



## \*INSTALLATION GUIDE

This is a guide for outdoor paving only. Natural stone is an exceptional product and a lot of care is required when dealing with it. This is why we highly recommend that you use a professional contractor to lay your natural stone product. Substrate's are subject to change, especially after excavating, this is why it is important to be aware that this installation process is a guide only and you should listen to your chosen professional contractor when undergoing works.

### CORRECT LEVELS AND DRAINAGE

Contact your local council for correct ground clearances against any claddings and floor levels to prevent any damp.

Make sure all paving is sloping away from a house with an appropriate fall of 1:80

### NATURAL STONE VARIATION

All natural stone paving slabs will vary in colour, textures and surfaces so this is why it is important to spread the variation of characteristics across your laying pattern.

### DAMAGE TO NATURAL STONE AND CHIPPINGS

Chippings to natural stone edges and corners are part of the characteristics of the stone. These are unavoidable and are not even noticeable once paving has been grouted. Any damage to the natural stone such as cracks or breakages, please notified Barrow & Stone prior to installation.

## PREPARATION FOR PAVING PATIO

Excavation Depth	150mm
Gap 20	55mm
Crushed Fines	20mm
Mortar Mix 5:1	30-50mm
Pointing	*Please ask for your best option
Fall	1:80

! Geotextile membrane may be laid between substrate and aggregate used if substrate is prone to subsidence.

- Excavate to appropriate depth required.
- Analyse ground make up.
- Installation of gap 20, compacting with a petal metal plate compactor and wetting with a hose regularly.
- Installation of crushed fines and further compact and wet.
- Set up a level string line (using a sprit level) at the finished height of the paving. This could be against the house for example.
- Set up two parallel string lines from the level one to a fall of 1:80 in the direction of the area being paved.

! For large patio areas it is recommend to divide the area into sections to make it easier to manage.

## INSTALLATION OF PAVING PATIO

- Mix up a semi wet mortar then spread across crushed fines layer of the paver you are about to lay.
- With a trowel create mountains and valleys then place the paver on top of the mortar, the paver should be proud of the string lines. Then carefully, using a white rubber mallet, evenly tap the paver until it is at the correct height.
- Repeat this process until the pavers cover the selected area in which you want to pave, continuously checking that the slope of the paving is correct by using a spirit level.

! For increased adhesion between low porosity stones or porcelain it is best to use a bonding bridge. Please ask a trained Barrow & Stone staff member or chosen contractor for guidance.

## PREPARATION FOR PAVING RESIDENTIAL DRIVEWAY

! For the use of light weight vehicles only.

Excavation Depth	225mm
Crushed Fines	20mm
Gap 20	130
Mortar Mix 4:1	50mm (min)
Pointing	*Please ask for your best option
Fall	1:80

- ! We highly recommended you use a geotextile between substrate and aggregate to help prevent any subsidence that may occur.
- ! Not all natural stone is recommended for driveways. Please ask Barrow & Stone for their recommendations before ordering your natural stone paving.
- ! Geotextile membrane may be laid between substrate and aggregate used if substrate is prone to subsidence.
  
- Excavate to appropriate depth required.
- Analyse ground make up.
- Installation of gap 20, compacting with a petal metal plate compactor and wetting with a house regularly.
- Installation of crushed fines and further compact and wet.
- Set up a level string line (using a spirit level) at the finished height of the paving. This could be against the house for example.
- Set up two parallel string lines from the level, one to a fall of 1:80 in the direction of the area being paved.
  
- ! For large patio areas it is recommend to divide the area into sections to make it easier to manage.

## INSTALLATION OF PAVING RESIDENTIAL DRIVEWAY

- Mix up a semi wet mortar then spread across crushed fines layer than the paver you are about to lay.
- With a trowel create mountains and valleys, then place the paver on top of the mortar, the paver should be proud of the string lines. Then carefully, with a white rubber mallet, evenly tap the paver until it is at the correct height.

- Repeat this process this process until the pavers cover the selected area in which you wanted to pave, continuously checking the slope of the paving is correct by using a spirit level.
- ! For increased adhesion between low porosity stones or porcelain it is best to use a bonding bridge. Please ask a barrow & Stone staff member or chosen contractor for guidance.

#### WHEN LAYING A PROJECT PACK - FOUR DIFFERENT SIZES

- Never lay more than three slabs in a row, this will avoid continuous straight lines when laying your random pattern.
- Always roughly lay an even amount of different paving sizes otherwise your laying pattern will appear uneven.

#### SAME SIZE PAVING - ONE SIZE

- When laying either 900 x 600 or 600 x 600 only be sure to use an extra string line to ensure you are parallel to your first level string. Continuously check these two strings are parallel by using a measuring tape to ensure you are correct.
- ! Please be aware all natural stone has a dimensional tolerance of +/- 4mm

PLEASE NOTE: Pointing gaps will vary for different natural stones, please ask a Barrow & Stone staff for your recommended pointing gap.

Remove any mortar or cement spills on the surface of the paving as you go. Keep a clean bucket of water and sponge or cloth on standby at all times.