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	۲*,***
freeze thaw	N
pool waterlines	Y ^{*,***}
heat resistant	Ν
sink backsplash	Y*
stove backsplash	Υ*
grout type	flexcolor cq & ultracolor plus fa
grout joint size	1/16"
UV resistant	Y







Standard thickness for bejmat tiles is ³/₄", and ³8" for all other zellige.

Please note all dimensions are nominal. Additionally, dimensions between tiles can vary +/- $\frac{1}{4}$ inch. 2" x 6" bejmat tiles actual measurements tend to be closer to 1 $\frac{3}{4}$ " x 5 $\frac{1}{2}$ ".

- *There are specific installation requirements for this usage, read more information under the installation, sealing, grout, and wet area application sections of this document.
- ** Only 2" x 6" bejmat can be used for exterior floors and must be installed above grade, in non-freeze/thaw locations.
- *** Glazed zellige can be installed on pool and fountain water lines with application of a waterproofing, penetrating sealant, in non-freeze thaw locations.

**** Only bejmat 2x6" can be used for light commercial foot traffic.All other zellige is only suitable for light residential foot traffic.

ZELLIGE

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. 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. It is also unlikely that your sample will be a perfect match with your actual order.
- 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, 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 edges—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 installation. This is typically done as tile is being set with a quick dip of each tile into a water bath.

INSTALLATION

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.

- 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.
- 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 refer to the current edition of the TCNA Handbook for best installation results and ANSIA137:1
 American National Standard Specifications for Ceramic Tile to reference for specifications.
- Prior to installation, dampen the tiles before setting by quickly dipping tiles in water for 2-3 seconds.
- Be sure to have 95% or more adhesive on the back of the tile to ensure the best bond when setting the tile.
- DO NOT USE TAPE during product installation, or otherwise. We cannot guarantee our products' safety against various construction tapes—INCLUDING BLUE TAPE
- Since each zellige tile is hand chiselled, there may be a few sharp edges. A good installer should be able to get the tiles flush with minimal lippage. If you find some tiles that stick up slightly or are a bit rough on the edges after grouting, a tile rubbing stone can be used to soften the edges.
- To accommodate variations in tile sizes, wedge spacers should be used when needed to keep tile lines straight.
- To increase slip resistance in wet area applications (especially shower floors), we recommend broadening the grout joint size on the setting of the pan tiles, vertical staggering of the tile layout, laying out the tile in a herringbone pattern, or alternatively cutting the tile into smaller 2x2" pieces.
- 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 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.
- Glazed zellige can be installed on pool and fountain water lines with application of a waterproofing, penetrating sealant, in non-freeze thaw locations.
- Unglazed zellige is not suitable for pool and fountain water lines.
- Only 2" x 6" bejmat can be used for exterior floors and must be installed above grade, in non-freeze/thaw locations.

MADE TO ORDER MOUNTED 2" × 2" SHEET TILES

- Individual pieces can be taken off the sheet and moved around in order to blend them.
- 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.
- 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.

SEALANT

- clé only recommends the use of Miracle 511 Porous Plus for an invisible sealant finish.
- IMPORTANT: 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 and to avoid staining.
- For light commercial 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 and fountain water lines) 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.
- If your contractor is having any issues or questions regarding this sealant, please have them reach out to Miracle tech support directly, 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.

GROUT

- clé ONLY recommends <u>Mapei Flexcolor CQ</u> for all zellige installations other than pool and fountain water lines, to reduce the risk of grout haze and staining. Make sure to always follow the manufacturer's instructions. Letting the grout sit for even a short period of time can be problematic.
- Ultracolor Plus FA must be used for pool and fountain water line installations.
- Because all Zellige is hand cut into the individual tiles after firing, they are crafted to allow for a very tight grout joint.
- clé recommends a 1/16" grout joint.
- 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.
- To increase slip resistance on shower floors using 4" x 4" tile, we recommend broadening the grout joint size on the setting of the pan tiles to 3/16".
- For hexes we recommend at least a 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.

STAINING

- Grout staining is only a problem if the guidelines set for Flexcolor CQ and Ultracolor Plus FA by Mapei aren't followed properly.
- Please make sure to follow the Mapei Flexcolor CQ application and cleanup instructions and Mapei Ultracolor Plus FA application and cleanup instructions to avoid the risk of staining/grout haze and to allow for easy application and cleanability. Read all installation instructions thoroughly before use. Using consistent application procedures will produce consistent results.
- Some of these procedures for Mapei Flexcolor CQ include:
 - During grout application, immediately remove any excess grout off the face of the tile with a clean, damp cloth/sponge.
 - Use a "clean as you go" approach to spreading and washing the grout, to ensure that cleaning begins before the grout skins over and dries on the tile surface.
 - □ Grout small areas of between 30 to 40 sq. ft. (2.79 to 3.72 m2) at a time, so that cleaning can begin before the grout skins over and dries on the tile surface.
 - □ Change your water bucket frequently to prevent the development of a haze on the tile surface.
- Some of these procedures for Mapei Ultracolor Plus FA include:
 - □ Spread Ultracolor Plus FA immediately into the joints with a rubber grout float. Make sure that all joints are well-compacted and free of voids and gaps.
 - Remove excess grout from the tile surface, moving the grout float diagonally to the joints while Ultracolor Plus FA is still fresh.
 - After the grout has set (follow proper setting time) use two buckets of cleaning water: One for rinsing the majority of the grout residue from the grout sponge, and one for moistening the sponge in clean water.
 - Change your water buckets frequently to prevent the development of a haze on the tile surface. To prevent discoloration and soft/powdery joints, avoid cleaning with excessive water.
- Should your contractor choose to use another brand of grout other than Mapei Flexcolor CQ or Mapei Ultracolor Plus FA, be aware that the dyes used to pigment most grouts can stain the tile.

 If your contractor selects brands other than Mapei grout or Miracle sealant, please have them reach out to the respected representatives of those manufactures for advice and support on failures.

INSTRUCTIONS FOR INSTALLATIONS CONTAINING GLAZED, UNGLAZED, AND GOLD/PLATINUM ZELLIGE (ESSAOURIA BLEND INSTRUCTIONS)

Sealing pre-grouting

- clé only recommends the use of Miracle 511 Porous Plus for an invisible sealant finish.
- In the case of installations containing gold / platinum, glazed and unglazed zellige (as with our Essaouria lustre blend), glazed zellige portions of the installation should be sealed before grouting only if the tile has visible crazing, pits and/or chips. Avoid getting sealant on Gold and Platinum tiles. In case of accidentally sealing Gold and/or Platinum with Miracle 511 Porous Plus, it can be rubbed off with a finger once it has dried. All unglazed portions should be sealed due to the porous nature of the tile.
- In the case that your installation is being grouted with a contrasting grout color vs. a matching one, then you should also seal all glazed (except for Gold and Platinum) tiles 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.
- IMPORTANT: Please be sure to read additional information on pre-grouting sealing in our "Gold & Platinum Zellige" and "Zellige" installation and maintenance guides.

Grouting

- clé ONLY recommends Mapei's Flexcolor cq grout for mixed zellige. Make sure to always follow the manufacturer's instructions.
- Note that the gold / platinum areas of your mixed zellige installation should be finger grouted. We recommend working in small areas and carefully finger grouting to keep grout in the joints and off the surface of these decorative tiles. You may find it easiest to employ this grouting method by using a grout bag for applying the grout into the joint and finalizing the grout finish with your finger or a soft, microfiber cloth.
- As you work in small areas, gently remove excess grout immediately with a clean, damp microfiber cloth ONLY.
 Use a "clean as you go" approach to spreading and washing the grout, to ensure that cleaning begins before the grout skins over and dries on the tile surface.
- Do not allow excess grout to dry on the surface. Letting the grout sit on the Gold & Platinum tile surface for even a short period of time can be problematic. Once the installation has been completely grouted, it is required that the installer clean any residual grout off of the surface of the tiles carefully while the grout is still wet. KEEP YOUR SURFACE CLEAN.
- IMPORTANT: Please be sure to read additional information on grouting in our "Gold & Platinum Zellige" and "Zellige" installation and maintenance guides.

Sealing post-grouting

For all applications of the mixed types of zellige, like the Essaouria lustre blend, seal the entire installation as a final step of installation (read note about sealant on Gold/Platinum in the "Sealing pre-grouting" section above). This is to avoid staining and to allow for easier cleaning.

- 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.
- IMPORTANT: Please be sure to read additional information on post-grouting sealing in our "Gold & Platinum Zellige" and "Zellige" installation and maintenance guides.

WET AREA APPLICATION

All zellige tiles can be installed on backsplashes, showers and steam showers with application of a waterproofing, penetrating sealant. Glazed zellige can be installed on pool and fountain water lines* with application of a waterproofing, penetrating sealant.

When installing, make sure these specific waterproofing precautions are taken:

- A waterproof membrane is used under the tile and a water resistant, penetrating sealer (Miracle Sealant 511 Porous Plus) is used to seal the grouted areas and the tile surface of unglazed tile.
- A waterproof membrane is used under the tile and a water resistant, penetrating sealer (Miracle Sealant 511 Porous Plus) is used to seal the grouted areas of glazed tile and any grouted pits and chips on the tile surface.
- To increase slip resistance in wet area applications (especially shower floors), we recommend broadening the grout joint size on the setting of the pan tiles, vertical staggering of the tile layout, laying out the tile in a herringbone pattern, or alternatively cutting the tile into smaller 2x2" pieces.
- 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 unglazed Zellige, this includes the tile surface and all grouted areas.
- Reapplication is needed more frequently if installation is in a steam shower.
- For superior water repellency in steam showers, we recommend applying Miracle 511 Impregnator in addition to Miracle 511 Porous Plus.
- For pool and fountain water lines, contact Mapei at 1-800-992-6273 (U.S. and Puerto Rico) or 1-800-361-9309 (Canada) and Miracle Sealant tech support directly at 1-877-385-8155 for best waterproofing application methods, installation suitability and maintenance requirements.

*We only recommend non-freeze thaw locations for pool and fountain water lines.

EXTERIOR INSTALLATIONS

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 for exterior floors and must be installed above grade, in non-freeze/thaw locations.

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.

MAINTENANCE

- Over time, a natural patina will occur on floors as they are maintained and naturally wear.
- Depending on specific site conditions, Zellige are subject to wear over time. This inherent traffic pattern is a highlight of using Zellige and should be both anticipated and favored.
- To minimize sizable traffic damage, a means for people to clean abrasive materials off their shoes before walking on a glazed Zellige floor should be provided.
- Topical sealants on unglazed zellige will require periodic stripping and re-application of sealant—please refer to a
 professional for this.
- 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 unglazed 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 water line. Please refer to a professional for this.
- For steam showers, opening windows/doors to help some of the moisture dissipate faster after use will help rid extra moisture.
- For superior water repellency in steam showers we recommend applying Miracle 511 Impregnator sealant in addition to 511 Porous Plus.
- Check with the Miracle Sealant tech support directly at 1-877-385-8155 for best advice on applying and maintaining sealants.

CLEANING

- 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 can be removed with a pH neutral dish soap, hot water and the scrub side of a sponge.
- To remove mildew, mold or soap scum on unglazed Zellige, we recommend Miracle Sealants Liquid Poultice.
- Oil stains are difficult to remove from unglazed Zellige. They will require the use of a poultice, like Miracle Sealants Poultice Plus to draw out the stain. Follow the manufacturer's instructions for application and use.

TRADE SPECIFICATIONS

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.

COLOR, TEXTURE AND SIZE VARIATION

Zellige are created from natural glazes, pigments and terracotta clay. Every one of these natural materials is completely unfiltered allowing for maximum variation and irregularities. Plus, zellige tiles are fired in hand made kilns that are fueled using olive pits. All of this handcraft is what makes zellige so magically varied - tile to tile. please enjoy the extreme variation of color, shade and surface texture. Your zellige order will contain the following: Noticeable variations in thickness, size, shade and color. If you want a uniform looking glazed tile we do not suggest purchasing zellige.

DIFFERENCES BETWEEN SIZES OF ONE COLOR: It is impossible to guarantee a perfect color match across different sizes of the same zellige glaze if installing them together - some variation is to be expected between sizes. If you wish to have your tiles made to order for optimal color continuity, please email contact@cletile.com to inquire.

IMPERFECTIONS: 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 varied zellige look that is so treasured by the design world. If the above irregularities differ from your expectations, clé highly recommends you select another tile that will yield more surface regularity.

THE IMPORTANCE OF BLENDING: 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.

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

Our Zellige tiles, with a few exceptions, are rated 'level 3 medium' for color variation, 'level 3 medium' for texture variation, and 'level 3 heavy' for size variation. The exceptions are unglazed Natural which is rated 'level 2 slight' for color variation, and Shattered pearl and Tea ceremony that are rated 'level 4 heavy' for color variation.

CATEGORY	LEVEL I	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
COLOR VARIATION	low	slight (natural)	medium	heavy (shattered pearl, tea ceremony)	extreme
TEXTURE VARIATION	smooth	slight	medium	heavy	n/a
SIZE VARIATION	slight	medium	heavy	extreme	n/a

Imperfections

Glazed tiles:

Our glazed Zellige tiles are rated 'level 2 medium' for both pits/chips and cracks/crazing, with the exception of Battled armor, Charred cedar, Midnight port and Scribes' ink that are rate d 'level 3 heavy'. For iron spots all glazed tiles are rated 'level 1 light'.



Unglazed tiles:

Unglazed (Natural) zellige is rated 'level 2 medium' for pits/chips, and 'level 1 light' for cracks.



FLOOR RATING

Bejmat 2x6" tiles are rated III (can be used for light residential to light commercial foot traffic) All other sizes of both glazed and unglazed zellige are rated I (can be used for light residential foot traffic)

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 not 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.)

PRODUCT DESCRIPTION

Handmade, glazed terracotta tiles.

PRODUCT COMPONENTS

Clay, glaze, pigments

PITTING, CRACKING & EDGE-CHIPPING

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.

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.

bejmat 5 cm x 5 cm x 1.9 cm (2" x 6" x ³ /4") / .23 kg per tile (.50 lbs)

DIMENSIONS

* Please note all dimensions are nominal. Additionally, dimensions between tiles can vary +/- 1/4 inch.

AVERAGE COEFFICIENT OF FRICTION (DCOF ACUTEST)

Unglazed zellige 4" x 4 avg. 0.80 Glazed zellige 4" x 4" avg. 0.25

* Application of Miracle 511 Porous Plus and/or Miracle 511 Impregnator can help increase slip resistance of unglazed zellige.

FREEZE/THAW RESISTANCE (ASTM C1026)

Zellige tiles are not freeze/thaw resistant.

WATER ABSORPTION (ASTM C373)

Unglazed zellige: avg. 21.9%; non-vitreous Glazed zellige: avg. 22.9%; non-vitreous

ACID RESISTANCE

Zellige tiles are not resistant to acids and should be cleaned with pH neutral cleaners.

LEED CREDITS

The product is an inherently non-emitting source of VOCs (stone, ceramic, metals, powder-coated metals, plated or anodized metal, glass, cement, clay brick, and unfinished or untreated solid wood) and has no integral organic-based surface coatings, binders, or sealants.

Zellige tiles are considered 'inherently non-emitting sources' under the Low-emitting Materials Credit of LEEDv4/v4.1. This is currently the only credit for our Zellige tile that is eligible to be used toward LEED.

'Inherently non-emitting' means that these tile types have been shown to not contribute emissions to indoor environments and are therefore exempt from demonstrating compliance with CDPH v1.1-2010 or CDPH v1.2-2017. Use of these tiles as Wall or Flooring materials should be entered in the LEED v4.1 low-emitting materials Calculator and identified as 'inherently non-emitting' in the Products Tab (Column L).

Disclosures for MR Credit Material Ingredient Disclosures under LEEDv4/v4.1, are not available at this time. We are exploring our disclosure options and have not established a timeline for completion.

Disclosures for MR Credit Environmental Product Declarations under LEEDv4/4.1, are not available at this time. We are exploring our disclosure options and have not established a timeline for completion.

Contribution to MR Credit Material Sourcing under LEEDv4/v4.1, does not apply as there is no recycled content, no bio-based materials, no wood, no reused products included in our tile at this time. Extended producer responsibility programs are highly difficult to manage given the nature of end-of-use tile removal methods. *Tile can last hundreds of years but fashions often change, which is the dominant reason for its removal. We work hard to ensure our stone tiles can withstand the test of time while remaining timeless.*

RECYCLED CONTENT

There is no recycled content in our zellige tiles at this time. See Material Sourcing disclosure above.

PERCENTAGE OF PRE-CONSUMER AND/OR POST-CONSUMER MATERIALS

There is no pre-consumer or post-consumer material content in our tiles at this time. See Material Sourcing disclosure above.

FIRE RATING

Typically, ceramic tile does not need to have fire rating testing performed. It is our understanding from TCNA that the explanation that ceramic is inorganic, inert, and typically free of materials that could burn or produce smoke is generally enough to satisfy a specifier and that testing is not necessary. Also, the temperatures observed in the testing are typically lower than the temperatures at which ceramic tiles are fired.

Zellige is a ceramic tile and falls under the description, "because ceramic tile is non-flammable and does not produce smoke in a fire, it inherently meets the flame spread and smoke development requirements of Section 803 of the International Building Code (IBC) for interior wall and ceiling materials."