

## Installation Guidelines – Wet Lay

### Getting Started

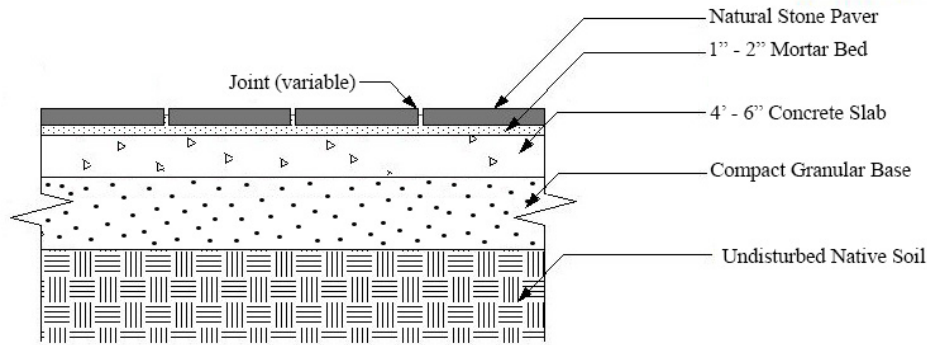
Banas Stones prides itself on Safety & Quality. Please ensure to be equipped with the appropriate PPE (Personal Protective Equipment) prior to beginning the installation.

Please note:

- Installations should always be done on undisturbed native subsoil. Drainage and frost protection must also be considered when designing the space.
- The stone surface and the base should slope away from buildings and/or structures. This allows gravity to naturally drain the water away from your home, preventing water damage. Water damage to our products due to improper drainage is not covered by warranty. Water logging or continued moisture exposure under the stone will create rust, efflorescence, flaking or delamination on the surface of the stone.
- Local building codes should always be reviewed prior to design and installation.
- A rubber mallet can be used to adjust/compact the stone. Use of heavy machinery on the stone surface can damage or break the stone.
- The cross section of the installation in this document is a guideline. A qualified professional should always determine actual design specifications.
- A Banas Stones<sup>®</sup> blade, or a diamond blade designed for cutting natural stone should be used to cut the stone. Avoid using sintered blades, laser welded segment is recommended. Always wet-cut natural stone for best results, this will also prevent harmful dust from getting airborne.

### Installation:

A successful installation requires a proper base. The below cross section is the recommended base construction for Banas Stones<sup>®</sup> Natural Stone Pavers.



Once the area has been dug down to undisturbed native soil, the granular base is to be installed and compacted. The area of the 4" – 6" thick concrete pad is to be formed and then the concrete poured and smoothed. Follow the guidelines of a concrete installer/manufacturer for best results.



Once the concrete slab is cured, a 1"- 2" mortar bed is to be applied. The mortar should consist of a 3:1 mixture of brick sand to Portland cement mixed with water with a small amount of latex added to provide elasticity for freeze thaw cycles.



To install the stones, apply some mortar to the back of the stone ("butter"), you can also use a slurry of GU Portland cement or latex, and carefully lay them into place. Gently tamp them with a rubber mallet. Joint spacing can be left at your desired size. We recommend mortaring and jointing small areas at the same time to allow proper bonding between the mortar and the jointing material. Failure to do so will result in a poor bond causing the joint material to break loose and pop out of the joint.



When all the stones are in place and levelled/sloped properly, the joints can be grouted using the same mortar mix. Use of other mortars may cause marking/staining that will not be covered by warranty. Be sure to wipe excess mortar from stone edges with a clean wet sponge. Keep refreshing the water to prevent mortar residue from getting on the sponge. Residue will cause hazing. In the event this occurs the Banas Stones® Grout Destroyer can be used to clean it.



### Cleaning & Care

- Stone can usually be cleaned by simply using soap and water. Brushes can also be used to scrub stone, however DO NOT use metal wire brushes as they will scratch the stone finish.
- Pressure washers are recommended to clean stubborn dirt buildup, but should be used cautiously on stones with fine finishes (Venetian Line) as it may leave marks.
- NEVER use acidic products to clean natural stone. It will damage and discolour the stone. Use of acid or acidic products will also void the warranty.
- Natural stains such as food and most beverages will naturally fade over time.
- We recommend using a protective BBQ mat in cooking areas.
- Banas Stones® has a full line of product safe cleaners that can be used to clean your stone or remove grout residue or rust spots harmlessly.
- Sealing depends on the type of stone being used. Sandstone is porous and should not be sealed as it needs to breathe. Sealing sandstone will trap condensation which will deposit salt, and other impurities to the surface of the stone. Limestone being denser in formation can be sealed with great results. Granite is virtually impenetrable and does not require sealing.
- For sealing only breathable water based impregnating sealers can be used, however Banas Stones® cannot warranty the performance of non- Banas Stones® products. Solvent or acrylic based products will have an adverse effect on the stone.

- **Banas Stones<sup>®</sup> is not liable for any damages (peeling, discoloring, efflorescence, etc.) that may occur after sealing with solvent based products or external treatments are applied to any Banas Stones<sup>®</sup> product. Use of these products will void all Banas Stones<sup>®</sup> warranties.**