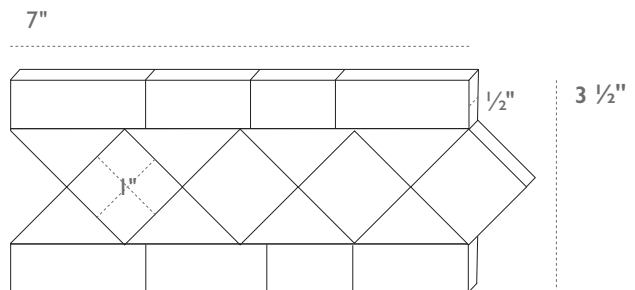
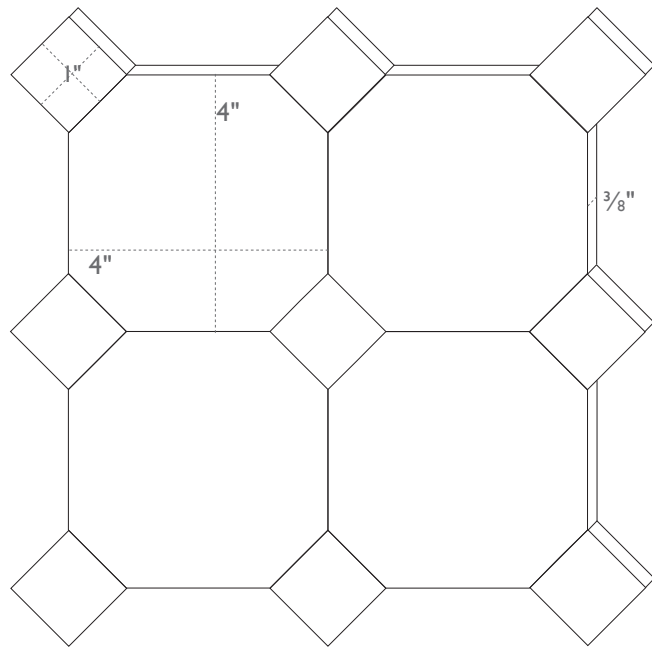


ZIO & SONS + clé

USAGE	Y/N
interior floor	Y*
interior wall	Y*
exterior floor	N
exterior wall	Y*
residential heavy traffic	Y
commercial light traffic	Y
radiant heating compatible	Y
fireplace surround	Y
shower	Y*
steam shower	Y*
fountain waterlines	Y*
freeze thaw	N
pool waterlines	Y*
heat resistant	N
sink backsplash	Y*
stove backsplash	Y*
grout type	ultracolor plus fa & flexcolor cq
grout joint size	butt joint or 1/16"
UV resistant	Y



Standard thickness for zio & sons is 3/8" and 1/2" for border piece. Note that border pieces come pre-assembled and can appear to be thicker than 1/2" due to the white setting material underneath that is used to glue the individual tile pieces together.

Please note all dimensions can vary plus or minus 1/4".

* There are specific installation requirements for this usage, read more information under the installation, sealing, and grout sections of this document

ZIO & SONS + clé INSTALLATION

Drawing upon the rich mosaic patterns of Morocco, this collection, in collaboration with designer Anthony D'Argenzio of zio & sons, offers two simple terracotta shapes that fit together—a 4" octagon and 1" bouchon. In four neutral shades: weathered white, sea salt (our newest bright white zellige color), charred cedar and natural. Each octagon can be mixed with a contrasting bouchon to create countless pattern combinations and a truly custom look. The collection is perfect as an accent wall or even for a floor surface. The collection also includes pre-assembled 8" mosaic borders perfect to frame floors, cap backsplashes and more.

What's in our tile: Zellige is a tile that has retained its ancient and archaic tile making process and, therefore, has all the primitive qualities that have become synonymous with it. Essentially, it's a glazed terracotta tile, hand hewn, olive-pit fired and hand chiseled to-size, Zellige is a testament of ancient tile craft. If your order doesn't contain tiles with pits, iron spots, cracks, shade/size variations and chipped edges—it's not Zellige.

clé has worked with our Moroccan studios to provide the finest quality Zellige tiles available. However, for the best installation, it is important that you hire a highly qualified tile contractor for your project.

YOUR TILE INSTALLATION IS ONLY AS GOOD AS YOUR INSTALLER.

INSPECTING YOUR SHIPMENT

- All Zellige tiles are made by hand, therefore noticeable variations in thickness, depth, color, shade, size and crazing is to be expected.
- **IMPORTANT:** Due to the noticeable color and shade variations, it is very important to blend the tiles from ALL BOXES once they arrive and place them in their installation area to ensure you have the layout you want before installing. Do not install without blending tiles from all boxes.
- Industry standard suggests adding at least 15% overage due to tile cuts, potential breakage, or future repairs.
- Note that due to the firing methods and raw materials used to create glazed clay tiles, your order of Zellige will have a percentage of tiles greater than 15% with cracks, crazing, edge-chipping, iron spots and pits through the glaze to the clay body.

clé **WARNING:** having an installation with tiles that experience any of the above imperfections is the traditional look for Zellige installations. Any editing of these naturally occurring imperfections from your tile shipment will greatly reduce the traditional appeal of your installation.

- If these imperfections do not fit your project's needs we recommend ordering more than 15% overage. This allows your contractor to cherry-pick these imperfections from your order.
- Dust and residue from shipping should be cleaned prior to installing. This is typically done as tile is being set with a quick dip of each tile into a water bath.

FOR INSTALLATION
GUIDELINES

- clé's guides are only to help direct you in the right path for a proper installation.
- Each project is unique and therefore requires a professional who can provide the exact specifications for your project.
- Please have your installer refer to the current edition of the TCNA Handbook for best installation results and ANSI A137.1 American National Standard Specifications for Ceramic Tile to reference for specifications.
- Tile is merely the surface of your construction. Installation problems will arise from substrate or construction engineering and/or installation issues. Please refer to your project architect, structural engineer and/or installer to have the best results for your tile finish.
- As is standard in the tile industry, installation deems acceptance of materials. Do not install if there are visible issues. If you have any doubts or are unsure of what qualifies as a visible issue for the tile you are installing, please reach out to us prior to installation. Our tiles are subject to variations in color, texture, size and finish. Do not install if you have any doubts about visible issues. Misuse by contractor or end-user including but not limited to negligence, physical and/or chemical abuse is not covered by clé's warranty.
- Be sure to have 95% or more adhesive on the back of the tile to ensure the best bond when setting.
- **DO NOT USE TAPE** during product installation, or otherwise. We cannot guarantee our products' safety against various construction tapes—**INCLUDING BLUE TAPE**.
- The natural variation in thickness and size of zellige creates an uneven surface which can increase slip resistance because of the bare foot's ability to form around the tile.
- We recommend setting the octagons first (leaving the bouchon space empty) and then setting the bouchons. Working in small areas (every 15 sq. ft.) is recommended.
- For mounted border pieces, the installer should do everything they can to ensure the pieces fit together perfectly—this may mean cutting/trimming down the end pieces slightly so that the border pieces fit into each other.
- Due to the extremely porous nature of natural zellige, we only recommend glazed zellige for pool and fountain water lines, in non-freeze thaw locations only.
- **IMPORTANT:** Zellige tiles cannot be placed where heat is directed onto them (inside fireplaces, pizza ovens and oven venting). If you are wanting to install Zellige behind a stove range/oven vent, we recommend that there is at least a 4" metal splash (provided by the range manufacturer) between the tile and the vent to deflect heat from directly onto the tiles.
- **IMPORTANT:** Zio & Sons tiles are not freeze thaw rated. Therefore we do not recommend and cannot warrant installing these outdoors in areas that regularly experience freezing temperatures*

* If you plan on installing these outdoors in areas that experience freeze/thaw, we cannot guarantee there won't be installation failures. Installations in freeze/thaw locations require flashing the top of vertical installations to prevent moisture from dripping behind the installation. In addition, the installation must be completely sealed and maintained with a weather and water resistant sealant like Miracle 511 Porous Plus.

With application of Miracle Sealant, these tiles can have resistance to freeze/thaw issues. However, oftentimes there are installation failures because the specific installation guidelines and sealant maintenance is not properly followed. But if completed and maintained correctly (see manufacturer's instructions) then you can proceed WITH CAUTION.

If you can comply with all of the above and understand that without the sealant your install won't hold up—then it's up to you to proceed with installing this tile in a freeze/thaw location. We recommend your contractor reach out to both Mapei tech support for installation support and Miracle Sealant tech support on the waterproofing of the tiles.

- clé ONLY recommends [Mapei Ultracolor Plus FA](#) grout for glazed zellige and [Mapei Flexcolor CQ](#) for natural zellige.
- Ultracolor Plus FA must be used for pool waterline and fountain waterline installations.
- Use of any other grout types can result in installation issues.
- Zio & Sons border pieces come pre-assembled with white setting material, often revealing this material in between each piece. Due to this, we recommend applying Mapei Grout Refresher onto the setting material to match the grout color you select for your installation.
- [Mapei Grout Refresher](#) comes in the same colors as Mapei Ultracolor Plus FA and Mapei Flexcolor CQ, allowing the color to be consistent and matched easily to your grout.
- Because all Zellige is hand cut into individual tiles after firing, they are crafted to allow for a very tight grout joint.
- clé recommends a 1/16" grout joint or butt joint.
- To accommodate variations in tile sizes, wedge spacers should be used when needed to keep tile lines straight.
- Grout is customarily used to fill any gaps left by wedge spacers between tiles as well as any pits, chips or cracked portions of Zellige.
- If installing on a shower floor, a larger grout joint can be used—3/16"—to help increase slip resistance.
- **IMPORTANT:** Contrasting grout color with zellige will highlight the thin hairline cracks/crazing found on the tiles and it will also fill in any pits, and/or chips. If you use a contrasting grout (i.e. white grout with black tile) please order 20-30% overage in order to cherry-pick the tile of the imperfections that are standard to zellige. Additionally, you must make sure to apply a penetrating sealant or grout release prior to grouting in order to minimize the possibility of the contrasting grout curing in the inherent hairline cracks, pits, and/or chips.
- For the octagon/bouchon bundle that has a combination of varied colors, we recommend matching the grout color to the octagon. For type of grout we recommend choosing unglazed grout if there is ANY unglazed tile in the installation.
- Grout color selection is always up to our client and/or their design professional. However, clé is often asked for our opinion on best grout selections for our tiles. And due to the large array of grout colors that are now available, clé would like to offer this general guideline on a foolproof grout color selection for any of your clé tiles.
 - First, have your professional tile contractor complete your tile installation, except for the grout portion.
 - Next, when ready to grout, ask your contractor to bring ALL grout color charts from his preferred grout manufacturers, for your review.
 - Lastly, choose a time of day when you are most pleased with the lighting in your space (either natural lighting, installed lighting or a blend of both). During that lighting and time of day, select the grout color that best matches your tile selection.
- Note that the full Mapei Ultracolor Plus FA & Flexcolor CQ color catalogue contains 40 colors to choose from. Visit the [Mapei website](#) to view.
- If you are working with a highly color-variegated tile or a combination of tiles (checkered or otherwise), we recommend that you follow the above recommendations—but match your grout to the color in your varied tile or tile combination that you would most like to accentuate.
- If your contractor is having any issues or questions regarding this grout, please reach out to Mapei tech support directly at 1-800-992-6273 as they are the best and fastest line of contact.

MAINTENANCE &
SEALING GUIDELINES

- clé only recommends the use of [Miracle 511 Porous Plus](#) for an invisible sealant finish.
- In the case of natural unglazed Zellige, due to its extremely porous nature, natural zellige must be sealed on all applications before and after grouting as the final step of installation in order to be cleaned easily and to avoid staining.
- For residential heavy traffic floor installations or areas susceptible to grease build-up we recommend three to five coats of [Miracle Mira Matte](#) top-coat sealant in addition to sealing for natural Zellige.
- If you are installing natural Zellige on a busy kitchen backsplash where heavy staining is a concern, we recommend applying the [clé top coat kit](#) to the tile surface and grouted areas instead of using Miracle 511 Porous Plus. The clé top coat kit can provide even more protection against stains on backsplashes. Apply the top coat kit as the final step of installation.
- Stains on natural unglazed zellige may be impossible to remove if unsealed.
- For glazed zellige, we recommend applying sealant or using a grout release prior to grouting if the tile has visible crazing.
- **IMPORTANT:** If zio & sons tiles are being grouted with a contrasting grout color vs. a matching one, then you must also apply a penetrating sealant or grout release prior to grouting in order to minimize the possibility of the contrasting grout curing in the inherent hairline cracks, pits, and/or chips.
- Dry applications of glazed Zellige do not need to be sealed as the final step of installation.
- In wet areas of glazed Zellige (backsplashes, showers, steam showers, pool waterlines and fountain waterlines) grouted areas, including grouted pits and chips and areas of visible crazing must be sealed as the final step of installation. Sealant will not penetrate the glazed tile surface but it will penetrate and protect grouted areas, pits and chips and areas of crazing or etching that reaches the clay body.
- For superior water repellency in steam showers we recommend applying Miracle 511 Impregnator sealant in addition to 511 Porous Plus.
- Single coat reapplication of the penetrating sealant is required once a year in shower applications due to the continuous exposure to water. For glazed Zellige, this includes all grouted areas. For natural Zellige, this includes the tile surface and all grouted areas. Reapplication is needed more often if installation is in a steam shower or pool/fountain waterline. Please refer to a professional for this.
- Topical sealants on natural zellige will require periodic stripping and re-application of sealant—please refer to a professional for this.
- PLEASE FOLLOW ALL MIRACLE SEALANT INSTRUCTIONS FOR BEST RESULTS as well as MAINTENANCE UPKEEP RECOMMENDATIONS.*

* **HINT:** if water and oil do not bead up on the surface of your tiles and/or grouted areas then the sealant was not applied properly.

CLEANING
GUIDELINES

- Mild, pH neutral soaps should be sufficient for most cleaning—test before general use.
- Clean using soft materials, like a cloth, instead of coarse materials.
- Always avoid harsh chemicals and acidic or alkaline cleaning products.
- Immediately clean up spills—do not allow liquids to sit on tile surface.
- Vacuum or sweep regularly—abrasive dirt and materials can scratch the surface.
- Non-slip mats or area rugs should be placed inside and outside entrance ways to remove abrasive materials that can scratch and dirty the tile surface.
- Mop floors when necessary with warm, clean water and pH neutral cleaner.
- Interior wall installations can be cleaned with warm water and damp microfiber cloth.
- Shower installations should be squeegeed after each use.
- Grout lines can be cleaned with warm water and a soft bristled cleaning brush.
- Most stains on natural Zellige can be removed with a pH neutral dish soap, hot water and the scrub side of a sponge.
- clé recommends the use of Miracle Porcelain & Ceramic Tile Cleaner to remove stubborn stains, grease build up, soap scum, hard water deposits and everyday grime.
- Miracle Tile & Stone Cleaner is effective as an ongoing maintenance cleaner and is gentle for everyday use.
- To remove difficult mildew, mold or soap scum, we recommend Miracle Sealants Liquid Poultrice.
- Oil stains are difficult to remove from natural Zellige. They will require the use of a poultrice, like Miracle Sealants Poultrice Plus to draw out the stain. Follow the manufacturer's instructions for application and use.