



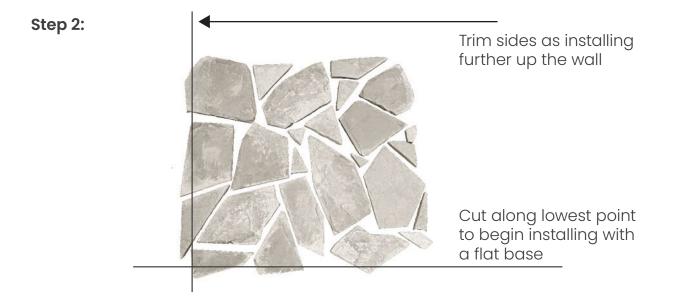
Retaining Walls • Concrete Sleepers • Concrete Blocks • Wall Cladding

# ARCTIC STONE INSTALLATION TIPS

**Joint Width:** The Arctic collection has been designed to be installed with either a dry joint or a 8-12mm mortar/grout joint. When applying the stones use timber or plastic dowels/wedges to keep the joints evenly spaced. Due to the nature of the product, stones will vary in size and may need extra wedges to allow for height variation.

**Dry Joint Installation Tip:** If installing with dry joints, please ensure either the wall or adhesive are a dark colour before starting. This can be done by purchasing a dark tile adhesive or tinting mortar with black oxide (check with your local glue supplier). This will help cast a shadow between stones giving a solid dry stone look. These stones will not line up to the millimetre, you will need off cuts and thin cut stones to fill any voids between the stone once the stones are applied.

- **Step I:** Lay the stones on the ground to plan your stone application.
  - If your application requires corners, apply these first alternating the long and short return in opposite directions.
  - Cut or trim stones using a wet saw or angle grinder with a diamond blade attached.
  - Lay 1st layer of product at the base of wall.



**Installing with Dry Joint:** Take time when laying the stone to cut thin stones to fill small gaps between the larger joints. This will create a natural hand crafted stone masonry look.

**Installing with Mortar Joint:** Pointing mortar or tile grout can be used to fill the joints. One of the easiest and fastest ways to fill the joints is with a piping bag. Purchase your piping bag from Veneer Stone by calling 1300 984 572 or email admin@veneerstone.com.au.

**Sealing:** To retain the original fresh quarried look we suggest sealing the stone. If you would like the stone to mellow slightly and gain the European look after years of harsh weathering don't seal the product.

## COASTAL CLADDING INSTALLATION TIPS

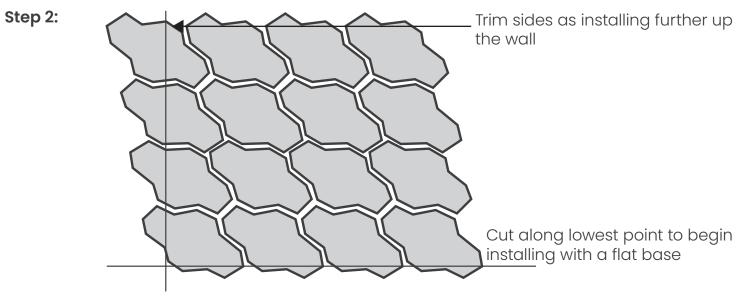
Joint Width: The Coastal collection has been designed to be installed with either a dry joint or an 8 - 20mm mortar/grout joint. When applying the stones use timber or plastic dowels/wedges to keep the joints evenly spaced. Due to the nature of the product stones will vary in size and may need extra wedges to allow for height variation.

**Dry Joint Installation Tip:** If installing with dry joints please ensure either the wall or adhesive are a dark colour before starting. This can be done by purchasing a dark tile adhesive or tinting mortar with black oxide (check with your local glue supplier). This will help cast a shadow between stones giving a solid dry stone look. The pattern will not line up to the millimetre, you will need off cuts and thin cut stones to fill the voids between the stone once the pattern has been laid.

Individual stones are held together with flexible webbing. Please specify if webbing isn't required when placing order.

#### Step 1:

- If your application requires corners, apply these first alternating the long & short return in opposite directions
  - Cut on trim stones using a wet saw or angle grinder with a diamond blade
    attached
  - Lay 1st layer of product at the base of wall in packaged re-occurring pattern
  - Draw a straight line across the 1st layer of stones then cut
  - Apply cut stone to wall in packaged re-occurring pattern



**Installing with Dry Joint:** Take time once the pattern is laid to cut thin stones to fill small gaps between the larger joints. This is very important, it will break up the pattern and provide the perfect hand crafted stone masonry look.

**Installing with Mortar Joint:** Sand and cement pointing mortar or tile grout can be used to fill the joints. One of the easiest and fastest ways to fill the joints is with a piping bag. Purchase your piping bag from Veneer Stone by calling (02) 4606 4907 or email admin@veneerstone.com.au.

**Sealing:** To retain the original fresh quarried look we suggest sealing the stone with VenSeal Ultra WB. If you would like the stone to mellow slightly and gain the European look after years of harsh weathering don't seal the product.

Joint Width: The Dry Stack collection has been designed to be installed with either a dry joint or an 8 - 12 mm mortar/grout joint. When applying the stones, use timber or plastic dowels/wedges to keep the joints evenly spaced. Due to the nature of the product, stones will vary in size and may need extra wedges to allow for height variation.

## **Installation Tips:**

- If your application requires corners, apply these first alternating the long and short return in opposite directions.
- After corner pieces have been applied, apply the bodies 1 layer at a time, working towards the edge/centre.
- Colour, size and texture variation is an essential aspect of a natural looking stone wall. Select stone from different boxes and lay out across your job site to ensure you gain this look. The visual effect will be enhanced by an overall natural mixed presentation. Cut or trim the stones using a hammer & bolster, wet saw or angle grinder with diamond blade attached.

## Webbed Panel Sizes:

185 - 200mm high x 470 - 500mm long x 35 - 45mm thick Individual stones attached to the webbing vary in sizes:

- Height: approx. 40, 80, 100, 120, 160 & 200mm
- Length: random ranging from 50mm 500mm

### Individual Stones Are Held Together With Flexible Webbing:

Sample Installation pattern – like brick work, avoid straight vertical lines when applying the webbed panels.



**Installing with Dry Joint:** Please ensure either the wall or adhesive are a dark colour before starting. This can be done by purchasing a dark tile adhesive or tinting adhesive mortar with black oxide. This will help cast a shadow between stones giving a deep solid dry stone look. Take time once the pattern is laid to cut thin stones to fill small gaps between the larger joints. This is very important, it will break up the pattern and provide the perfect hand crafted stone masonry look.

**Installing with Mortar Joint:** Pointing mortar or tile grout can be used to fill the joints. One of the easiest and fastest ways to fill the joints is with a piping gun or piping bag.

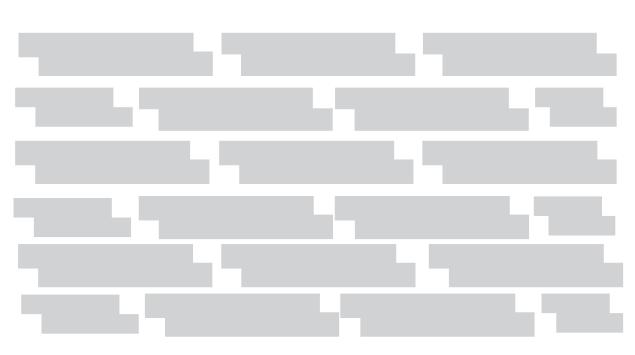
To retain the original fresh quarried look we suggest sealing the stone. If you would like the stone to mellow slightly and gain the European look after years of harsh weathering don't seal the product.

# LEDGESTONE INSTALLATION TIPS

**Important Note:** Our Ledgestone collection has been designed to have irregular edges to give a rustic appeal. This will create small voids between some panels. If your application requires corners to be covered, apply these first. We suggest you prepare the wall by ensuring the colour of the wall is similar to the stone. This can be done by tinting the glue or mortar with an oxide. Check with your local glue supplier for warranty & terms.

### **Installation Tips:**

- Ledgestone has been designed for dry stack installation/presentation. When applying the panels keep the joints as tight as possible to retain the natural dry stone look.
- If your application requires corners to be covered, apply these first.
- After the corner pieces have been applied, apply the stone panel's 1-2 layers at a time, working towards the centre.
- Colour, size and texture variation is an essential aspect of a natural looking stone wall. Select stone from different boxes and lay out across your job site to ensure you gain this look. The visual effect will be enhanced by an overall natural mixed presentation.



Sample Installation guide - (just like brick work) avoid straight vertical lines when placing the stone

All bodies interlock around corners

**Cutting the Stone Panels:** The stone panels can be cut or trimmed using a wet saw, hammer & bolster, wide mouth nippers or angle grinder with diamond blade attached.

**Sealing:** To retain the original fresh quarried look we suggest sealing the stone. If you would like the stone to mellow slightly and gain the European look after years of harsh weathering, don't seal the product.

Working with stone veneers can be a satisfying experience and crafting a simple stone wall is easily within the reach of your stonemason, landscaper or average DIYER

#### Preparing surface for stone cladding

Veneer Stone recommends that wall construction be in accordance with the relevant Australian and Industry standards. The contractor must examine substrates and advise the general contractor and architect of any existing conditions or surface contamination which will require correction before work commences. Before starting, substrates must comply with maximum allowable deflection criteria as called for by Australian Industry Standards or the applicable local building code. All rough, uneven or "out-of-plumb" surfaces must be made "plumb and true" to within 1/8" in 10' (3mm in 3m) and 1/16" in 1' Dry, dusty concrete or masonry surfaces must be high pressure water washed and excess water removed just prior to the application of adhesive materials. In some cases a primer may be needed which will seal the surface and enhance the bond of the adhesive onto the substrate.

#### Preparing rendered surface for stone cladding

The surface of the wall must have a wood float finish. For steel trowelled finished surfaces ensure that the surface is mechanically or chemically abraded prior to commencing tiling, in this particular case. Render should be allowed to fully cure before tiling commences.

#### Preparing Brick work for stone cladding

Ensure all brick work internally/externally is rendered before installation.

#### Preparing tilt up concrete panels for stone cladding

All tilt up concrete slabs have to be mechanically grinded then cleaned using high pressure water, ensuring that all curing compounds and release agents are completely removed prior to commencing tiling. Ensure all surfaces are clean, dry and free from dirt, dust, grease, oil, wax, curing compounds and any loose contaminating materials which may affect the bond of the adhesive onto the substrate.

#### Mechanical fixing of stone cladding

In some cases, mechanical fixing may be necessary. If in doubt, please contact your engineer or seek advice from Laticrete on 1800 331 012

#### Installing stone cladding over expansion and control joints

Existing joints in subsurface must be carried through the veneer work and must conform to architectural details. Expansion joints must be installed where veneer abuts restraining surfaces, such as perimeter walls, curbs, columns, corners, etc. Expansion joints must be installed at all "changes of plane" in the veneer work. Refer to AS3958.1-2007 (current year) for industry recommendations.

#### Waterproofing and crack suppression membrane

Install Laticrete hydro ban in all wet areas and over all non-structural cracks ( $\leq 1/8$ " or 3mm) in the substrate(s) before veneer stone is installed. Laticrete hydro ban is to be installed in accordance with the Laticrete written installation instructions. Refer to Laticrete DS663.0 and DS663.5 for complete information.

#### Cold weather note

The curing of installation materials is retarded by low temperatures and finished work should be protected for an extended period of time. Typically, for every 18 °F below 70 °F (10 °C below 21 °C), installation materials take twice as long to cure.

#### Product selection/Variation in stone veneers

Colour, size, shape and texture variation is an essential aspect of a natural stone wall. Lay out and mix boxes of stone to ensure you gain this look. The visual effect will be enhanced by an overall natural mixed presentation

#### Adhesive application

Prior to installation, ensure the backs of the Veneer are clean of dust, laitance, loose concrete crumbs and any excess film that could impede bond. Due to the wide variety of substrates, we recommend you contact your local glue supplier or Laticrete on 1800 331 012 for the best suited adhesive for your application.

- 1. Once the surface has been prepared in accordance with Australian Industry Standards, using the flat edge of a trowel, firmly apply adhesive to the substrate. Then, comb on additional mortar with the notched side, use a 12mm x12mm notched trowel, trowel size can vary depending on the size & weight of the stone veneer.
- 2. For all veneers it is important to fill all grooves or uneven backing by buttering the back of the veneer, this is to provide full bedding of the veneer. Cover the entire back of the veneer not just the perimeter in addition to trowelling the adhesive onto the substrate.
- 3. Place the veneer onto the adhesive and adjust to desired position. Buttered veneer should be firmly worked onto the substrate and pushed slightly back and forth to fully embed the veneer in the adhesive. Ensure the tiles are laid into the adhesive before it skins over. If the adhesive skins over remove the adhesive from the surface and reapply fresh adhesive.
- 4. Check the adhesive for 100% coverage by periodically removing veneers and inspecting the transfer of the adhesive onto the substrate.

Note; the size and weight of the veneer stone will vary. Conduct a small test area for non-sag performance. Due to job site conditions and differences in finish material types; ledger boards, shims, wedges or spacers may be required to maintain finish levels and heights. Allow the installation to cure for 24 hours at 21°C, prior to grouting. Excess adhesive must be cleaned from the veneer surface with a clean, wet cloth or sponge, while it is still fresh. The final bed thickness of the adhesive should be 6mm in this particular application.

#### Grouting and pointing joints between stone veneers

Allow the installation to cure for 24hours at 21 °C prior to grouting /pointing joints. The Veneers should be pre-sealed to ease grout removal and protect veneer surface finish and colour. For interior installations, either a penetrating or topical sealer can be used. For exterior installations, use only a penetrating sealer for superior durability.

- 1. Use either a trowel and tuck pointing tool or a mortar/pointing bag to place the pointing mortar.
- 2. Once applied, allow it to achieve "thumbprint" hardness, then trowel, rake and/or brush to the desired finish. Joints must be packed full and free of voids and pits.
- 3. Excess grout must be cleaned from the surface of the veneers as the work progresses, while the grout is fresh and before it hardens. Do not use acid or alkaline cleaners which may damage the surface of veneers.
- Pointing the joint; One of the easiest & fastest ways to fill/place the joints is with a piping bag. Purchase your silicon piping bag from Veneer Stone by calling 1300984572 or email info@veneerstone.com.au

#### Protection and sealing stone veneers

The contractor must take precautions to protect the finished work from damage by other trades. Protect installation from exposure to rain for a minimum of 7 days. Allow the cement to cure for a minimum of 7 days at 70 °F (21 °C) before aggressive cleaning. For interior installations, either a penetrating or topical sealer can be used. For exterior installations, use only a penetrating sealer for superior durability. Whilst sealing the stone isn't always necessary it will protect veneer surface finish and colour. If the veneers are installed near wet areas or areas prone to salt attack, we recommend dip sealing all veneers prior to installation. To retain the original fresh quarried look, we highly recommend sealing the stone. If you would like the stone to mellow slightly and gain the European look after years of harsh weathering don't seal the product.

For more information visit our website at <u>www.veneerstone.com.au</u> or call 1300 984 572

## TOOLS AND MATERIALS REQUIRED

| Optional | Tools  | Use  | Product/Specification                             |
|----------|--|--|---|
| Yes      | Brick saw  | Perfect straight cuts                                      | Contemporary & Dressed edge                       |
|          | 9" or 4" grinder with<br>concrete cutting blade<br>(diamond blade) | Cutting stone  | All Products                                      |
|          | 12mm Notched trowel  | Buttering tile adhesive onto wall and stone                | All products                                      |
|          | Buckets x 2  | Mixing tile glue & wash up water                           | All Products                                      |
|          | Sponge   | Wiping excess glue off stones                              | All Products                                      |
| Yes      | Paint brush  | For priming surface  | Depends on surface                                |
| Yes      | Step ladder or<br>scaffolding                                      | Applying stone at height                                   |   |
|          | Spirit level and pencil  | Gain horizontal levels every 300mm                         | Not needed for South Coast and Arctic collections |
|          | Tape Measure   | Measure cuts when finishing off edge or top of wall        |   |
| Yes      | Drill with mixing attachment                                       | Mixing tile adhesive                                       | Some adhesives require mechanical mixing.         |
|          | Tile wedges  | Level up individual stones                                 | All products                                      |
| Yes      | Hammer & Chisel  | Splitting stones to gain rough edge cut                    | Depends on finished look                          |
| Yes      | Rubber Gloves  | Keep hands clean   |   |
| Yes      | Extension cord   | Allow cutting next to installation area                    |   |
| Yes      | Wheelbarrow  | Moving stones large distance, mixing large amounts of glue |   |

#### Tools required for mortar joints

| Yes | Small brush              | Brushing mortar once firm                  |  |
|-----|--------------------------|--|--|
|     | Piping gun or piping bag | Piping tile grout or mortar between joints |  |
| Yes | Sponge                   | Wiping mortar once firm                    |  |

#### Materials needed

|     | Tile adhesive                        | Glue stone to wall                                | All Products                          |
|-----|--------------------------------------|---|---------------------------------------|
| Yes | Surface primer                       | Depending on glue specifications and<br>substrate | All products                          |
|     | Pointing mortar mix or<br>Tile grout | Grout the joints                                  | Tint colour of mortar by adding oxide |

**Please note:** extra materials may be needed if mechanical fixing is required. In some cases, an engineer's report may be needed to ensure correct installation practice. The tools and materials recommended are a guide only. If in doubt, please seek help from a professional tradesperson or your local Veneer Stone stockist.

**Joint:** Pointing mortar or tile grout can be used to fill the joints. One of the easiest and fastest ways to fill the joints is with a piping bag. Purchase your silicone piping bag from Veneer Ston e by calling 1300 984 572 or email <u>admin@veneerstone.com.au</u>

To retain the original fresh quarried look, we suggest sealing the stone. If you would like the stone to mellow slightly and gain the European look after years of harsh weathering don't seal the product.

For more information visit our website at www.veneerstone.com.au or call us on 1300 984 572