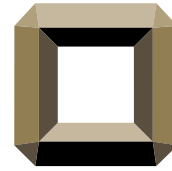


**OAMARU
STONE**
ARCHITECTURAL LIMESTONE

Technical Information





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Ōamaru Stone Veneers

Specifications for handling and laying other than set out below shall comply with relevant building bylaws.

Ōamaru Stone is a natural material, not a manufactured article and its performance as a building material has been proven over the past 100 years.

When the stone is removed from the quarry, it has a natural moisture content, and when the milling of the stone is complete it will stay damp and soft for some considerable time.

When milling of the stone has been completed it is stacked on timber pallets up to 1.60 tonne in weight. These pallets have the top covered when they leave the quarry but are not usually wrapped to allow air movement around the stone and to allow the dispersion and evaporation of water. If the stone has been shrink wrapped for transportation purposes, the wrapping should be removed immediately the stone is placed on site. It is important to remember that as the stone dries it becomes harder and stone shall not be laid until 3-4 weeks after milling. If stones are not sufficiently hard enough they are more easily damaged.

On site pallets should be stacked clear of mud and have any shrink wrap removed. This will allow for side ventilation to continue the drying process.

The top covering of the pallets can remain in place to stop weather penetration. Foundations will need three coats of D.P.M. such as Mulseal applied to form a membrane prior to the laying of the first course of stone. This is essential to prevent any dampness rising into the stone.

There may be a slight variation in the heights of the stone after milling, and the layer should have random checks on sizes prior to setting out story rods. Maximum bed depth shall be 6-8mm.

Mortar Mix

Sand may be washed beach sand or clean sharp sand which has been passed through a 5mm sieve. Using 6 parts of dry sand to 1 part hydrated lime, thoroughly mix and store dry until required for use. Use 9 parts of this prepared mix, add 1 part of cement, thoroughly mix dry, prior to adding water. Add sufficient water for the mix to become pliable.

Joggling

It is recommended that all stones over 100mm high shall be joggled or have a vee cut in the perpendicular joint. This vee cut shall be a depth of approx. 12mm and be approx. 60mm wide in the centre of the 100mm blocks.

Ties

Ties shall comply with all provisions of NZS 4210. Ties must be heavy duty ties with a durability that complies with NZS 4210. The ties must be contained within the middle of the mortar bed. The ties must be located at a maximum horizontal spacing of 600mm and a maximum vertical spacing of 400mm. This equates to approximately 2 ties per block or 11 ties/m². The ties must be fixed to studs and nailed to the stone at all times.

Pointing Mix

Use 2 parts of dry sharp sand, to 1 part hydrated lime, to 1 part dry Oamaru Stone dust. Mix thoroughly and pass through a 1/6 sieve. Use 4 parts of this mixture to 1 part of white cement and add water to suit.

Weep Holes And Ventilation

The normal method to provide weep holes is by omitting mortar from part of the vertical mortar joints. With this method, the weep hole should be at least 75mm high and be provided in each vertical joint on the bottom course. The spacing of the weep holes must not exceed 750mm. Ventilation must be provided around the top of the Oamaru Stone veneer. This may be achieved in a similar manner to that used to form the weep holes.

Laying Instructions

After the foundation has received the damp proof coating and all lines set out and prepared, spread mortar as for normal brick or block work. Lay first course to line, do not wet blocks, perpendicular joints to be no greater than 6-8mm.

When the first course is laid in the area of work, vee joints or joggles shall be filled prior to laying the next course of stone. To fill these vee joints take mortar and add water to thin this mix to a grout. Pour this grout into the vee joint with the use of a dipper, topping up till completely filled prior to bedding the next course.

In laying the next course, only spread sufficient mortar bed for one stone at a time. Before placing this mortar bed, the stone shall be wet by pouring water from a dipper.

As each course is laid repeat the system to fill all vee joints.

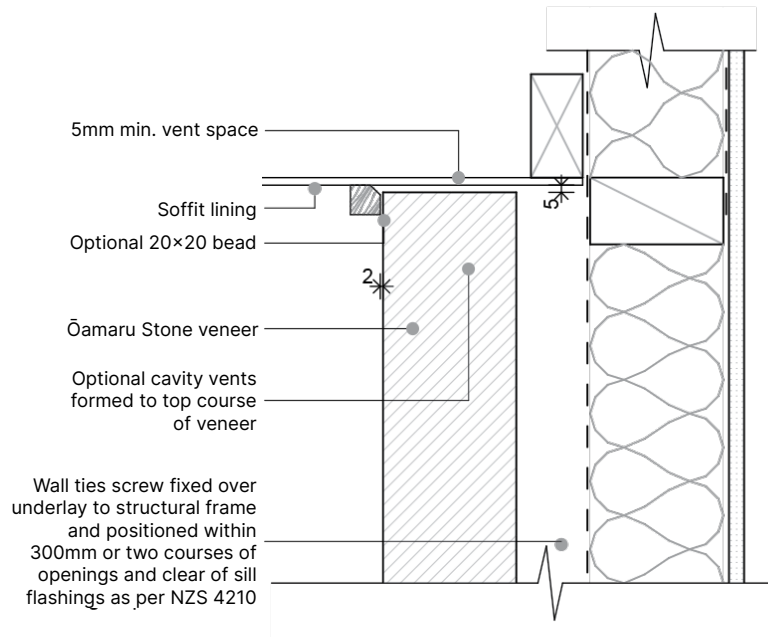
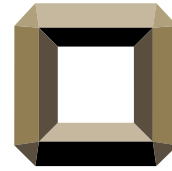
Bedding mortar should not be used for pointing.

All joints shall be raked to a depth of approx. 8mm to allow for pointing.

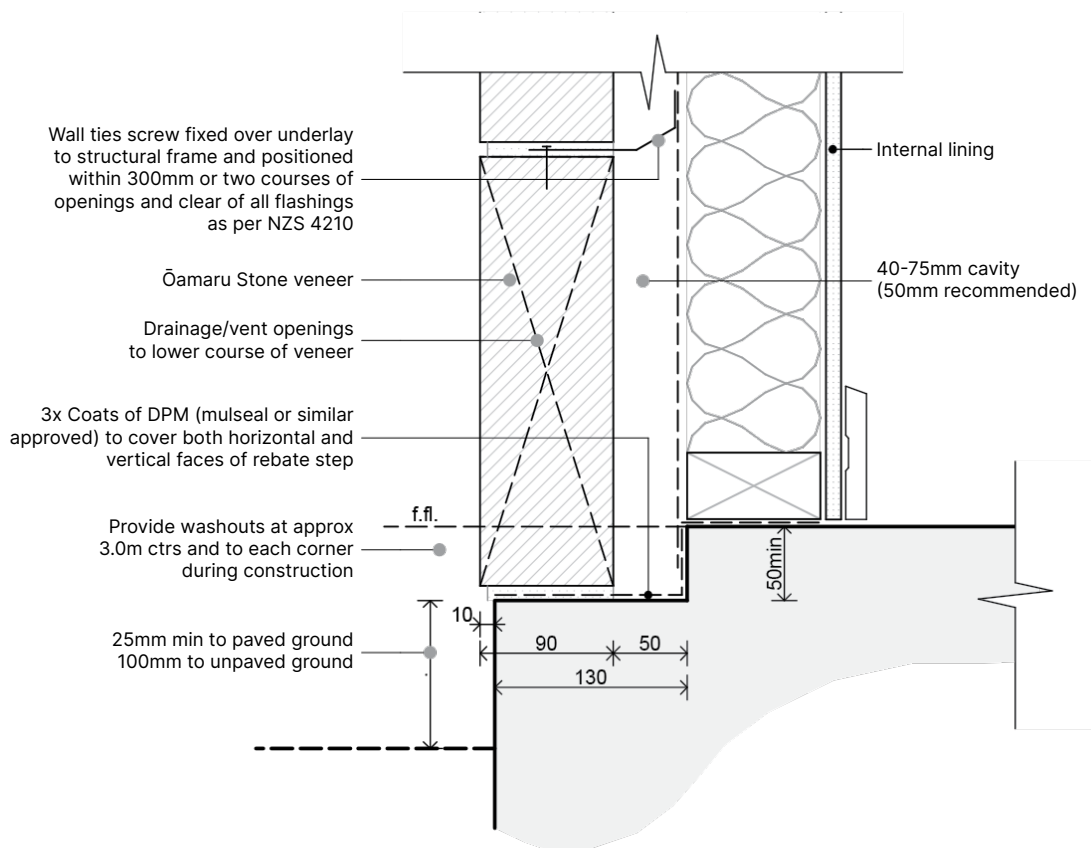
Prior to pointing it is possible to take a tool such as a rasp and straighten all horizontal and perpendicular joints. This gives nice clean edges to the stone and removed any minor chipping. Once these joints and lines are straight, pointing may continue.

At no time shall the veneer bed width be less than 70mm.

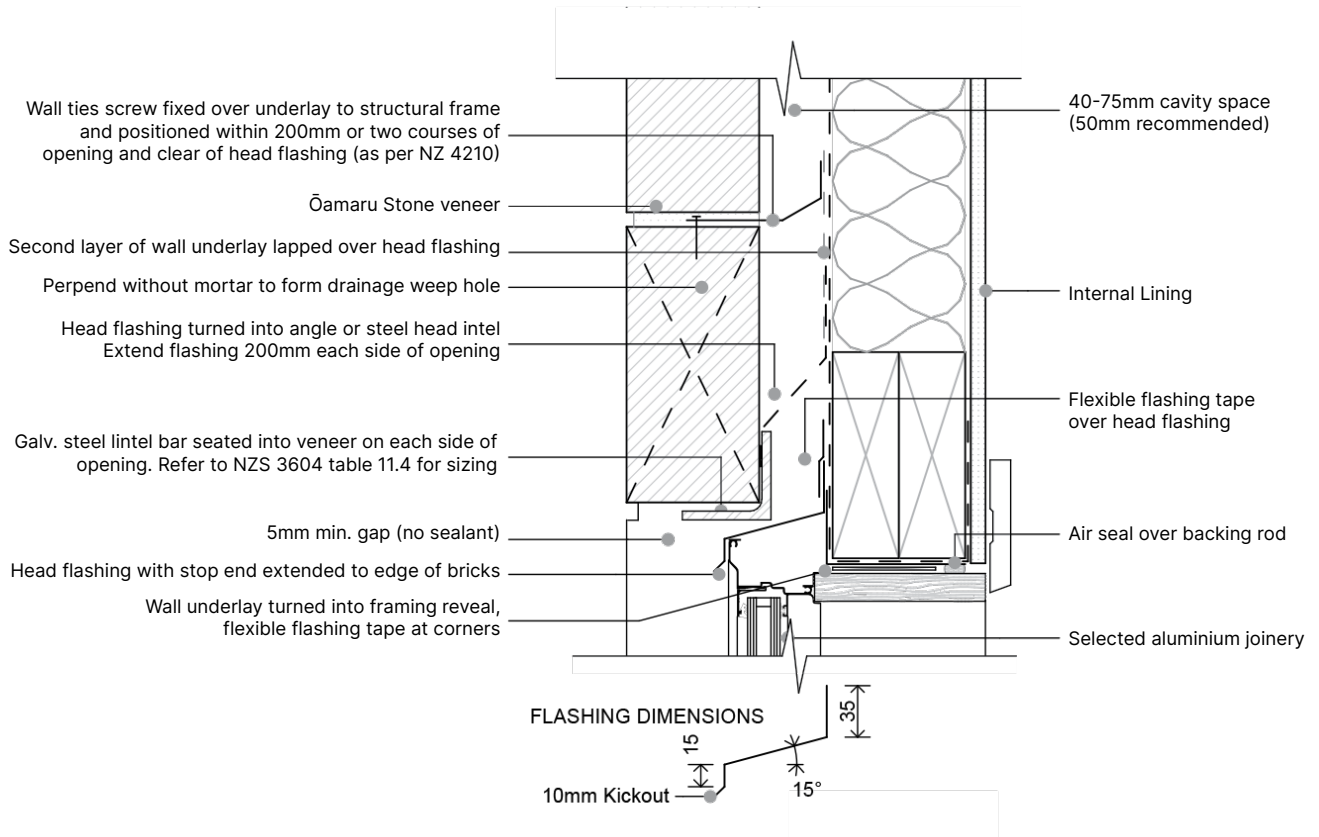
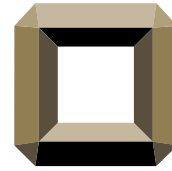
We recommend cleaning the stone at the completion of the build, organic growth which may have occurred on long builds needs to be removed with the use of our recommended cleaner mix (Hypostat/ Moss Kill). Once the presentation is acceptable and the weather is dry the stone should be sealed to lock in the natural beauty of the stone for years to come with our recommended sealer Aqualux S.



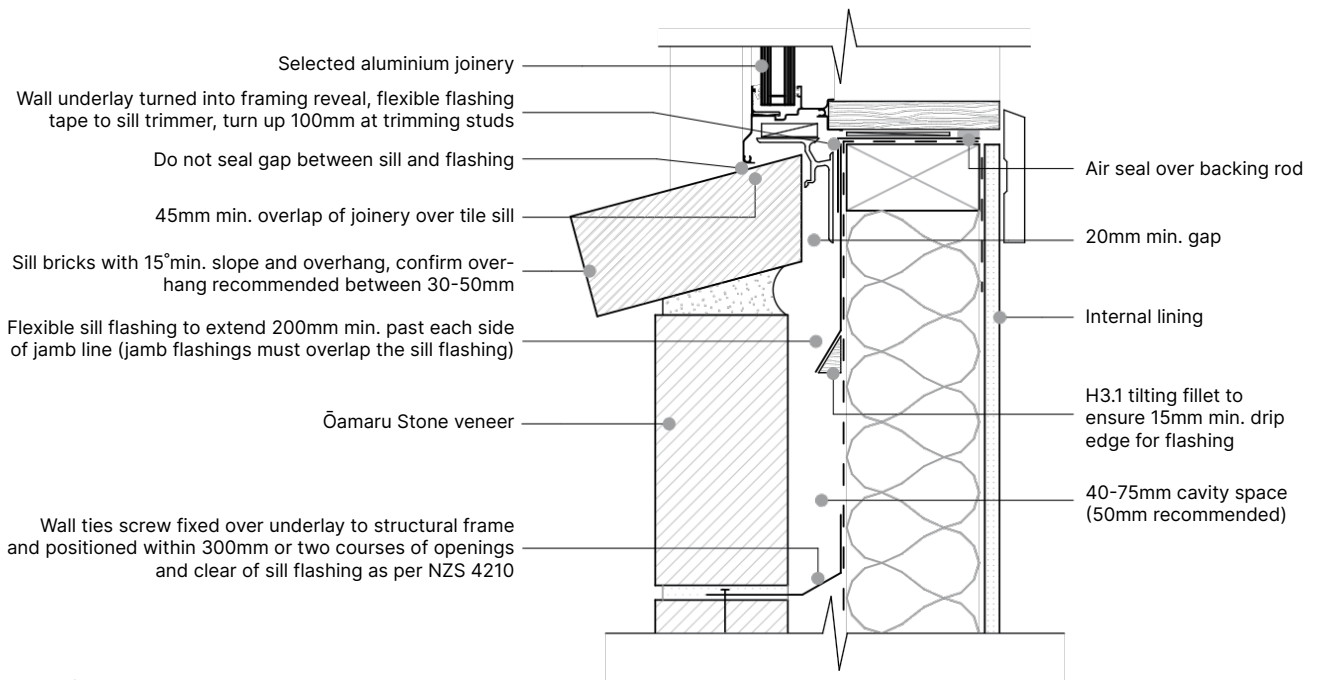
D-01 | ŌAMARU STONE -SOFFIT DETAIL
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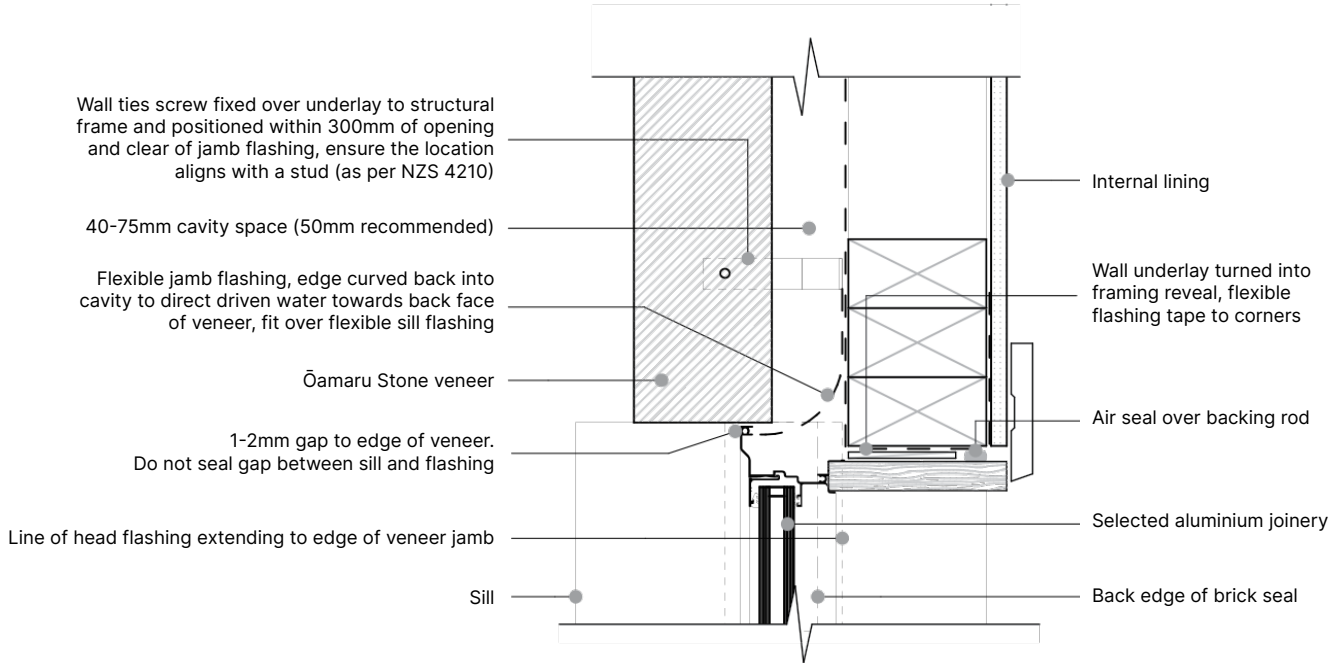
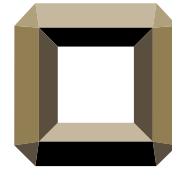
D-02 | ŌAMARU STONE -BASE DETAIL
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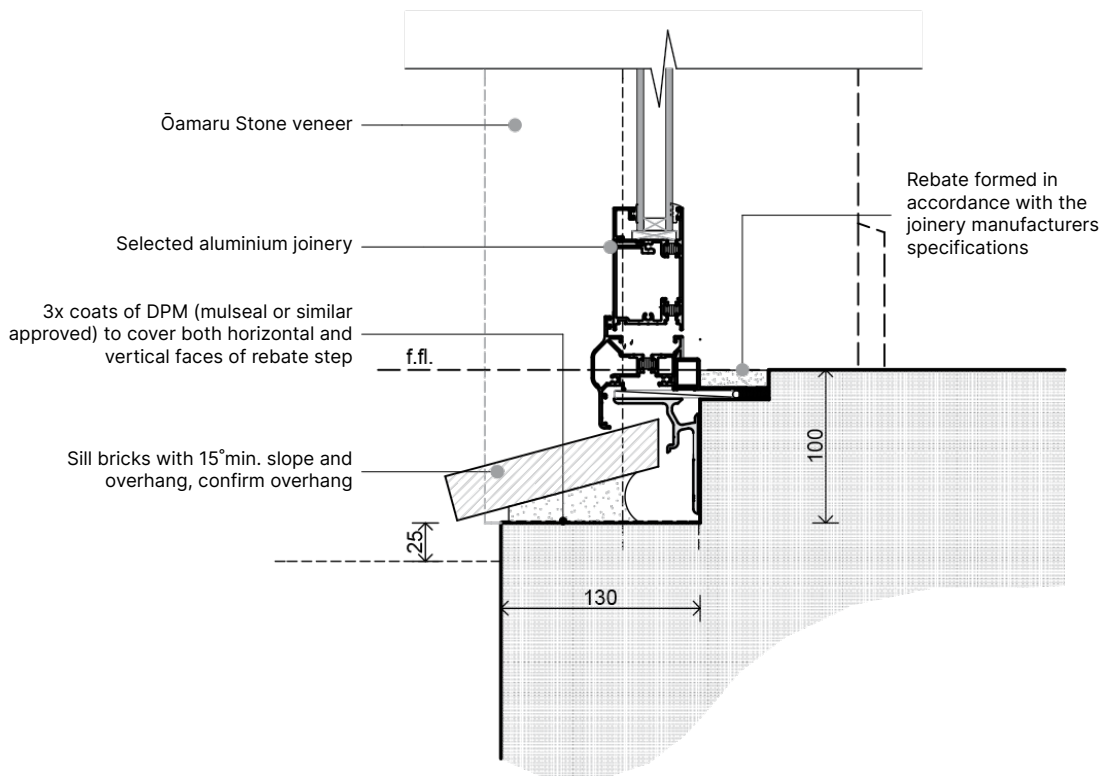
D-03 | **ŌAMARU STONE-HEAD DETAIL**
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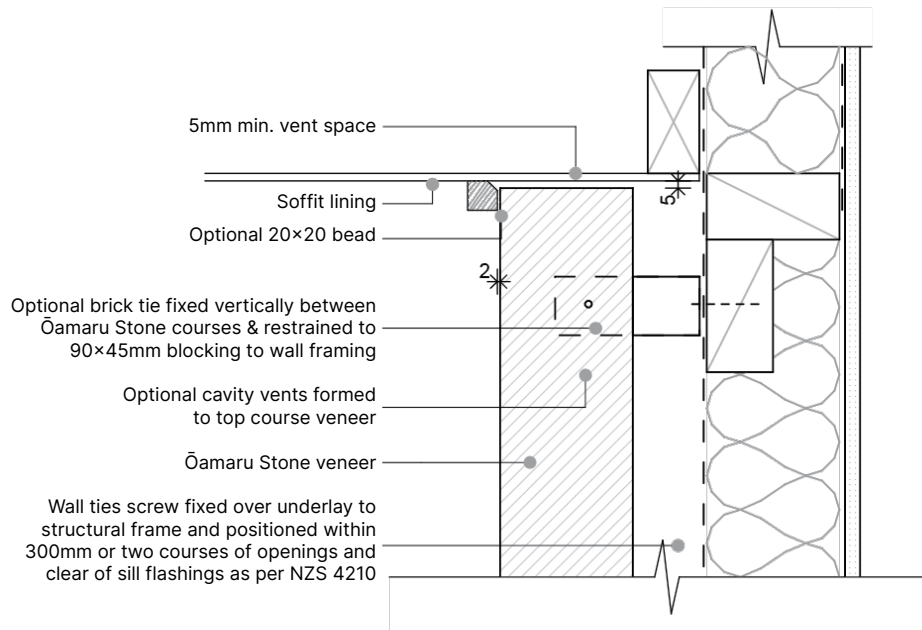
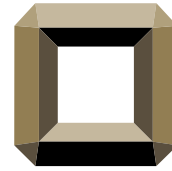
D-04 | **ŌAMARU STONE-SILL DETAIL**
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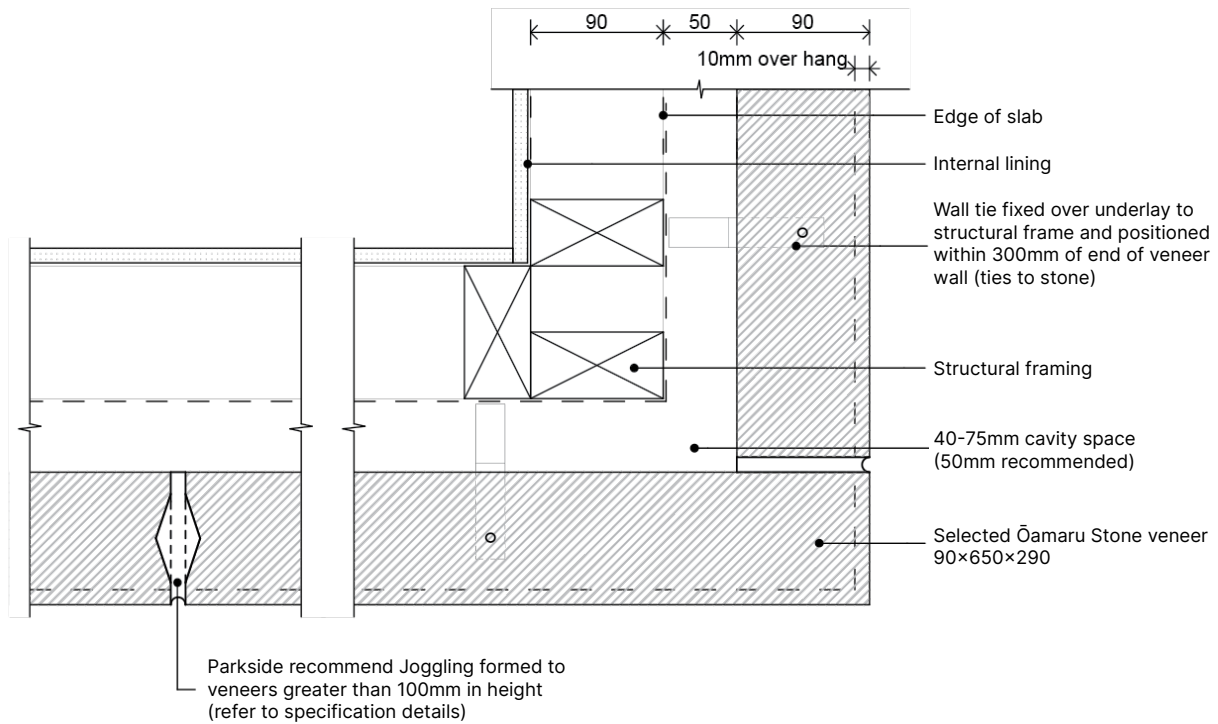
D-05 | **ŌAMARU STONE-JAMB DETAIL**
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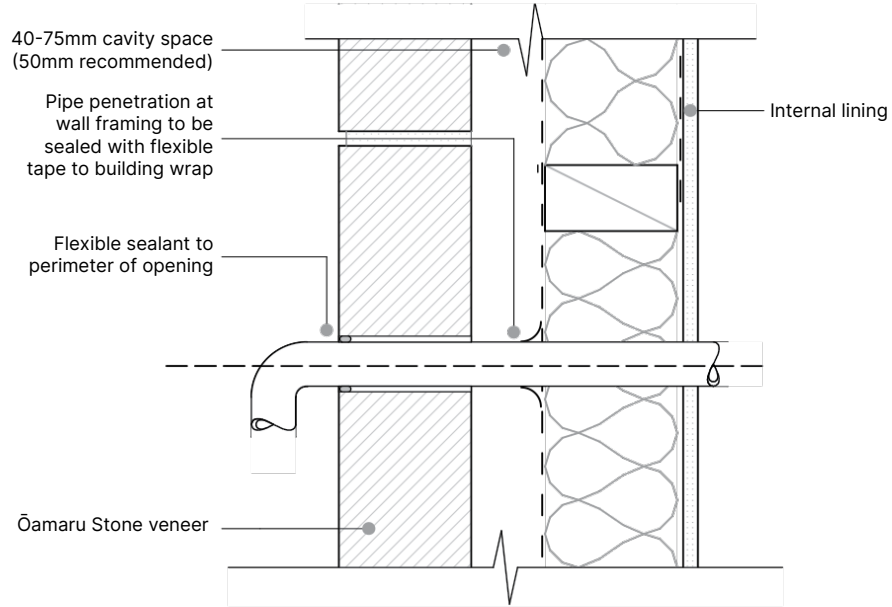
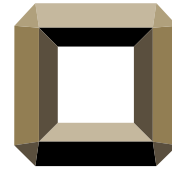
D-06 | **ŌAMARU STONE-DOOR SILL DETAIL**
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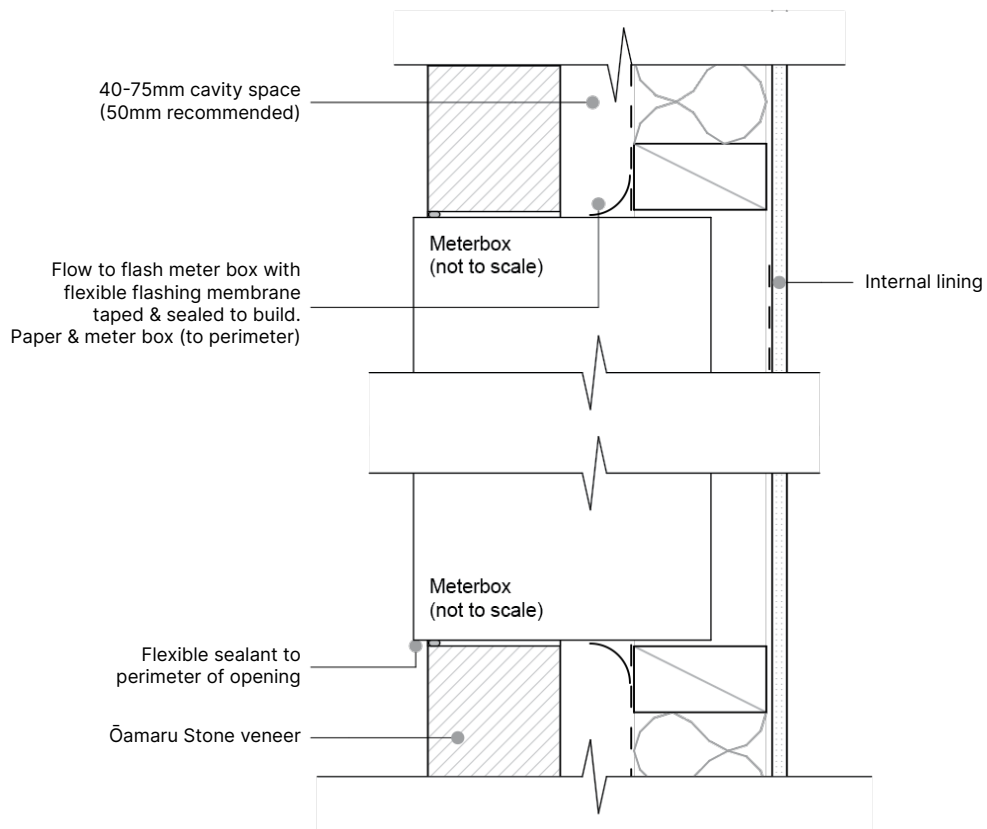
D-07 | **ŌAMARU STONE -ALT. SOFFIT DETAIL**
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D-08 | **ŌAMARU STONE-CORNER JUNCTION**
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D-09 | **ŌAMARU STONE -PENETRATION DETAIL**
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D-10 | **ŌAMARU STONE -METER-BOX DETAIL**
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Care and Maintenance of Ōamaru Stone work

Ōamaru Stone buildings require maintenance, cleaning and sealing for the stone to retain its natural white/creamy colour. The following information may be of some assistance.

New Buildings

When built Ōamaru Stone should be washed down, brushed clean and any areas which have discoloured with moss or mould should be treated with a moss or mould killer.

When stone is dry it should be treated with a top quality water repellent silicone sealer.

This treatment should be carried out as per manufacturers instructions, along with an exception that most water repellents require a cover of approximately litre per 1 - 1.5 m² on Ōamaru Stone which has a greater absorbency than concrete.

In normal circumstances correctly treated surfaces remain water resistant for up to 10 years.

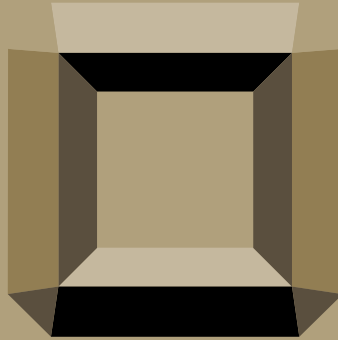
Building Resealing

To check if stone needs resealing, spray water onto stone surface. If water repellent is working, water will run into droplets on stone surface. If surface is porous, water will be absorbed into stone which will go slightly darker in colour.

A general indication of stone requiring treatment is when mould, moss or lichen begins growing on surface, causing green or greyish discolouration of the stone.

To clean stone a moss or mould killer should be applied by thoroughly wetting surface with product. When moss killer has taken effect clean with a hard bristled brush. In some areas where there is a build up of moss or mould a wire brush may be required. Do not clean stone with high pressure spray as this can loosen pointing and damage stone surface.

Stone should then be left to dry and a 2nd application of moss killer applied. At this time any repairs required (e.g. loose pointing) should be carried out. When stone has completely dried out, apply water repellent sealer.



OAMARU STONE

ARCHITECTURAL LIMESTONE

Oamaru stone is a prestige natural
Limestone, NZ grown, NZ owned and
without the price tag.

Buy direct from the quarry.

For pricing or technical information
contact Parkside or visit our website.

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151 Airedale Road, RD5
Oamaru 9492

Phone: 03 433 1134
Email: sales@oamarustone.co.nz
Website: oamarustone.co.nz

