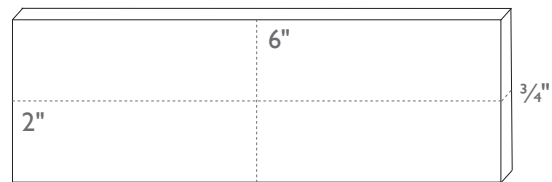
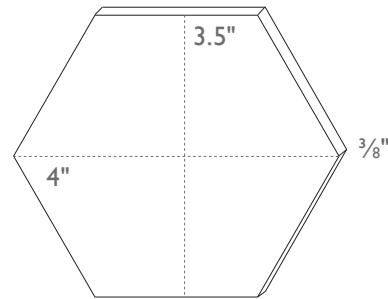
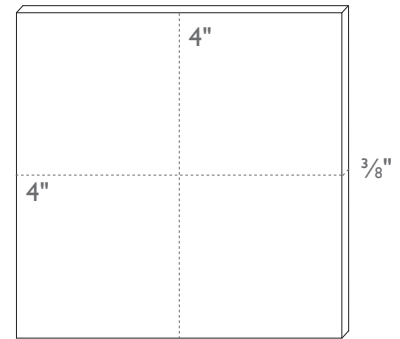
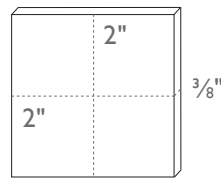


# ZELLIGE

USAGE	Y/N
interior floor	Y*
interior wall	Y*
exterior floor	Y*
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 bejmat tiles is 3/4", and 3/8" for all other zellige.**  
 Please note all dimensions are nominal and can vary plus or minus 1/4".  
 2" x 6" bejmat tiles actual measurements tend to be closer to 1 3/4" x 5 1/2".

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

# ZELLIGE INSTALLATION

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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, 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, cracks, iron spots, 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.**

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## 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.
- For the 2" x 2" sheet mounted tiles, individual pieces can be taken off the sheet and moved around in order to blend them. Make sure to slowly and carefully remove each piece from the sheet at an angle to avoid the risk of glaze being removed. If the sheet leaves glue residue on the glaze it can be removed with water and a wet warm cloth or by applying warm water directly to the surface.
- Industry standard suggests adding at least 15% overage due to tile cuts, potential breakage, or future repairs. There is also color and size variation between batches that will be hard to match with an add on order, please keep this in mind when calculating your order, and be sure to purchase enough material.
- 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, iron spots, crazing, edge-chipping and pits through the glaze to the clay body.
- Pits and chips are more prevalent on 2" x 6" bejmat tiles compared to other zellige sizes, with corners and edges being the most affected. This is due to the differing production methods between 2" x 6" tiles and our other zellige shapes, which are hand chiseled after firing from a larger piece of tile. This allows for the glaze to lay evenly flat across a large area, creating less chipped edges when the pieces are chiseled into individual tiles. By comparison, our 2" x 6" tiles are molded, not chiseled, allowing the clay body to retain protrusions that when glazed, sometimes will chip away.
- The molds used to create our 2" x 6" tiles will always create unclean edge—no matter how well they are packed—meaning the edges are vulnerable by nature of how they are made. These nuances of production are part of what makes the surfaces of zellige so unique. Once installed properly and grouted, the above issues will bring you the textured zellige look that is so treasured by the design world.

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.

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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.
- If installing 4" x 4" on a shower floor, vertical staggering of the tile layout, increasing grout joint size or opting for the 2" x 2" squares can help increase slip resistance. 2" x 6" tile can be installed in a herringbone pattern. Please refer to the grout section below for more information.
- Note that mounted 2" x 2" tile sheets are a more affordable means of setting tiles so that a tile installer does not need to install one tile at a time. This support is generally offered for tiles 3" and smaller.
- Mounted 2" x 2"s allow for contractors not to have to set individual tiles that are very small—but they still have to manage the installation from sheet to sheet—this can be done in whatever way is easiest for the contractor (dismantling a sheet so they have loose tiles that can be used to puzzle sheets together with a closer grout joint—or off-setting sheets, etc.) Mounted sheets are an assist—not a magic wand on an installation.
- Mounted tiles are a convenience for the installer and should also provide a cost savings for the client because it is faster and easier to install small tiles that are sheet mounted. However, sheet mounting does not eliminate the care and expertise required to set the sheets of tiles. Sheet mounted tiles should be considered a support and not a replacement for ensuring that the sheets are mounted carefully amongst and besides one another, just as the tile setter would carefully install the individual tiles. If you or your installer believes that sheet mounted tiles are created to perfectly align with one another, this is incorrect.
- Tiles that are sheet mounted for perfect alignment to one another are considered tile murals and would have to be ordered to fit a specific project. They would then be set to exact project measurements, sheet mounted, then cut into sheets that are numbered and lettered to be perfectly reconfigured on the job site.

- The 2" x 2" sheet mounted tiles are not tile murals. Please be clear that your contractor will need to provide a level of expertise to align each sheet in order to reduce the grout joints that would show a grid line of mounted sheets. This takes time and expertise, but is still much easier than installing small tiles, one tile at a time.
  - 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.
  - Trim is not part of Zellige. Trim, in general, is not a tradition for tiles outside of the U.S. and specifically for tiles that have an ancient history.
  - For jobs requiring a finished edge—we recommend the traditional craft of trimming tiles. Please see our separate [trim guide](#) illustrating how to finish zellige without trim.
    - For turning corners and for mud-set tiles, we recommend mitering your tiles. This provides a beautiful corner finish and in the case of a mud-set requiring a quarter round—this substitutes the quarter round finish with a squared miter finish.
    - For finishing edges on a vertical surface, we recommend either mitering the tiles to cover the edges and setting materials (as stated for turning corners and for mud-sets) or we recommend building up your sheetrock surface to allow the plane of the Zellige to be on the same plane as your sheet-rocked wall.
  - **IMPORTANT:** Zellige tiles—like most tiles, cannot be placed where excessive 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 highly 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 blowing directly onto the tiles.
  - **IMPORTANT:** Zellige 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 and installing the tiles above grade for horizontal installations. In addition, the installation must be completely sealed and maintained with a water resistant sealant like Miracle 511 Porous Plus.
- Only 2"x6" bejmat can be used on exterior floors and must be installed above grade, in non freeze/thaw locations.
  - Pool waterlines and fountain waterlines only in non freeze/thaw locations. We only recommend glazed zellige with waterproof, penetrating sealant.

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 unglazed zellige.
- Ultracolor Plus FA must be used for pool and fountain water line installations.
- Use of any other grout types can result in installation issues.
- Because all Zellige is hand cut into individual tiles after firing, they are crafted to allow for a very tight grout joint. Dry applications can be left ungrouted should you desire, but we still recommend sealing unglazed tile installations and all glazed tiles with pits/chips and visible hairline cracks in order to avoid staining and for easier cleaning.
- clé recommends a  $\frac{1}{16}$ " grout joint or very tight 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— $\frac{3}{16}$ "—to help increase slip resistance.
- For hexes we recommend at least a  $\frac{1}{8}$ " grout joint for shower floors.
- **IMPORTANT:** We do not generally recommend using a contrasting grout color with Zellige, as it will highlight the thin hairline cracks/crazing found on the tiles, and fill in any pits, and/or chips. If you choose to 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.
- 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.

- **IMPORTANT:** we do not generally recommend using a contrasting grout color with zellige, as it will highlight the thin hairline cracks/crazing found on the tiles, and fill in any pits, and/or chips. If you choose to 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.

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MAINTENANCE &  
SEALING GUIDELINES

- clé only recommends the use of [Miracle 511 Porous Plus](#) for an invisible sealant finish.
  - In the case of unglazed Zellige, due to its extremely porous nature, unglazed 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 unglazed Zellige.
  - If you are installing unglazed 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 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 Zellige tiles are being grouted with a contrasting grout color vs. a matching one, then you should also seal before grouting because many tiles may have crazing without it being visible to the eye and would only come out with the grouting of the tiles as the invisible crazing absorbs the dye from the contrasting grout.
  - 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 & 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. Yearly resealing is required.
  - Topical sealants on unglazed zellige will require periodic stripping and re-application of sealant—please refer to a professional for this.
  - If your contractor is having any issues or questions regarding this sealant, please have them reach out to Miracle tech support directly at 1-877-385-8155 as they are the best and fastest line of resolution.
  - 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.

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CLEANING  
GUIDELINES

- Zellige tiles require minimal maintenance. 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 the tile surface. Excess liquid and moisture can stain, pit and crack tile—even when properly sealed.
- 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.
- When necessary, sealed tiles should be mopped with clean warm water and a pH neutral cleaner or mild soap.
- Interior wall installations can be cleaned with warm water and damp microfiber cloth.
- Shower installations should be squeegeed after each use to prevent hard water stains, soap scum and mildew.
- Grout lines can be cleaned with warm water and a soft bristled cleaning brush.
- Most stains on unglazed 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 unglazed 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.

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COLOR AND TEXTURE  
VARIATION

Zellige tiles are rated V2 – V4, T3

you can also expect your tiles to be affected by cracks, chipped edges, pitted glaze surfaces, crazing and iron spots. once installed properly and grouted, the above issues will bring you the textured zellige look that is so treasured by the design world. There is also color and size variation between batches that will be hard to match with an add on order, please keep this in mind when calculating your order, and be sure to purchase enough material.

The following is a guide for the different degrees of variation that we have assigned our tiles:

COLOR VARIATION

- V1** low variation
- V2** slight variation
- V3** medium variation
- V4** heavy variation
- V5** extreme variation

TEXTURE VARIATION

- T1** smooth
- T2** light texture
- T3** medium texture
- T4** heavy texture

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FLOOR RATING

all sizes of glazed and unglazed zellige are rated III  
(can be used for light residential to light commercial foot traffic)

- I** light residential  
for residential areas with light foot traffic. examples can include bathroom, bedroom, formal dining and living rooms. please note the following:
  - not suitable for shoes with hard sole profiles (cleats, stilettos, etc.)
  - the floor must be kept clean from abrasive debris (gravel, mud, salt, etc.)
  - immediately clean all stains (food, personal and household care products, oils, paints, chemicals etc.)
- II** heavy residential  
for residential areas with continuous foot traffic. examples can include entry, hallway, kitchen, foyer, laundry and mud rooms. please note the following:
  - the floor must be kept clean from abrasive debris (sand, gravel, mud, salt, etc.)
  - immediately clean all stains (food, personal and household care products, oils, paints, chemicals etc.)
- III** light commercial  
for commercial areas with light foot traffic. examples can include commercial office, doctor's office and boutique. please note the following:
  - the floor must be kept clean from abrasive debris (sand, gravel, mud, salt, etc.)
  - immediately clean all stains (food, personal and household care products, oils, paints, chemicals etc.)



**IV** heavy commercial

for commercial areas with continuous foot traffic. examples can include hotel lobby, retail, corridors in an office building, shopping mall and restaurant. please note the following:

- the floor must be kept clean from abrasive debris (sand, gravel, mud, salt, etc.)
- immediately clean all stains (food, personal and household care products, oils, paints, chemicals etc.)

**V** industrial

standard industrial floor use with no extreme, heavy breakage or spillage. examples can include restaurant kitchen, bar work area, winery production, exterior hotel entry, airport, car showroom, driveway. please note the following:

- the floor must be kept clean from abrasive debris (sand, gravel, mud, salt, etc.)
- immediately clean all stains (food, personal and household care products, oils, paints, chemicals etc.)