



# TERRA FORM ARCHITECTURAL BLOCKS INSTALLATION GUIDE

--- Read this guide, **IN FULL**, prior to beginning any installation of Terra Form architectural blocks ---

To ensure proper installation based on unique project and/or site conditions, clients are responsible for hiring a skilled installer that has experience in installing architectural blocks. Zia Tile is not responsible for installation, ongoing care, or issues arising after receipt and installation of product. If client's installer deviates from the instructions or recommendations below, this may result in costly and undesirable outcomes.

Terra Form architectural blocks can be used on facades or other exteriors, forming part of an enclosure, or as part of a free-standing structure. These blocks are not intended for load bearing, and reinforcement is required for each installation type. Terra Form architectural blocks can provide privacy and contribute to the bioclimatic behavior of the building through natural ventilation and lighting.

Hairline cracks, also known as crazing, are common and can be expected on the surface of glazed Terra Form architectural blocks. We recommend matching the grout color to the tile color as closely as possible to minimize the appearance of crazing on the surface. Contrasting grout colors will accentuate crazing on the surface and should be avoided.

## REVIEWING YOUR ORDER

- Please inspect your order thoroughly, upon receipt. Zia Tile cannot be held responsible for tiles that have already been installed.
- Terra Form architectural blocks are handmade; therefore, each piece will have tonal and textural variation. Subtle variations in shape and size are also natural and should be expected in your tiles.
- To account for pattern, inherent variation, and potential breakage in transit, it is strongly recommended that all orders include a minimum of 15% overage to avoid costly add-on shipping and schedule delays.

## BEFORE BEGINNING YOUR INSTALLATION

- Due to the inherent color variation of Terra Form architectural blocks, it is very important to **blend** the tiles from **all** boxes in your order. You should then lay out the tile in the installation area and ensure any variation is evenly distributed **before** beginning your installation.
- Terra Form blocks should be installed in sections no larger than 13 feet (4 meters). Larger installation areas should be divided into sections with expansion and waterproof joints between sections. These sections must be separated from the adjacent masonry by a perimeter expansion joint.
- Reinforcement is required for all installations. See additional notes in Installation section below.
- Terra Form architectural blocks should be installed with a masonry cement, high quality mortar, polyurethane grout or resins such as "Sikaflex."
- Terra Form architectural blocks should never be cut as this could sacrifice the integrity of the block/installation
- Prior to installation, clean any dust from shipping and residue with a pH neutral cleaner and soft cloth.

## INSTALLATION

### REQUIRED MATERIAL

#### For placing the tiles:

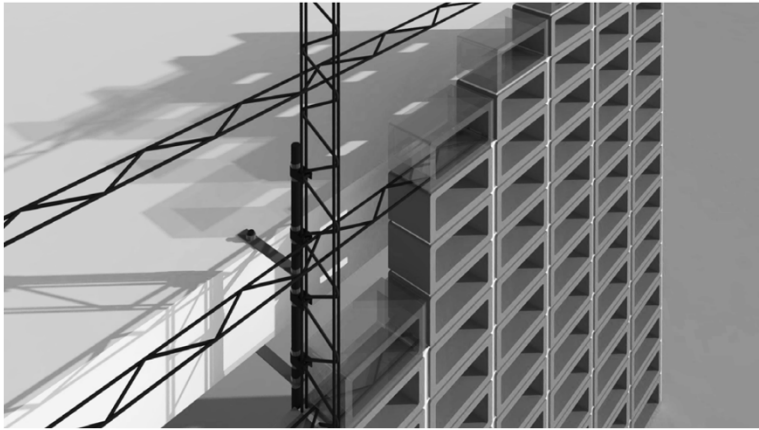
- Sponge
- Bucket
- ½" grout spacers (minimum) for block spacing
- Expansion joints
- 1½" grout spacers (minimum) for perimeter
- High quality mortar
- Trowel with ½" semi-circular notches

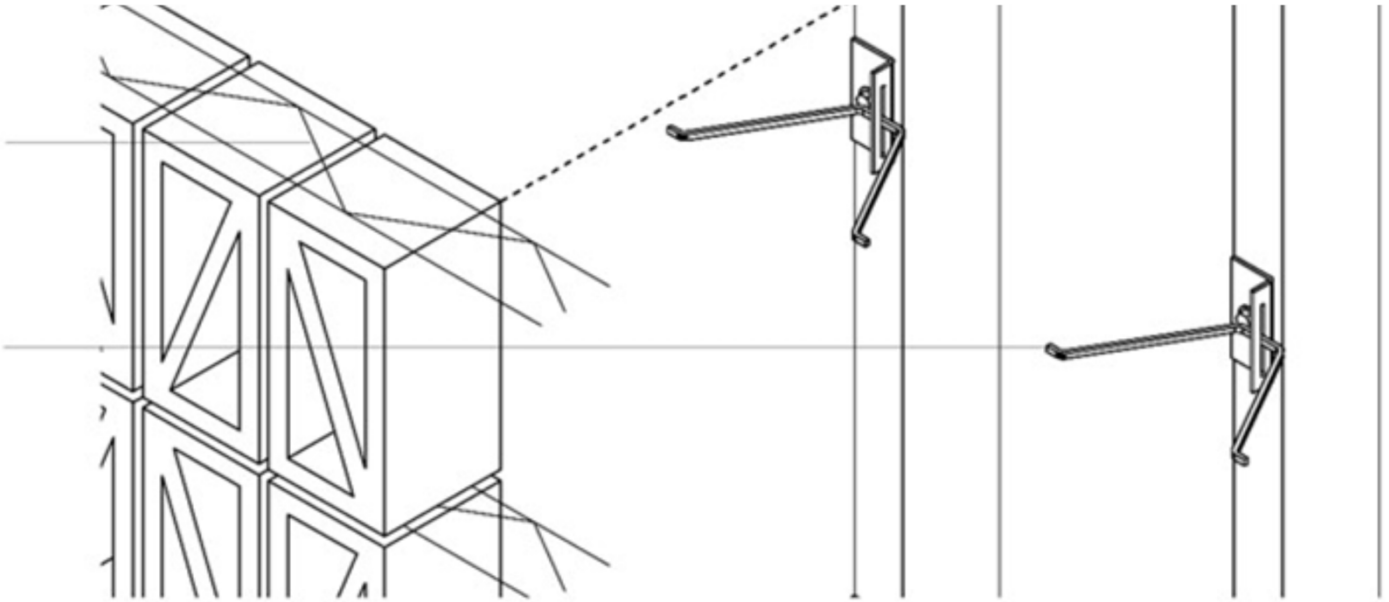
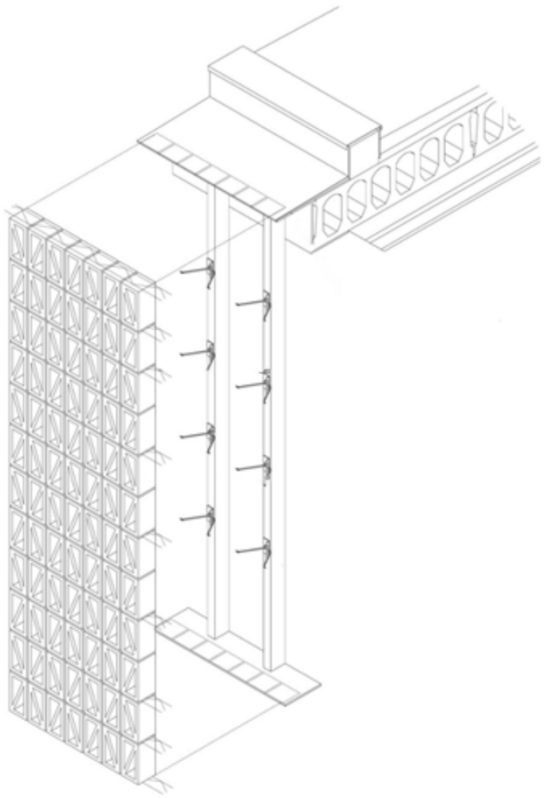
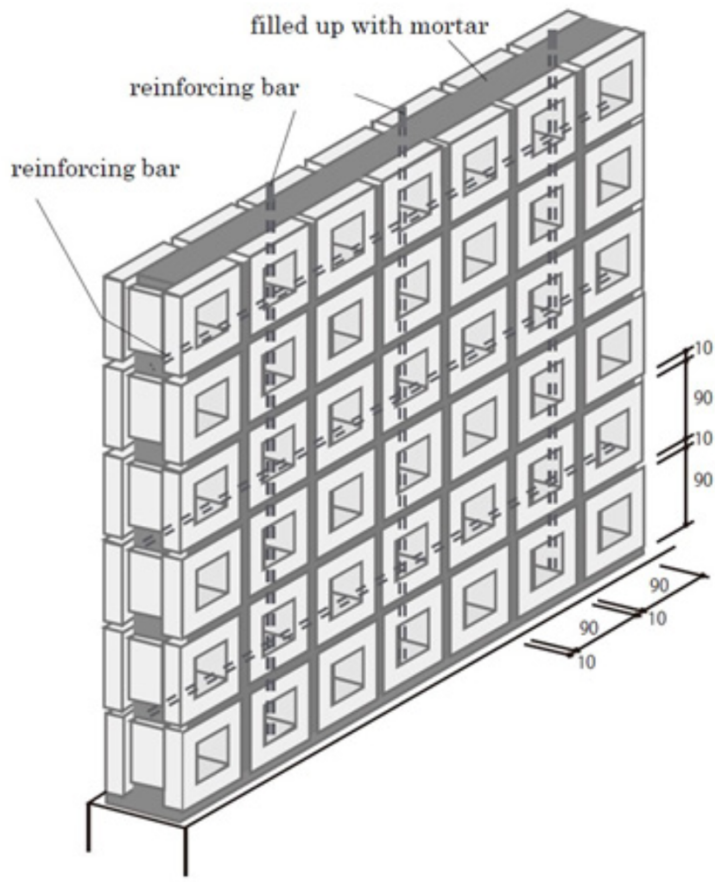
#### For cleaning Terra Form architectural blocks:

- pH neutral cleaner such as Miracle Sealants Heavy Duty Cleaner (Acid Substitute)
- Lint-free cotton cloth

## REINFORCEMENTS

- Reinforcement is required for all installations and must be placed inside the vertical and horizontal joints so that it is not visible. Any reinforcement should not be in contact with the Terra Form blocks and must be completely encased in mortar. Reinforcements required per project should be determined by the contractor, installer, architect, or structural engineer.
  - All sections must be fastened at the perimeter to the structure, directly or by a rigid metal, wooden, or masonry frame.
  - For ventilated facades, Terra Form architectural blocks must be anchored to a substructure (metal or wood), or to a back-up wall.
  - For free-standing walls, a vertical substructure of steel ribs must be embedded in the Terra Form sections and anchored to the foundation of the building.
  - Joints between Terra Form sections should also be reinforced with small metal profiles or anchored to structural elements. These joints are delicate and different techniques may be employed to guarantee the stability of the installation.
  - To reinforce installations that will encounter wind, horizontal and vertical reinforcements must be used throughout. Calculations must be checked and adapted to specific loads based on your contractor, installer or structural engineer's specifications.
- Please note, for load bearing structure specifications, refer to your installer. Terra Form architectural blocks are **not** intended for load bearing.





## LAYING THE BASE

- Terra Form architectural blocks should be installed beginning with a base row and built up one row/layer at a time.
- The subfloor, foundation, or installation surface must be uniform, in good condition, and completely cured (if applicable, usually a minimum of 30 days). Terra Form architectural blocks should never be installed on shifting substrate. Waterproof underlayments are necessary for wet areas.
- Evenly apply the foundation mortar to the installation surface using a trowel. Wet the base and sides of each tile with a sponge before applying the adhesive to the base and sides of each tile, making sure to apply the mortar in the same direction to prevent air pockets from forming.
- Place Terra Form architectural blocks using the appropriate size tile spacers; note: 1/2" is the minimum spacing required. Incorporate horizontal and vertical reinforcements as needed for your project. Ensure the blocks are level and even during installation.
- Immediately wipe off any residual mortar on the surface of the tiles. **Mortar and grout can be incredibly difficult to remove without damaging the tiles if left too long.**

## INSTALLING LAYERS

- Continue laying the following layers in the same manner: wet the tile, apply cement grout to the base and sides of each block, and incorporate reinforcements and spacers accordingly. It is important to level the installation periodically to ensure stability and aesthetic cohesion.
- Continue to clean grout off the tiles immediately to avoid staining.
- ALWAYS cover the tiles with durable paperboard during and after installation to prevent damage and/or staining of the tiles until construction is complete.

## ONGOING MAINTENANCE

### CLEANING

- Promptly clean up any spills, especially oil and grease. Un-cleaned spills can cause stains.
- Tile can be wiped with warm, clean water and a pH neutral cleaner.
- Terra Form architectural blocks should be cleaned using pH neutral cleaners ONLY. Use of acidic cleaners will damage the tiles. For regular cleaning, we recommend Miracle Sealants pH Neutral Tile and Stone Cleaner. For heavier stains, we recommend Miracle Sealants Heavy Duty Cleaner (Acid Substitute).