

These instructions are very general guidelines.  
Each circumstance and material may require slight alterations to these guidelines.

## **Surface Prep & Substrates**

Suitable Substrates include:

- Fully cured concrete
- Gypsum wallboard for tile
- Cementitious wallboard
- Flat Masonry
- Fully cured cement mortar beds
- Self-leveling with the proper PSI rating for the purpose
- Underlayment specifically for tile and rated by the manufacturer

## **Substrate Requirements**

All substrates must be structurally sound, solid, flat, dry and thoroughly clean and free of oil, wax, grease, asphalt, latex and gypsum compounds, curing compounds, sealers and any contaminant that might act as a bond breaker. Per the Tile Council of North America (TCNA) guidelines, all natural stone substrates must meet a deflection rating of L/720. Overly absorbent as well as non-absorbent substrates require priming prior to installation. A maximum variation in the sub slab cannot exceed 1/8" in 10' from the required plane per MIA Guidelines. Subfloor must also be level with the maximum variation of 1/16" IN 3'.

## **Crack Isolation**

Cracks as well as any areas susceptible to future surface cracking require the installation of a crack isolation membrane meeting ANSI 118.12.

## **Wet Areas**

Wet Areas require the installation of a waterproofing membrane. Most major tile setting material manufacturers have a product. Select one that has specs meeting ANSI 118.10 prior to installation. Steam Rooms require a waterproofing and vapor retarding membrane specific for the purpose with a perm rating of .05 perms or less.

## **Cutting**

A stable tile wet saw with a high-quality continuous rim diamond saw blade must be used to cut stone tile or mosaics. The recirculated water must be kept fresh and clean during the cutting process.

## **Radiant Heat**

Follow the manufacturer's radiant heat system instructions carefully. Allow all substrates and setting materials to fully cure before use. Follow ANSI A108.5 and TCNA EJ 171 specifications.

**Additional Recommendations:**



**TOOL**

Lambswool Applicator



**TOOL**

Atomizer Spray



**GROUT**

Ardex Cast Iron #22



**SEALER**

Dry Treat Stain Proof  
Impregnating Sealer

Always carefully inspect any material you intend to install before performing any installation work. For mounted mosaics, verify sheet-to-sheet color consistency by first comparing each sheet to one another from the backside. Next, compare the face of the sheets by laying them adjacent to one another and comparing the visible portion (edge) of the mosaic tiles.

**IMPORTANT:** Do **NOT** apply any type of tape directly on the surface of the basalt tile.

Please note that raw basalt tile will appear lighter in color during initial inspection. However, the shade will deepen once the tiles are installed and sealed. Additionally, the choice of grout color will influence the overall appearance of the basalt. Dark or black grout will create a darker, more uniform look. White or light gray grout will create a lighter, more speckled appearance.

We recommend testing one tile using the steps outlined on the following page for color evaluation prior to proceeding with full installation.



## 1. Setting Basalt Tile & Mosaics

- Carefully organize your material. It is best to measure out an area of the same size as the intended installation and dry lay the tile or mosaic. Once the desired look is achieved, transfer to the area and install in manageable sections.
- For tile, make sure to create a natural looking layout of light, dark, veined and figured material that is balanced and pleasing visually.
- For mosaics, make sure the sheets fit together with consistent joint spacing and shave/trim/cut the interlocking sheets to form a professional fit before actually performing the final setting process.
- Always create a test patch using your chosen setting materials with the tile/mosaic first to make certain they are compatible and the desired effect is achieved.
- Do **NOT** use mastic or unmodified thinset.
- All installation methods used should conform to guidelines established by the Marble Institute of America (MIA) and or the Tile Council of North America (TCNA).
- Attain a 100% coverage of the setting material on the back of each tile. This will create the strongest bond.
- Once the tiles have been installed (ungROUTED), clean the tile fully.

## 2. Sealing Basalt Tile & Mosaics

- We recommend using Dry Treat Stain-Proof Impregnating Sealer. After installing and cleaning the basalt tile but **BEFORE GROUTING**, use the Atomizer Spray tool to apply a barrier coat across the surface of all the tiles. Let it dry for several minutes.
- Next, take the Lambswool Applicator tool and apply a second coat of sealer on all of the tile. Let the second coat dry and fully cure.

## 3. Grouting Basalt Tile & Mosaics

- Terra Bella creates its basalt displays using Ardex Cast Iron #22 sanded grout. We recommend using this if you want to achieve the same look.
- Apply the chosen grout across the whole surface of the tile. Remove any excess grout. Let it dry and fully cure.  
**IMPORTANT:** Because basalt is a porous material, it is very important to apply the grout over the entire surface of the tile to ensure a consistent and uniform appearance.

## 4. Sealing (Again)

- After the grout has fully cured, use the lambswool applicator tool and apply two additional coats of sealer over both the tile and grout. Let it dry and fully cure.

## **Sealers 101 – Important Knowledge To Protect Your Investment**

Modern sealers are amazing and help keep natural stone looking gorgeous, but understanding what they actually do will help a lot.

### **Impregnating / Penetrating Sealers - What they do and don't do**

Impregnating sealers work by repelling water, or water and oil. Impregnating sealers do not block the pores of the material nor create a physical barrier. As a result:

1. Impregnators do not prevent acid etching to acid sensitive surfaces including the following stones: Marble, limestone, travertine and onyx. These stones contain calcite, a form of calcium, which reacts and dissolves on contact with acids, even mild acids such as lemon juice, cola and wine. In populated urban areas, rain can be acidic. The use of acid sensitive materials outdoors is not recommended as discoloration and acid damage may occur. It is important to note that Basalt does not etch.
2. Impregnators do not make surfaces impervious to staining. Given enough time, or enough pressure, water and oil can penetrate. Spills should be wiped up in a timely manner.
3. Impregnators do not provide a physical barrier and therefore do not provide protection from physical wear and tear, scuff marks, or dirt being ground into the texture or pits of rough surfaces.