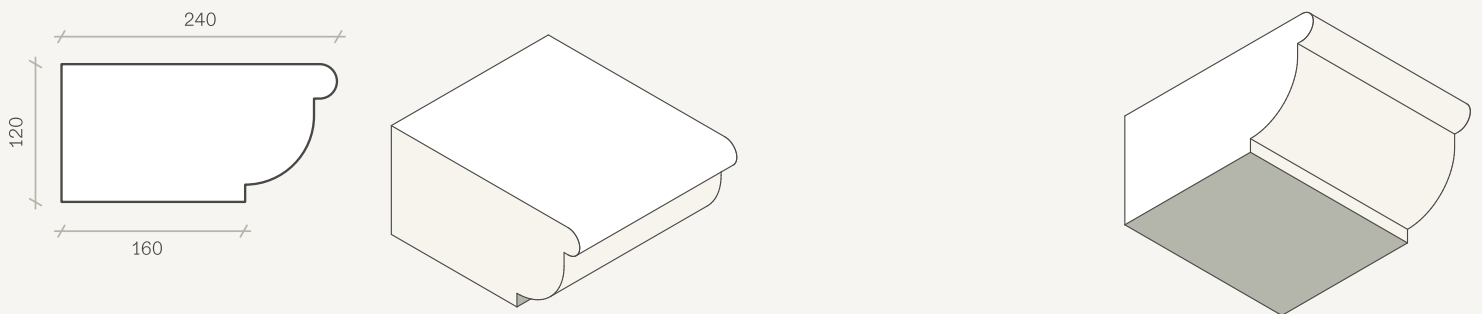
All moulds are 660mm in length as standard. Depths and widths vary between profiles. Special sizes and variations are available on request.

02 Small Mould Profiles

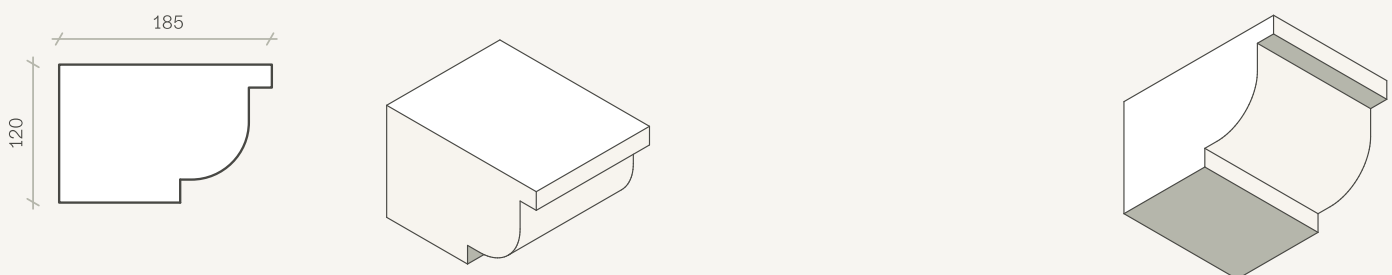
Small Mould #05



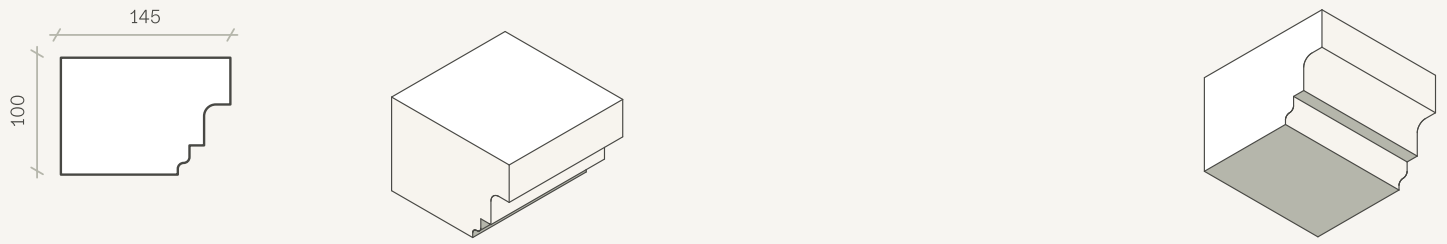
Small Mould #06



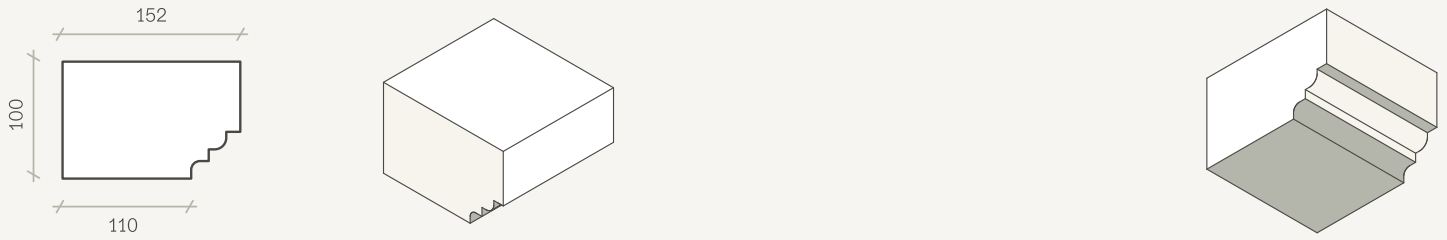
Small Mould #10



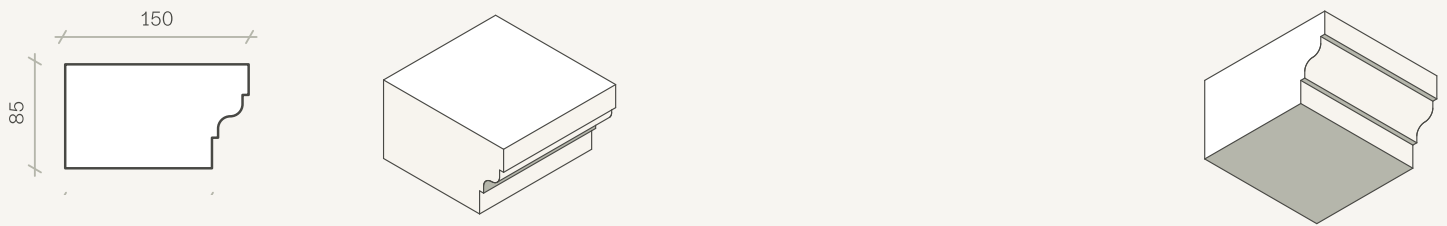
Small Mould #11



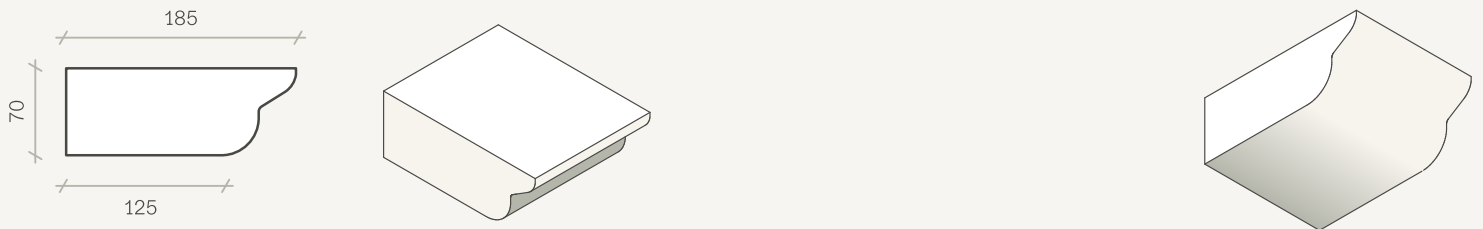
Small Mould #13



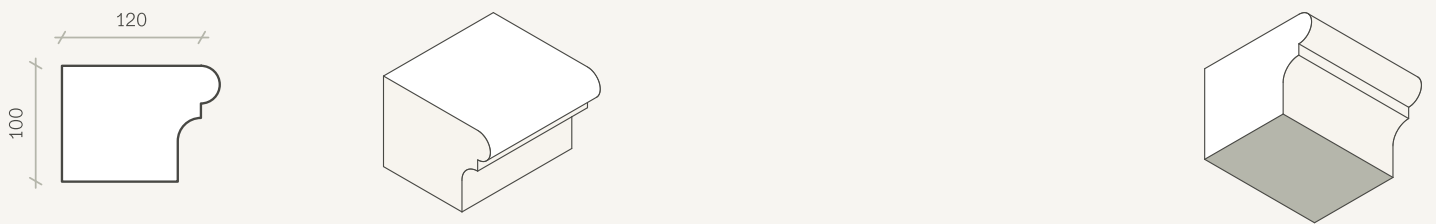
Small Mould #15



Small Mould #17

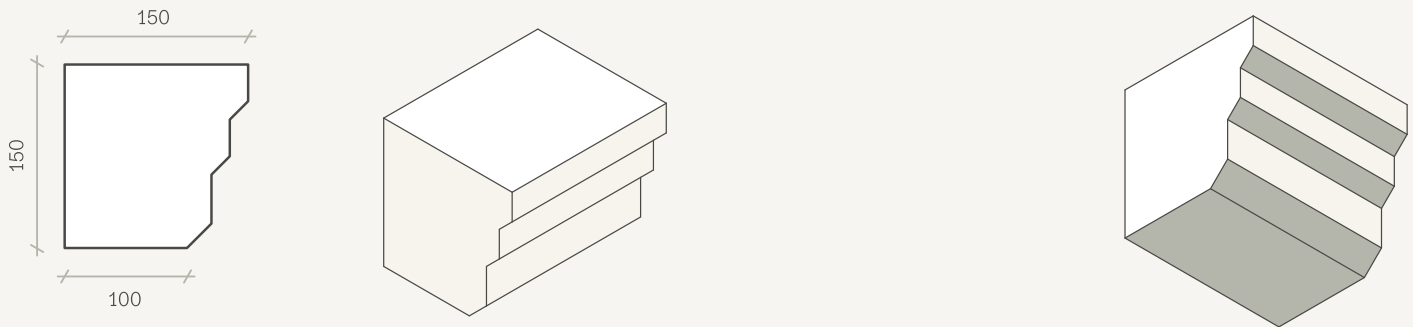


Small Mould #18

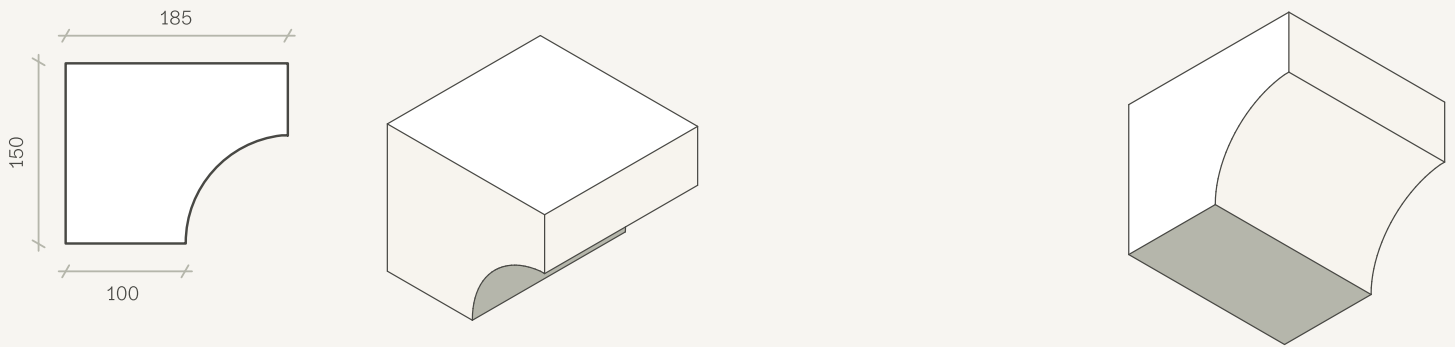


03 Medium Mould Profiles

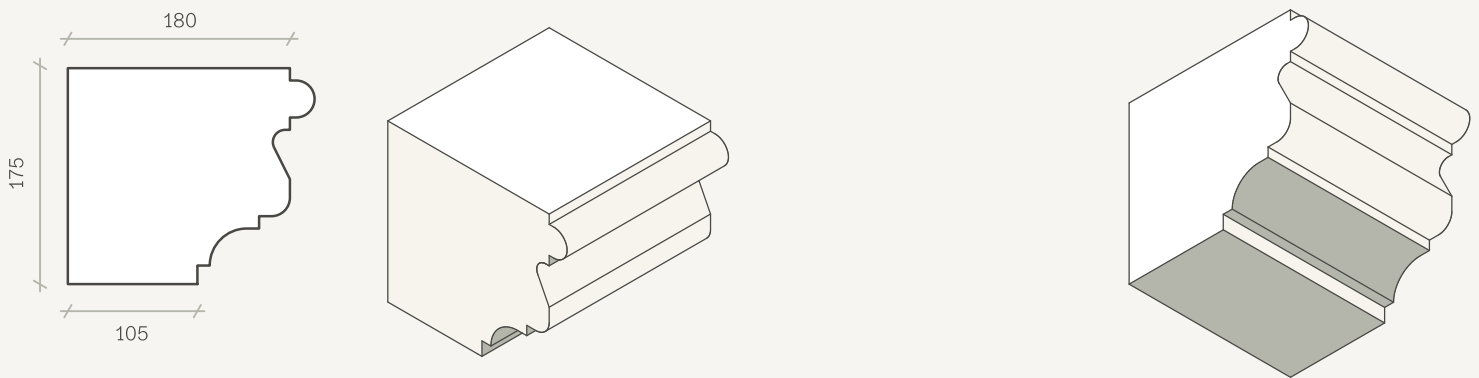
Medium Mould #01



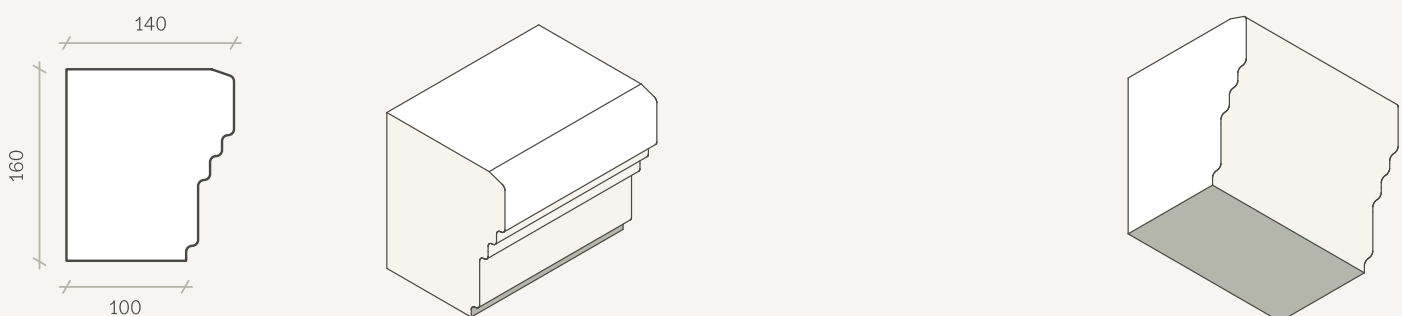
Medium Mould #03



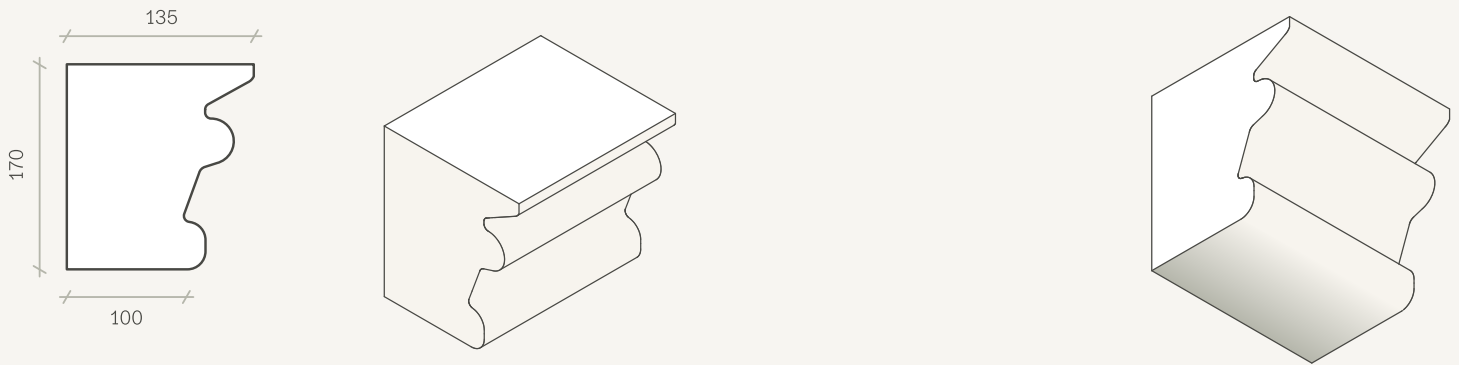
Medium Mould #04



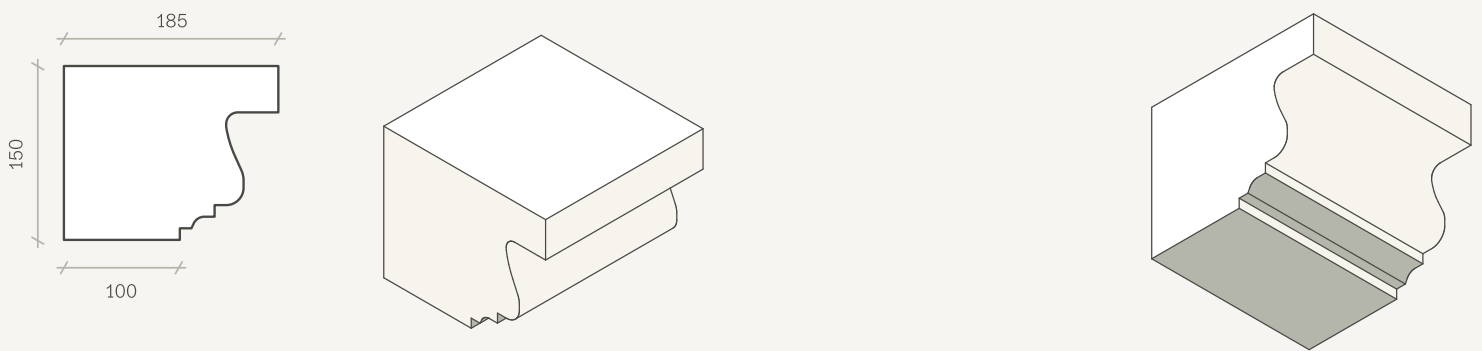
Medium Mould #07



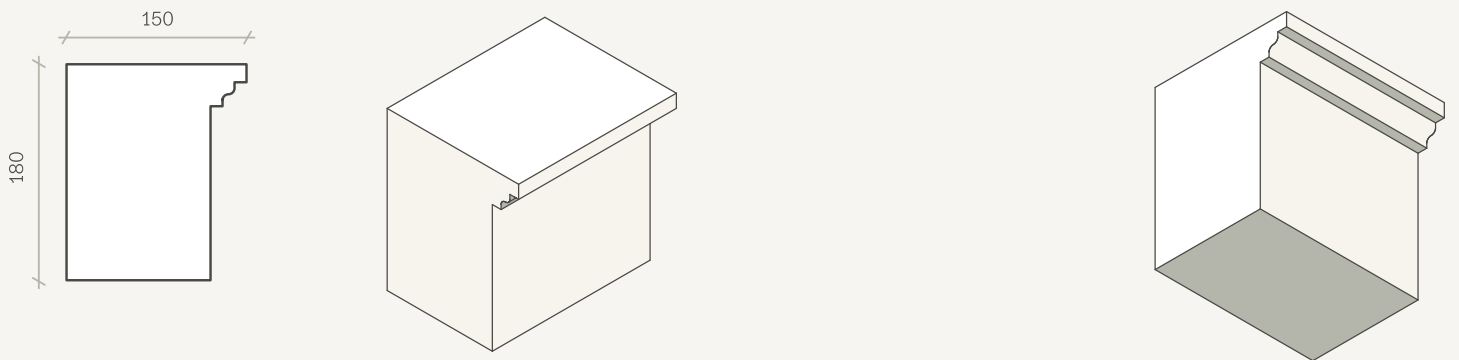
Medium Mould #08



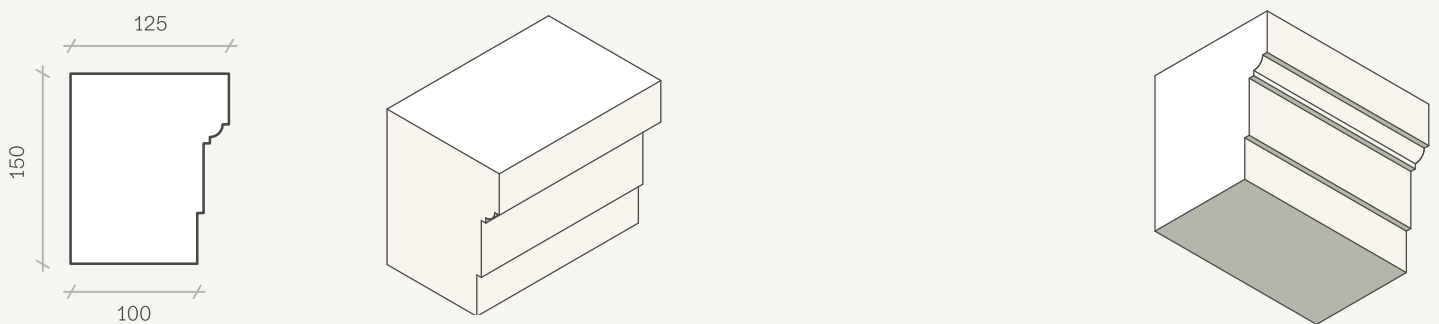
Medium Mould #09



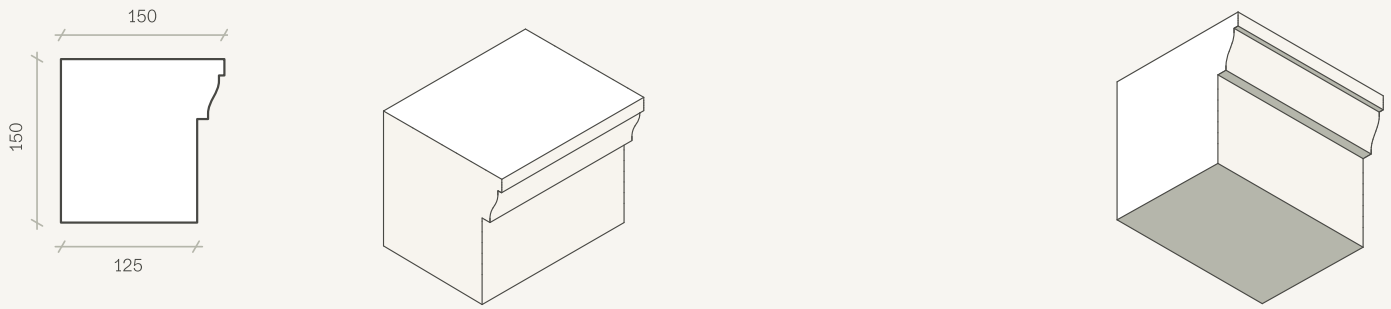
Medium Mould #14



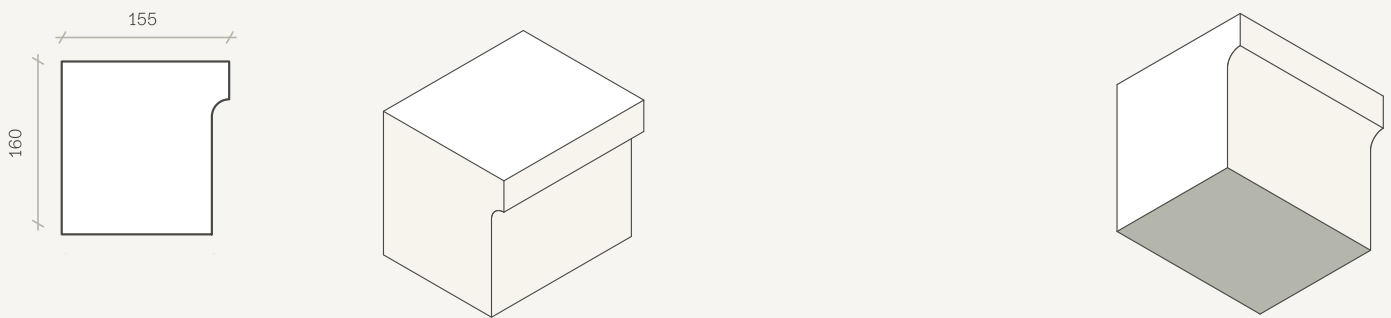
Medium Mould #16



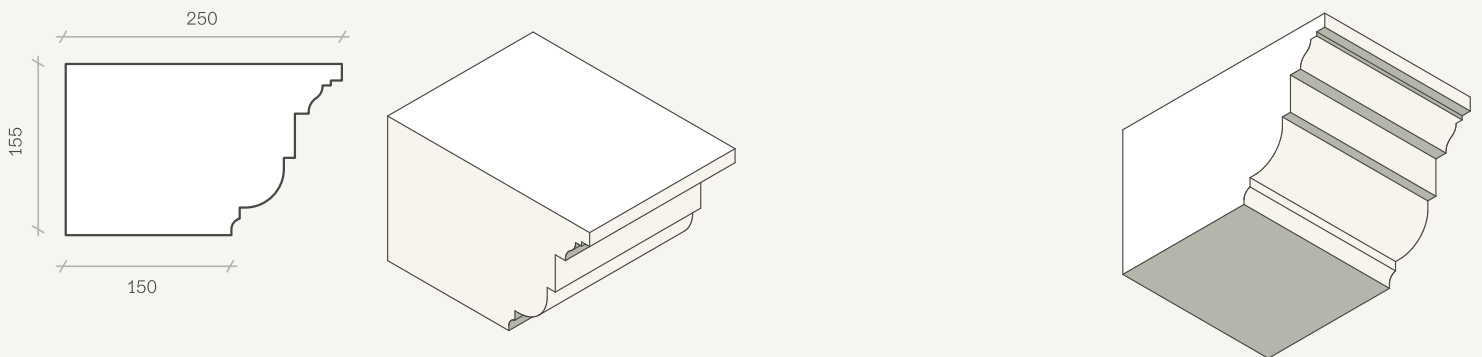
Medium Mould #19



Medium Mould #20

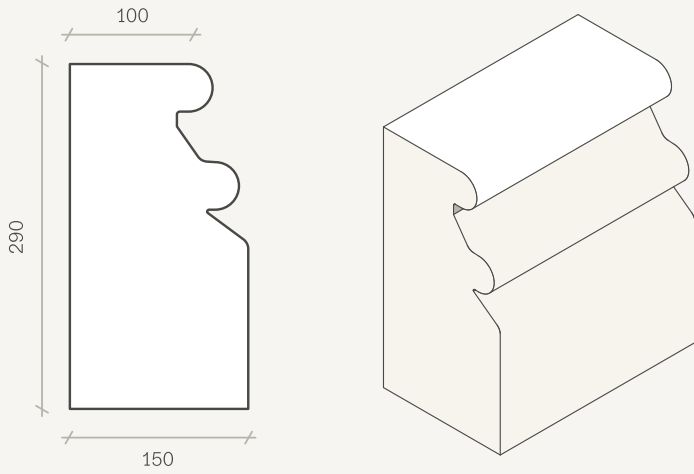


Medium Mould #21

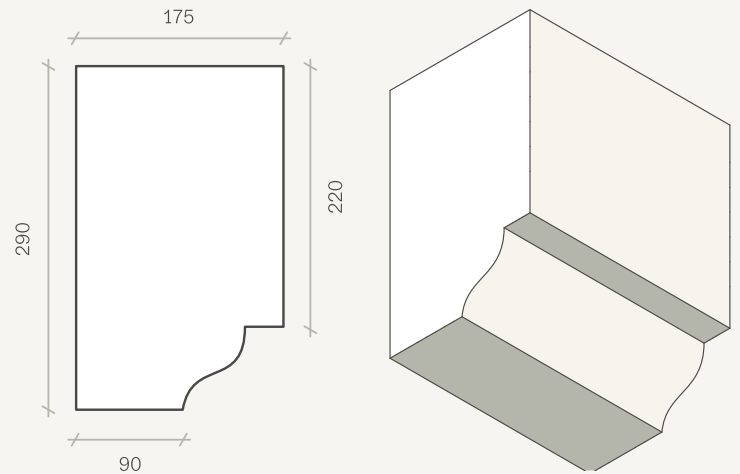


04 Large Mould Profiles

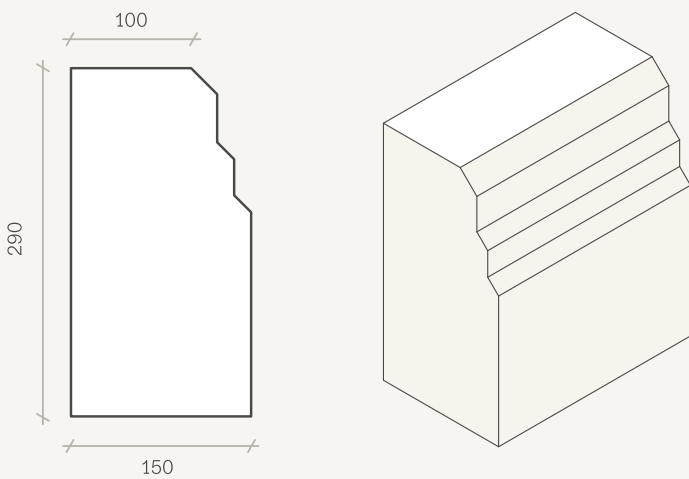
Large Mould #02



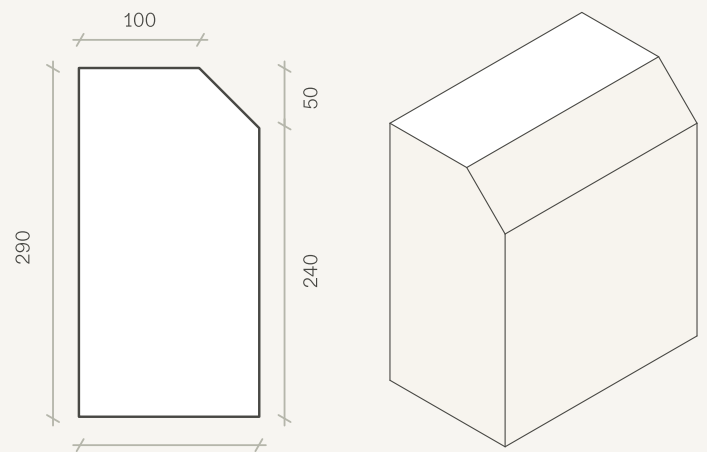
Large Mould #22



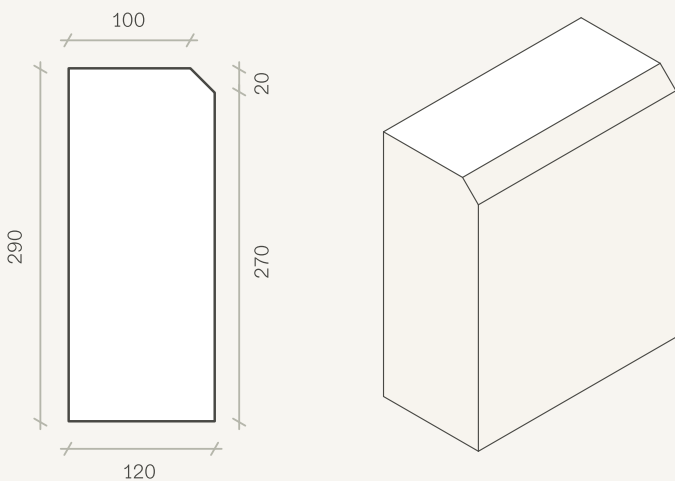
Large Mould #24



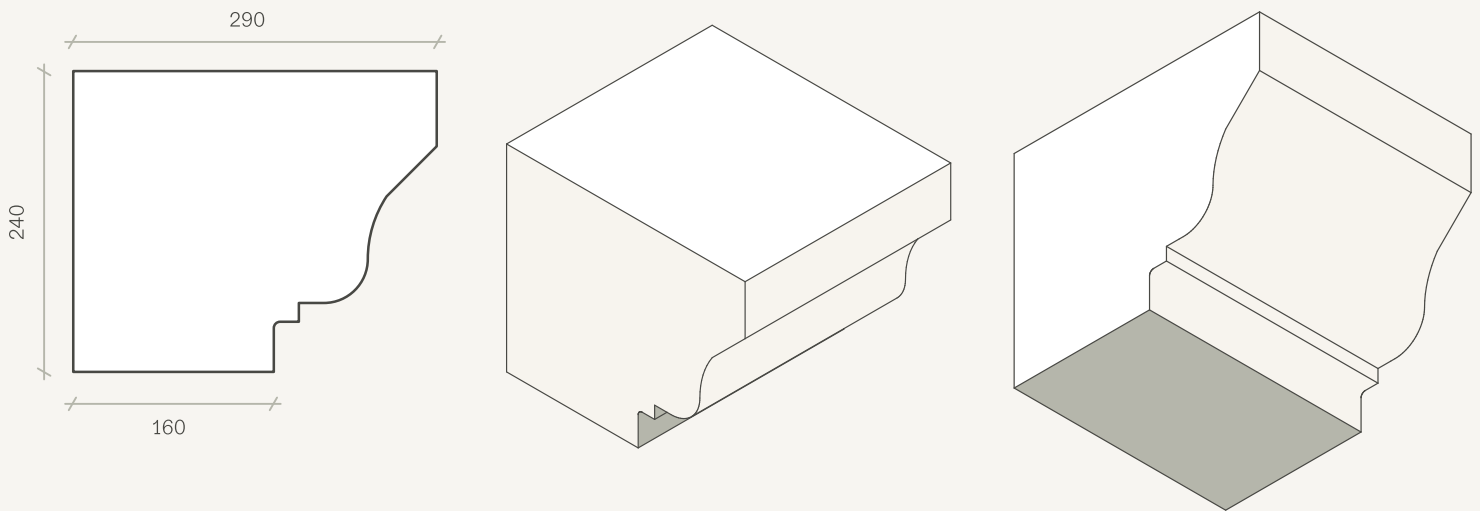
Large Mould #25



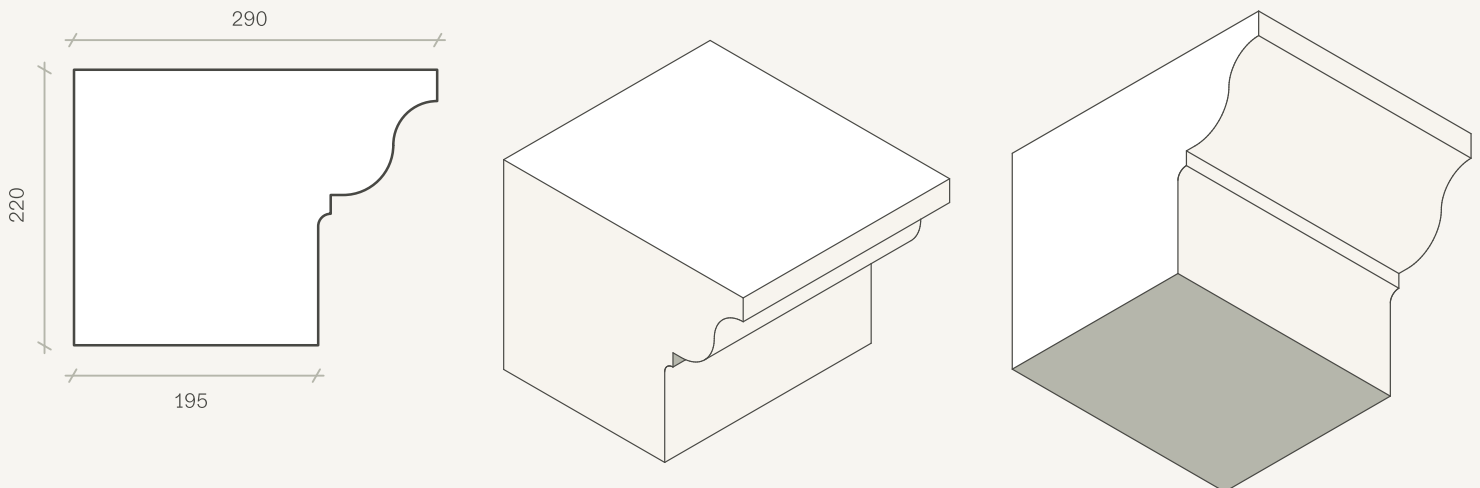
Large Mould #26



Large Mould #12



Large Mould #23



Special sizes and variations are available on request.

For pricing and size options: (08) 8721 8000 · sales@bruhnlimestone.com.au

Image, next page: Large Mould #23 in production.

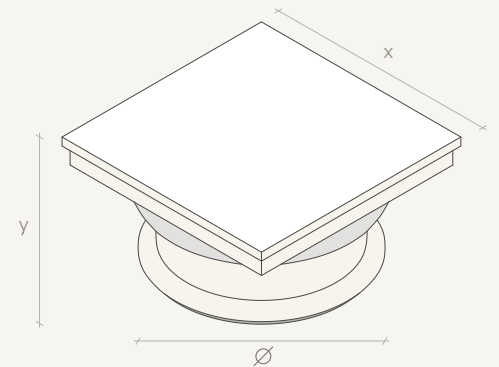


05 Columns

Bruhn Limestone Columns are crafted from solid Mount Gambier limestone and are available in a range of diameters and heights to suit both residential and commercial projects.

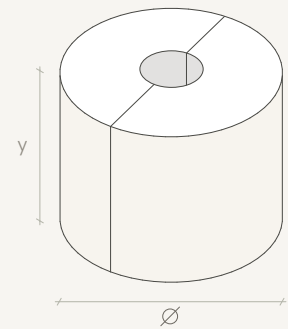
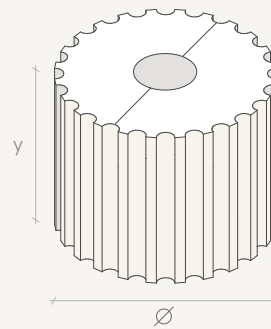
Capital

The crowning element of the column, where shaft meets structure and detail meets sky.



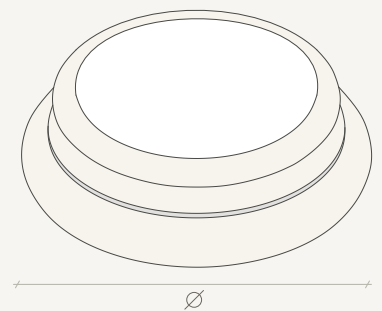
Column Drum

The main shaft of the column, solid Mount Gambier limestone shaped to diameter and height. Dispatched with a smooth finish, or fluted onsite for custom projects by independent stonemasons.



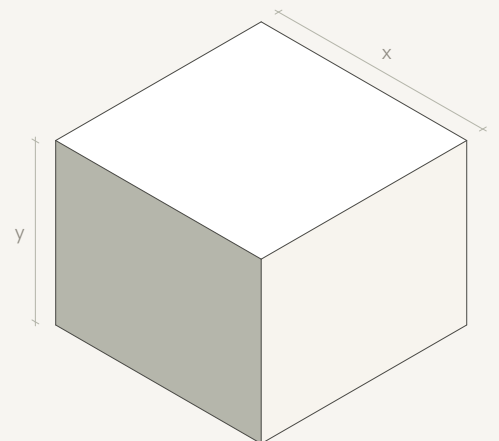
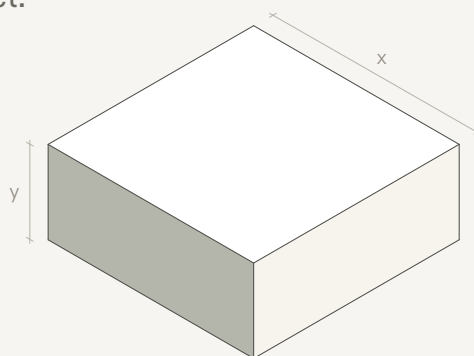
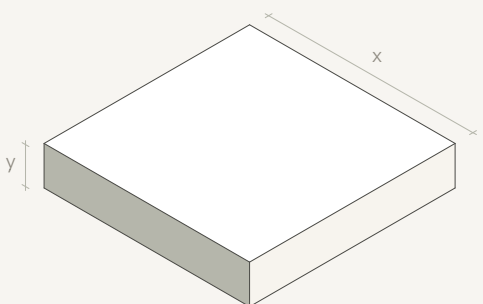
Base

A moulded transition from column to plinth, providing visual grounding and structural bearing.



Plinth

The lowest element of the column assembly, anchoring the form firmly to its surface. Tailored to each project.



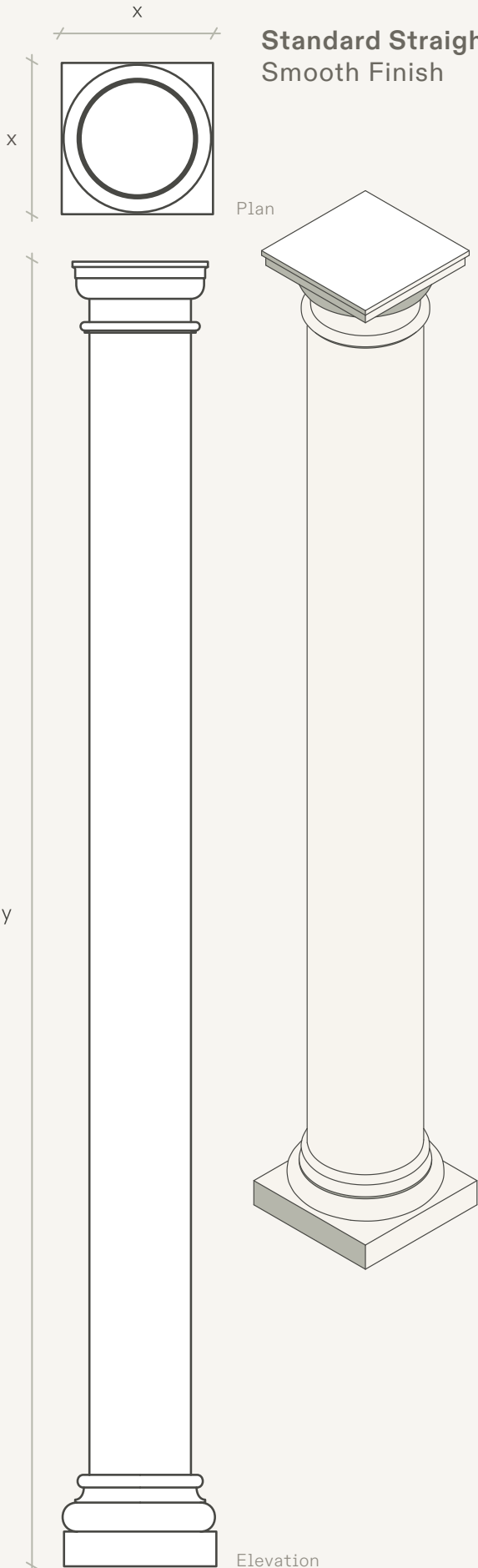
Image, next page: Column drum in production.



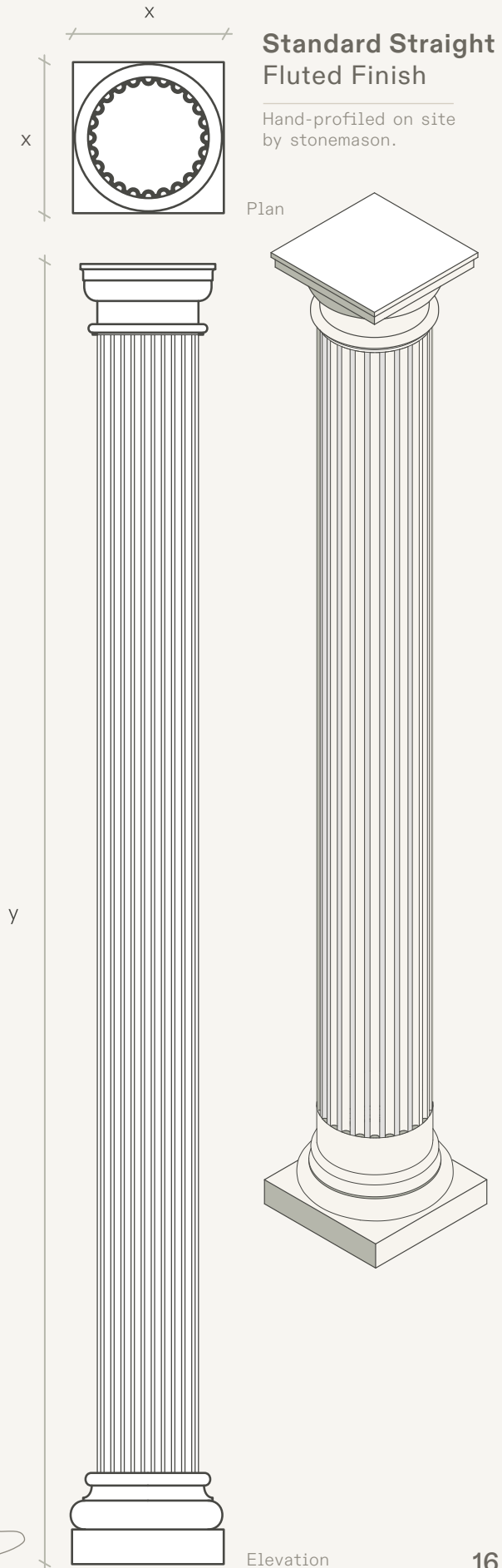
Standard Column

Column and sub-element dimensions are tailored to each project. Speak to our team about your project requirements.

Standard Straight Smooth Finish



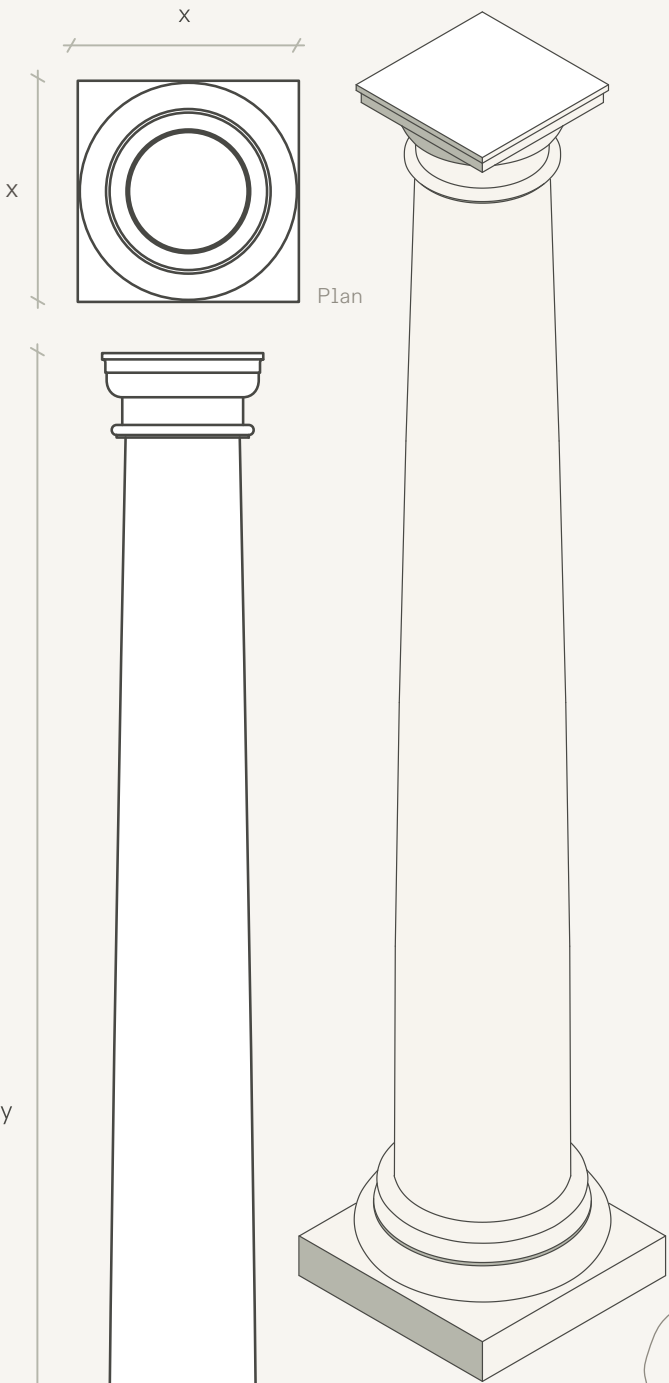
Standard Straight Fluted Finish



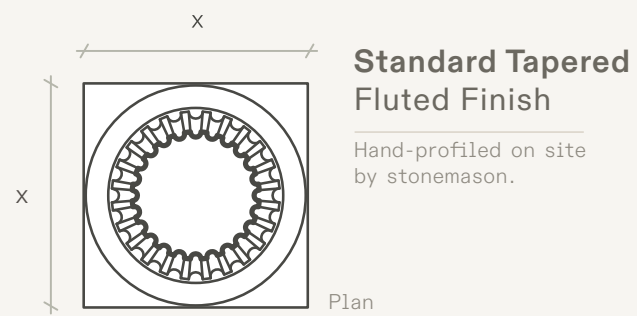
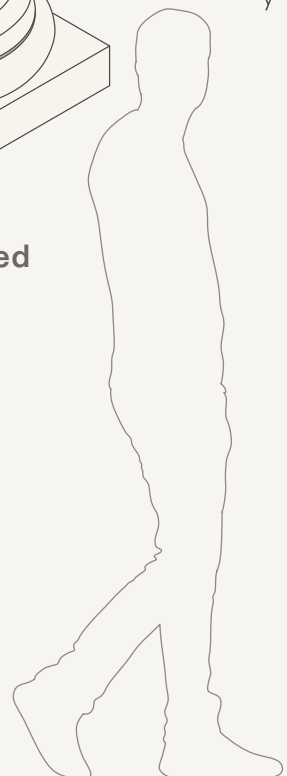
Hand-profiled on site by stonemason.

Standard Tapered Column

Column and sub-element dimensions are tailored to each project. Speak to our team about your project requirements.



Standard Tapered Smooth Finish



Standard Tapered Fluted Finish

Hand-profiled on site by stonemason.

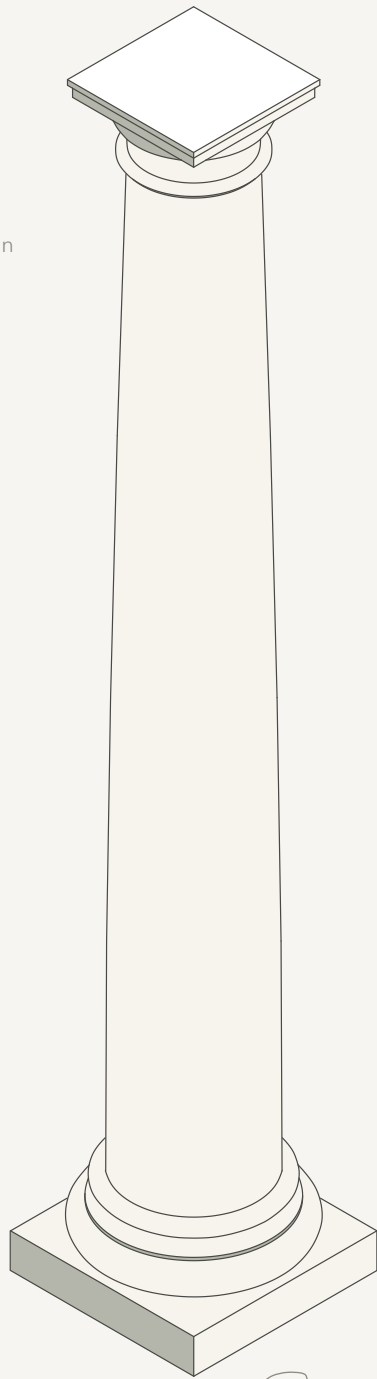
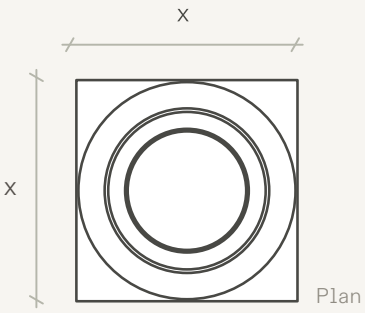


Elevation

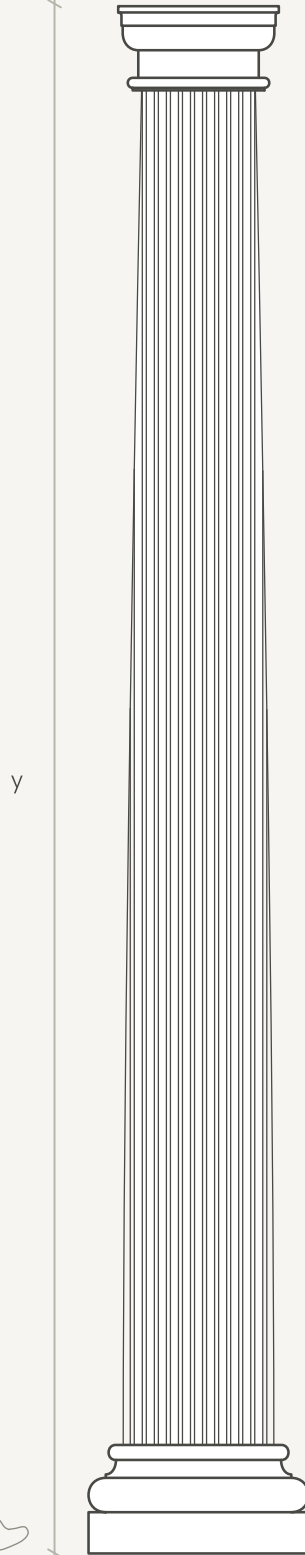
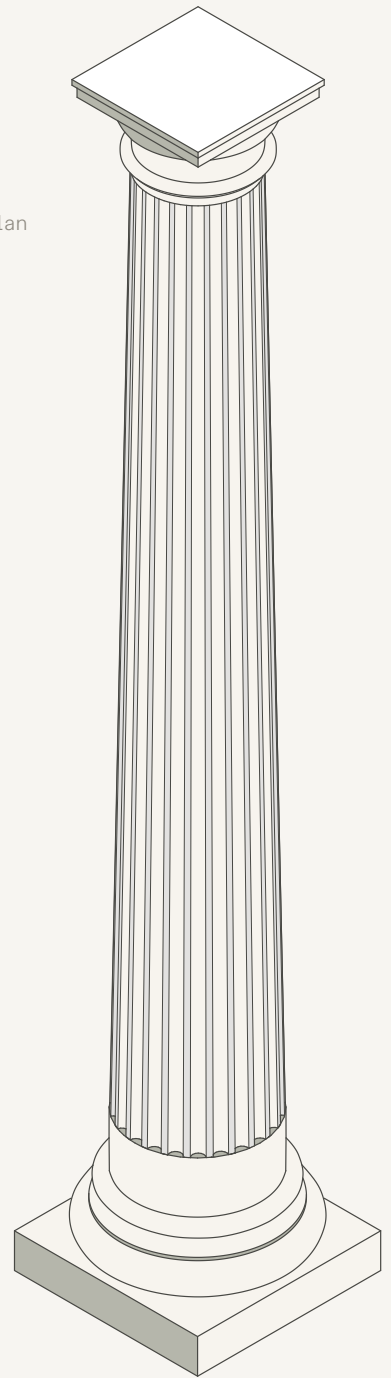
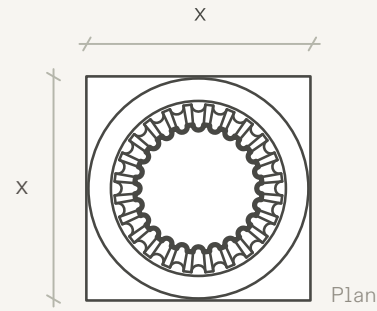
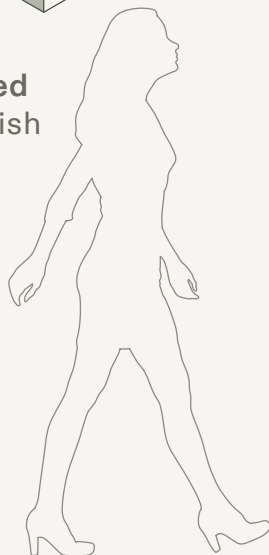
Elevation

Luxe Column

Column and sub-element dimensions are tailored to each project. Speak to our team about your project requirements.



Luxe Tapered Smooth Finish



Luxe Tapered Fluted Finish

Hand-profiled on site by stonemason.



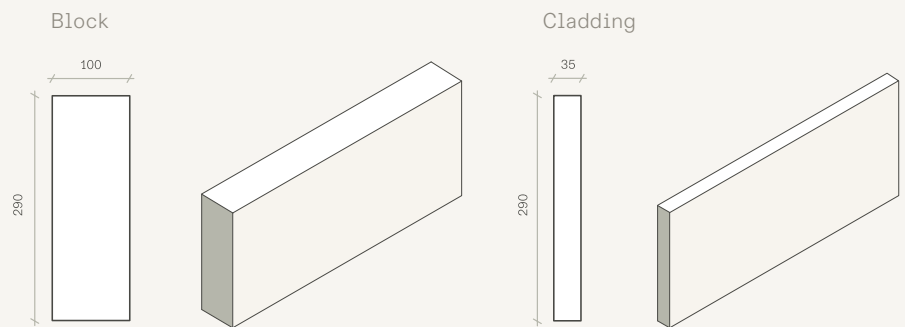


06 Face Finishes

Bruhn Limestone offers three distinct face finishes across their Mount Gambier ashlar block and cladding range, each suited to a different architectural expression. A fourth, 'rusticated' is hand-profiled on site.

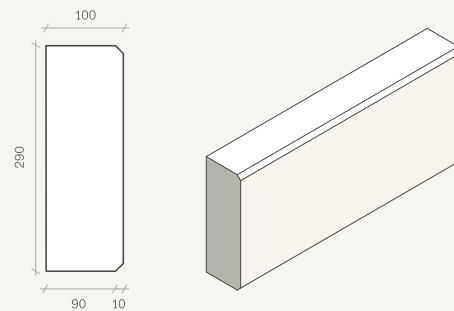
Plainface

A flat finished ashlar block with a smooth surface. Blocks cut with diamond tipped saws. Limestone offers a great solution for either a modern contemporary or classic looking finish.



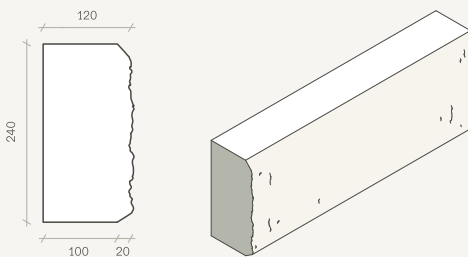
Bevel Edge

A smooth plainface stone but has 10mm bevelling on the top and base course. Finishes promotes the stone beautifully with the bevel framing each piece.



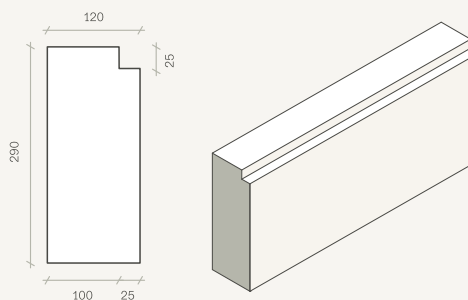
Rockface

A rough face finish which is created by guillotining the stone. Each piece has a guaranteed unique surface.



Rusticated

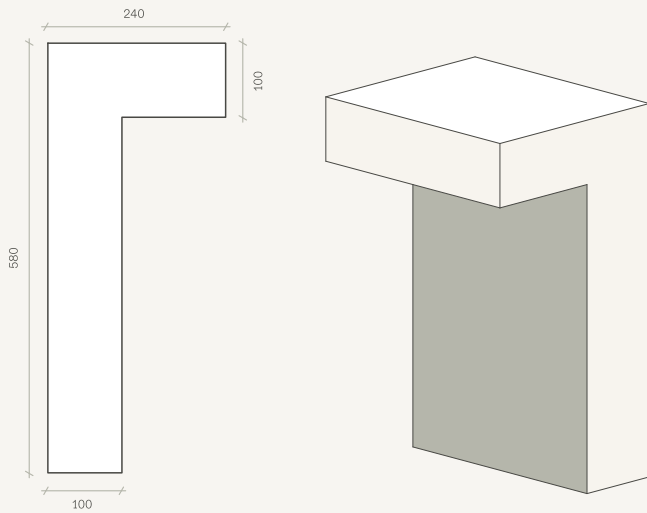
A smooth plainface stone with a 25mm square groove notched out along the top course. This finish is typically hand-profiled on site by the stonemason according to project design specifications



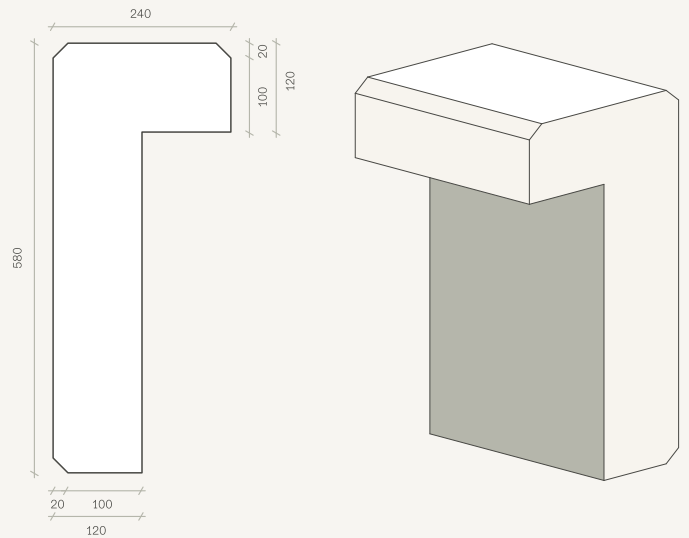
07 Cornerstones & Housing Blocks

Cornerstones and housing blocks are available in both plain and bevel edge profiles to match your chosen face finish.

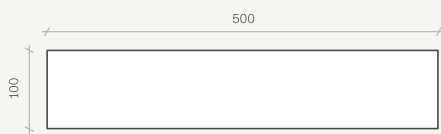
Plainface Cornerstone



Bevel Edge Cornerstone



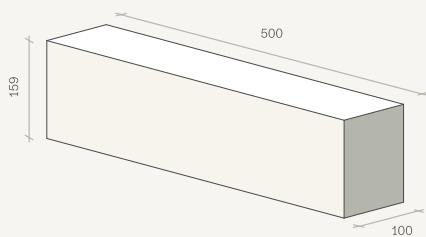
Housing Blocks



We offer a range of quarry-cut standard block sizes to suit a variety of projects.

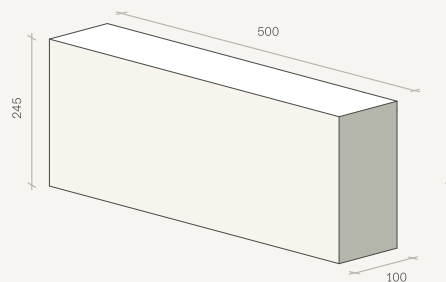
Small Housing Block

159mm H x 500mm W x 100mm D



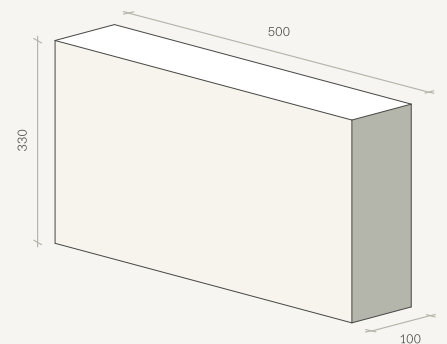
Medium Housing Block

245mm H x 500mm W x 100mm D



Large Housing Block

330mm H x 500mm W x 100mm D

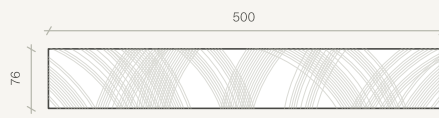
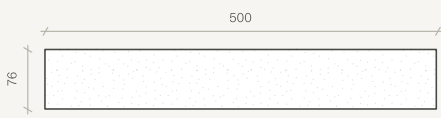


08 Sills

Our range of solid natural limestone sills are designed to complement any ashlar block or cladding installation. Our window sills provide a clean, durable solution for under-window applications.

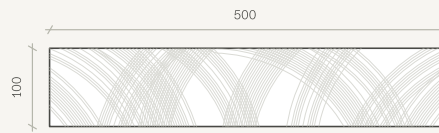
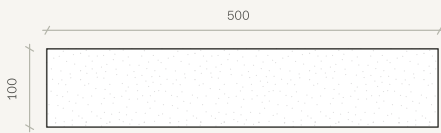
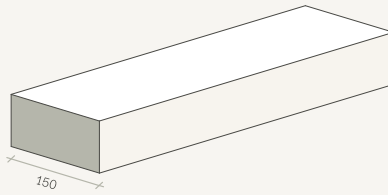
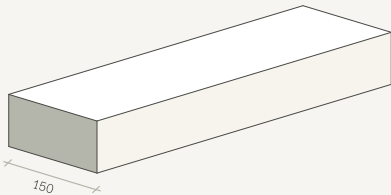
Quarry Cut

Diamond Cut



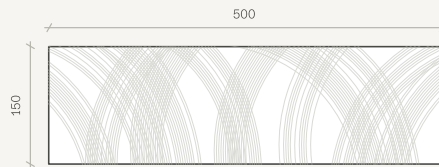
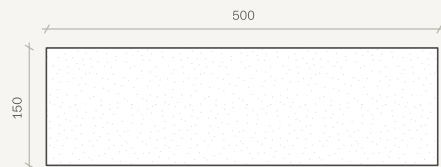
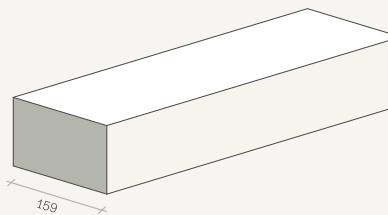
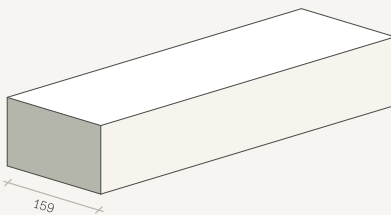
Small Sill

76mm H x 500mm W x 150mm D



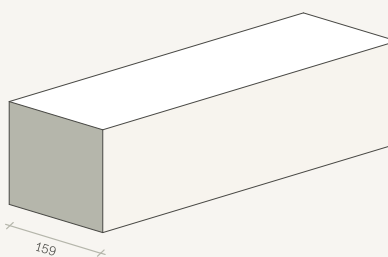
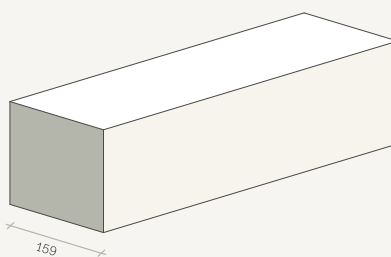
Medium Sill

100mm H x 500mm W x 159mm D



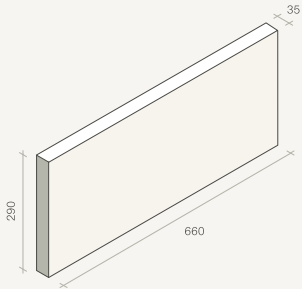
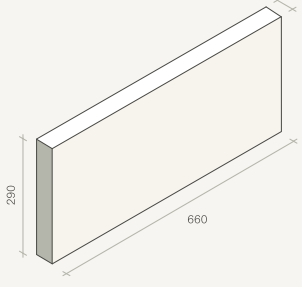
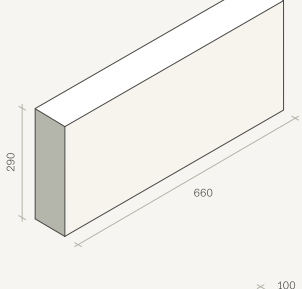
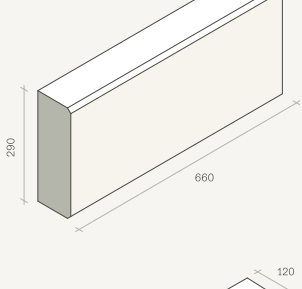
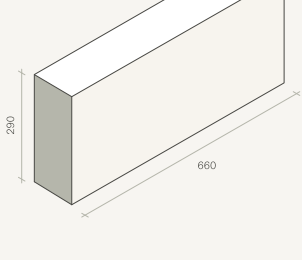
Large Sill

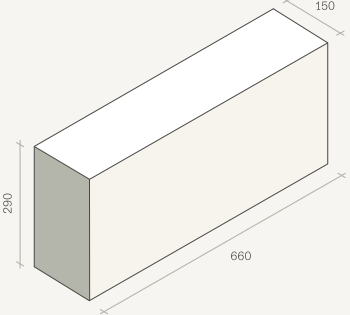
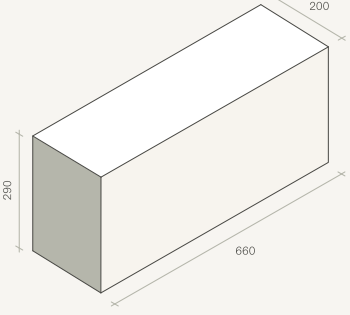
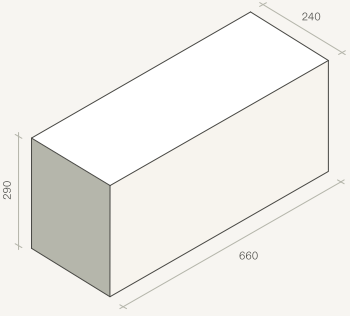
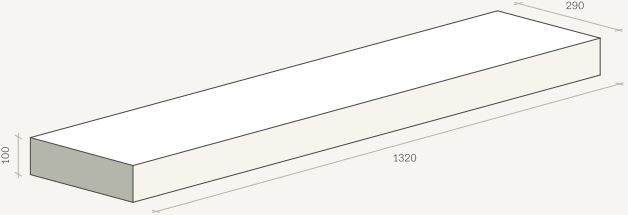
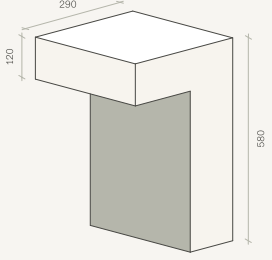
150mm H x 500mm W x 159mm D



09 Block Size Chart

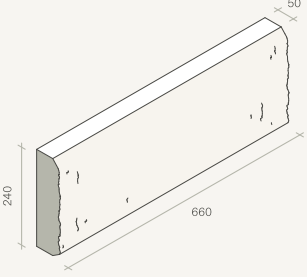
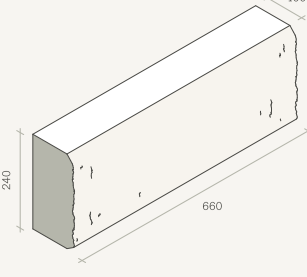
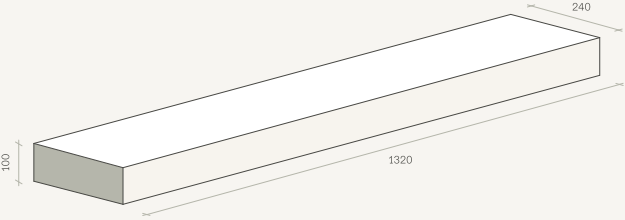
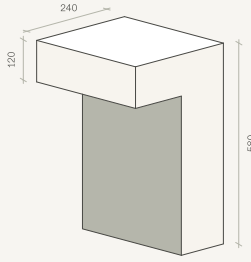
Standard cladding and ashlar block sizes. Custom sizes and cuts are possible – please speak to us.

Description	Size (mm)	Pieces per pallet	m ² per Pallet
290H			
Plainface Veneer	 290×660×35	160	32
Plainface Veneer	 290×660×50	160	32
Plainface Ashlar	 290×660×100	80	16
Bevel Edge	 290×660×100	80	16
Plainface Ashlar	 290×660×120	64	12.8

Description		Size (mm)	Pieces per pallet	m ² per Pallet
290H				
Plainface Ashlar		290×660×150	48	9.6
Plainface Ashlar		290×660×200	40	8
Plainface Ashlar		290×660×240	32	6.4
Window Sill		290×1320×100	33	-
Cornerstone		290×580×120	64	-

- 290mm course height represents 5 ashlar per m² wall area including mortar.
- Width reference represents mortar bedding surface.
- All square meterage referred to include 10mm mortar joints.
- Special Frogged ashlar are available for 5mm mortar joint finish.

Block size chart continues on next page.

Description		Size (mm)	Pieces per pallet	m ² per Pallet
240H				
<p>Rockface Veneer</p> <p>50mm wide structural block with textured split stone extending 20-30mm, project specific.</p>		240×660×50	80	13.33
<p>Rockface Ashlar</p> <p>100mm wide structural block with textured split stone extending 20-30mm, project specific.</p>		240×660×100	160	32
240H				
<p>Window Sill</p>		240×1320×100	33	-
<p>Cornerstone</p>		240×580×120	80	-

- 290mm course height represents 5 ashlar per m² wall area including mortar.
- Width reference represents mortar bedding surface. Rockface overhangs approx. another 20mm.
- All square meterage referred to include 10mm mortar joints.
- Special Frogged ashlar are available for 5mm mortar joint finish.

Independent testing by Curtin University, CSIRO, the University of South Australia and Stones Initiative confirms Bruhn Mount Gambier Limestone as a high-performance building material.

10 Thermal Performance

Bruhn Limestone offers three times the thermal qualities of brick. Data supplied by Curtin University of Technology.

Tests performed in accordance with AS/NZ 4859.1.

Thermal Conductivity & R-Values		Comparison with other materials	
Thermal Conductivity (k)	$0.49 \pm 0.04 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$	Bruhn Limestone 100mm	R0.20
R-value @ 100mm	0.20 ± 0.03	Brick 90mm	R0.05 - R0.07
R-value @ 120mm	$0.25 \text{ m}^2\cdot\text{K}\cdot\text{W}^{-1}$	Concrete Block 100mm	R0.07
R-value @ 140mm	$0.29 \text{ m}^2\cdot\text{K}\cdot\text{W}^{-1}$	Mud Brick 300mm	R0.27
Sample Density	$2360 \pm 50 \text{ kg/}$		
Mean Test Temperature	$23.7 \pm 0.1^\circ\text{C}$		

Calibration Reference: NIST SRM 1453
 Sample: Bruhn Limestone, Second Strata
 Measurement Reference: 0091, 0092, 0093
 Meeting Area (A): 0.038 m²
 Date: 20/05/05 - 26/05/05
 Cold Plate Temp (T_c): 14.9 ± 0.1°C
 Hot Plate Temp (T_h): 32.6 ± 0.1°C
 Temperature Difference: 17.8 ± 0.2°C
 Ambient Temp: 21.0°C
 Ambient Humidity: 45.2%

BRUHN

FRL

120/120/120
Fire Rating

3.9

MPa Compressive
Strength (Dry)

3x

The thermal
quality of brick

0.49

W/K Thermal
Conductivity

A LEGACY IN LIMESTONE.

11 Acoustic Performance

This study examined a specimen of a single-leaf wall built of Bruhn quarry second strata sawn limestone blocks.

Wall Specification

- Nominal Thickness: 120 mm
- Mass per unit area: 152 kg/m²
- Block dimensions: 660 × 290 × 120 mm
- Mortar: Sand / Lime / Cement 6:1:1

One/Third-octave Band Centre Frequency (Hz)		
100	125	160
200	255	315
400	500	630
800	1000	1250
160	2000	2500
3150	4000	5000

Airborn Sound-Transmission Loss (dB)		
32	32	31
32	33	32
35	36	39
43	44	47
50	52	54
57	57	58

12 Compressive Strength

Supplied by Stones Initiative and Materials Testing Group Pty Ltd

Water absorption and bulk specific gravity were determined in accordance with ASTM C97-15 “Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone”. The specimens had been dried at 60 ± 2°C for 48 hours followed by soaking at 22 ± 2°C for a further 48 hours.

The compressive strength of each specimen was determined in accordance with AS/ NZS 4456.4:2003 “Masonry units and segmental pavers and flags – Methods of test – Determining compressive strength of masonry units”.

Property	Mount Gambier Limestone
Bulk Specific Gravity (kg.m-3)	1300 (1273 - 1318)
Water Absorption (% by weight)	28.0 (26.8 - 29.4)
Compressive Strength Dried (MPa)	3.9 (3.8 - 4.0)

13 Fire Resistance

CSIRO Australia, Division of Building, Construction and Engineering. AS 1530.4-1990. Sponsored Investigation No. FSV 0335, Test No. NFBASV1017.

FLR Test Performance Results

133 minutes

Structural Adequacy

127 minutes

Integrity

134 minutes

Insulation

Specimen

Single-leaf loadbearing limestone block wall
3000 mm (H) × 3000 mm (W) × 125 mm thick

Blocks – 290 mm H × 600 mm L × 125 mm W (Laid in stretcher bond with full mortar joints)

Mortar – 1 cement : 1 lime : 6 sand

Total load – 90 kN

Sponsored Investigation No. FSV 0335
Test No. NFBASV1017

Test Standard

Australian Standard AS 1530.4-1990

‘Methods for fire tests on building material, components and structures - Part 4: Fire resistance tests’

Sponsored by – Bruhn Limestone
295 Commercial Street West, Mount Gambier

Testing – CSIRO Australia
Division of Building, Construction and Engineering

For the purposes of building regulations in Australia, the FRL of the test specimen was 120/120/120. For the purpose of AS 1540.4-1990 the results of these fire tests may be used to directly assess fire hazard.

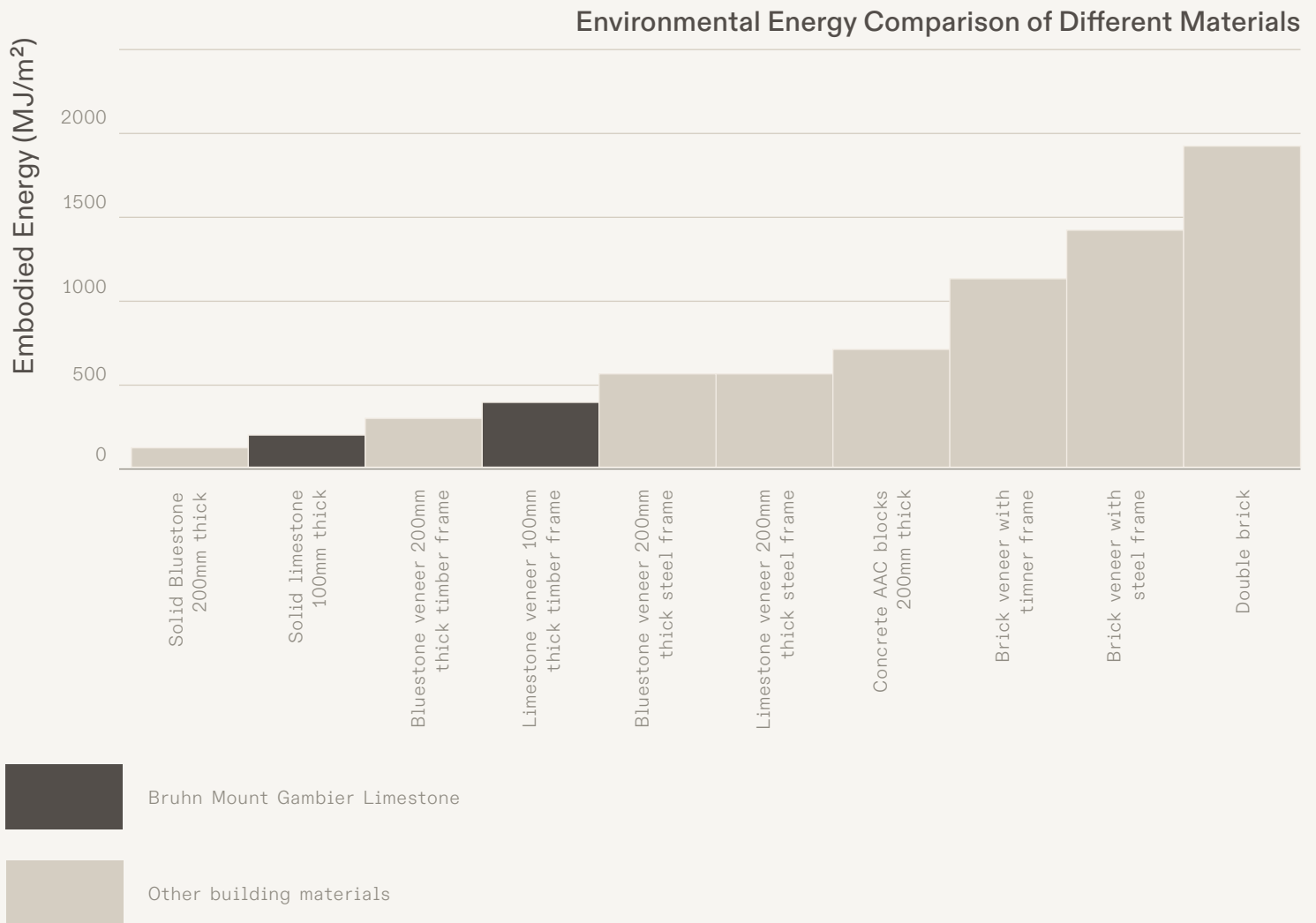
14 Embodied Energy

A comparison of the Embodied Energy of walling systems per square metre.

Supplied by University of South Australia

Embodied energy is the energy consumed by all of the processes associated with the production of a building, from the mining and processing of natural resources to manufacturing, transport and delivery of the product.

Below is a comparison of the Embodied Energy of walling systems per square metre. BRUHN Limestone has HIA Green Smart accredited personnel.



15 Service & Delivery

Bruhn Limestone operates their own delivery vehicles to ensure products are professionally and carefully handled direct from quarry to building site.

Direct quarry to site delivery

All pallets are strapped and shrink-wrapped, ensuring product is managed and well protected, guaranteeing quality stone on delivery. All WHS standards in accordance with loading and delivery are accredited and comply with government mass management regulations.

Compliance & Safety

We pride ourselves as being in the forefront of the industry when it comes to compliance with both the Occupational Health & Safety Act and the Compliance & Enforcement Act.

Technical Support

Bruhn Limestone have licensed stonemasons on staff that can assist with all planning, technical and construction enquiries. We maintain a comprehensive list of qualified stonemasons across each state of Australia.

HIA GreenSmart Accredited

Bruhn Limestone has HIA GreenSmart accredited personnel, supporting your project's sustainability credentials.



BRUHN

A LEGACY IN LIMESTONE.

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For all product and specification enquiries
contact your Bruhn Limestone representative or
visit our website.