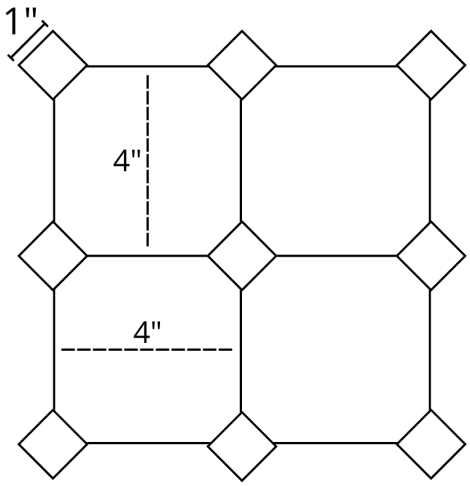
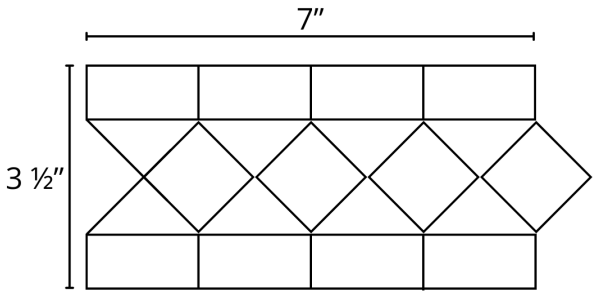
clé + zio and sons



octagon + bouchon bundle



border

standard thickness for zio and sons is ⅜" and ½" for border pieces. graphics are not to scale
note that border pieces come pre-assembled.
the white setting material underneath that is used to glue the individual tile pieces together can make them appear to be thicker than ½"
please note all dimensions are nominal. additionally, dimensions can vary +/- ¼ inch.

ITEMS INCLUDING		walls		floors						traffic rating			
	grout joint	interior	exterior	interior	exterior	entry-way	mud-room	bath-room	kitchen	light res.	heavy res.	light comm.	heavy comm.
GLAZED ONLY	1/16"	Y	Y*	Y	N	N	N	Y*	N	Y	Y	Y	N
NATURAL (unglazed)	1/16"	Y	Y*	Y	N	N	N	Y	N	Y	Y	Y	N

ITEMS INCLUDING	shower		steam shower						resistant		fireplace		
	floors	walls	floors	walls	fountain	pool	waterline	freeze thaw	UV	heat	surround + hearth	backsplash	radiant heating
GLAZED ONLY	Y*	Y	Y*	Y	N	N	Y	N	Y	N	Y	Y*	Y
NATURAL (unglazed)	N	N	N	N	N	N	N	N	Y	N	Y	Y*	Y

*there are specific installation requirements for this usage. please review the "installation areas" section below and discuss with your installer.

drawing upon the rich mosaic patterns of morocco, this collection, in collaboration with designer anthony d'argenzio of zio and sons, offers two simple terracotta shapes that fit together—a 4" octagon and 1" bouchon. in four neutral shades: weathered white, sea salt, charred cedar and natural. each octagon can be mixed with a contrasting bouchon to create countless combinations and a truly custom look. the collection is perfect as an accent wall or even for a floor surface. it also includes pre-assembled mosaic borders perfect to frame floors, cap backsplashes and more.

what's in our tile: zellige, a tile that has retained its ancient tile making process, has all the hand-hewn qualities that have become synonymous with it. essentially, a glazed terracotta tile, hand-crafted, 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.

due to the handmade craftsmanship and variety of materials used in our tiles, there will be variation in color, shade, size and texture across production lots or batches. this means that your sample may not be a perfect match with your actual order, and that your add-on order may not be a perfect match to either. **this is the beauty of artisanal tile!**

INSPECTING YOUR SHIPMENT

- **WHAT TO EXPECT** – zellige tiles are handcrafted, wood-fired terracotta with inherent variations in color, surface marks and texture as well as occasional crazing, pitting, and iron spots. ALSO - dust and shipping residue are to be expected and should be cleaned prior to installing.
- **BLEND BLEND BLEND** - due to the natural materials and production process of Zellige, your order will contain degrees of variation in color, shade, and size. it is crucial to blend tiles from every box and place them in their installation area to ensure you have your desired layout before installing.
- **ORDER EXTRA!** - industry standard suggests adding at least 15% overage due to tile cuts, potential shipping breakage, or future repairs. please note that due to the production process including 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, chipped edges, and pitting. if these traits do not fit your project's needs we recommend ordering 20-30% overage to allow your contractor to allow your installer to cherry-pick tiles most desirable for your project.

INSTALLATION FYIs

- **GENERAL GUIDELINES, NOT INSTRUCTIONS** - clé offers general information about our tiles and their unique qualities and usages. proper installation will only be attained if you have selected a seasoned installer with years of experience with artisan tiles. an installer without artisan tile experience will not know how to install clé tiles and will likely result in failed installations.

- **INSTALLATION DEEMS ACCEPTANCE OF YOUR ORDER** - if you are not 100% sure of your tiles- DO NOT INSTALL THEM. as is standard in the tile industry and with all construction materials, installation deems acceptance of materials. do not install if there are visible issues. if you 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. misuse by contractor or end-user including but not limited to negligence, physical and/or chemical abuse, as well as order shortages ARE NOT a clé responsibility and therefore, not covered by clé's warranty.

- **TILE IS A MATERIAL. INSTALLATION ERRORS ARE NOT THE FAULT OF THE MATERIAL** – clé tile is a material. tile is merely the surface of your construction. installation problems will arise from inexperienced artisan tile installers, substrate, or construction engineering and/or installation issues. please refer to your project architect, structural engineer and/or installer for best results.

- **PLEASE CONFIRM YOUR INSTALLER'S LEVEL OF ARTISAN TILE EXPERIENCE** - your installation will only be as good as your installer. please visit our blog for tips on how to choose an installer (https://www.cletile.com/blogs/cle-notes/how-to-choose-contractor-installer).

- since each zellige tile is hand chiseled, there may be sharp edges. your installer will minimize the sharp edges during the installation process or after installation with a light sanding on high points.

- **REQUIRE YOUR INSTALLER PERFORM A "DRY RUN" BEFORE BEGINNING YOUR INSTALLATION** – before installing, lay out and blend tiles from ALL BOXES so that variations in color, and chips and pits are placed as you would like. clé selects our tiles for their hand-hewn qualities and inherent surface and color variations, which include pits, cracks, and chipping. best placement of these nuances within your installation must be guided by you and/or your design professional to realize the best possible blend of your shipment of our limited-availability tiles. your installation is only as good as your DRY RUN.

- **DO NOT USE TAPE, BLUE TAPE, OR OTHER TAPE** - do not use blue tape or other construction tape during product installation. tape may erode or damage our products.

- Use wedge spacers as needed to keep tile lines straight and accommodate size variation.

- **WAIT UNTIL YOUR PROJECT IS COMPLETE BEFORE INSTALLING YOUR TILES** - install the tiles as late as possible in the project to minimize the risk of damaging the tile.

- **REQUIRE MOCK-UP BOARDS** – to ensure your tiles will be organized properly and your grout joint size and color, as well as your sealant, are done to your design professional's specifications- we urge you to require your installer create mock-up boards prior to your installation. a STANDARD PRACTICE for seasoned installers, it enables the end-user and their design professional to tile layouts in mock-up form and, allows the mock-up boards to be examined in the space and lighting in which the tiles will be used. before beginning the mock-up boards- make sure to FIRST do your above-recommended DRY RUN and lay out and blend your tiles as described in that section.

- **“FINAL FINISH” – what it is and why may your project requires this?** - if you plan to install your tile before installing cabinets, fixtures, etc., you must refinish the tile after the other features are installed in a step we call the “final finish.” in this step, your contractor should replace any broken or chipped tiles caused by construction damage, scuffing, or any deterioration of the tile surface. they should also hire a professional refinisher for the final refinishing of your tile installation. (*NOTE – another benefit is that shipping refinishing can lessen common shipping imperfections). make sure to account for this final step in your project timeline and budget.

  TCNA and ANSI - refer to the latest edition of the TCNA handbook and ANSI A137:1 american national standard specifications for ceramic tile for best installation results and specifications.

INSTALLATION AREAS

- **walls**
  - zellige tiles can be used on interior and exterior walls.
  - for outdoor installations in cold-weather areas, there must be a flashing or roofing overhead and the tiles must be sealed with a water-repellent sealer.
- **floors**
  - glazed and unglazed zellige can be used on interior floors in areas of light commercial traffic
  - zellige tiles both glazed and unglazed are radiant heating compatible
- **bathrooms + showers**
  - glazed zellige can be used in showers and steam showers when a penetrating sealer is applied.
  - unglazed zellige tiles are not suitable for use in these areas
  - on wet floors the natural variation on the surface of the tile and the application of a slip-resistant sealer or treatment can provide protection against slipping.
- **pools, fountains & waterlines**
  - glazed zellige can be installed on pool and fountain water lines. they, however, are not suitable for fully submerged installs.
  - unglazed zellige is not suitable for pool and fountain water lines.
- **freeze/thaw rating**
  - zellige is not freeze/thaw rated
- **uv resistance**
  - zellige tiles are uv resistant
- **fireplace surround and hearth**
  - zellige tiles can be used on fireplace surrounds and hearths
  - zellige tiles are not heat resistant and should not be placed where heat is directed on them (inside fireplaces, pizza ovens, oven venting).
- **backsplashes**
  - zellige is suitable for stove backsplashes. consult with your installer to see if a range splash is required for your installation.
  - zellige tiles can be installed on sink backsplashes with the application of a penetrating sealer.

GROUT

- clé recommends a 1/16" grout joint with this collection.
- clé recommends using mortar and unsanded cementitious grout that comply with the ANSI A118 or ISO 13007 classifications suitable for your project. pool and fountain waterlines require a grout specifically rated by its manufacturer for submerged use. please follow the applicable TCNA Handbook methods and consult your installation professional to make these determinations.
- zio and sons border pieces come pre-assembled, revealing white setting material in between each piece. we recommend applying mapei grout refresher onto the setting material to match the grout color you select for your 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 grout color selection for any of your clé tiles.
    - first, have your contractor complete your tile installation, except for the grout portion.
    - next, ask your contractor to bring all grout color charts from his preferred grout manufacturer 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.
- if you are working with highly color-variegated tiles or a combination of tiles, we recommend that you follow the above recommendations—but match your grout to the color in your installation that you would like to accentuate.
- 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 stonetech heavy duty sealer from laticrete as a pre-grout treatment to minimize the possibility of the contrasting grout curing in the inherent hairline cracks, pits, and/or chips.
- if your contractor is having any issues or questions regarding grout, please reach out to the grout manufacturer directly. they are the best and fastest line of contact.

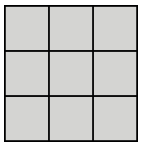
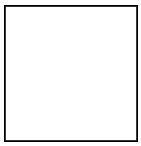
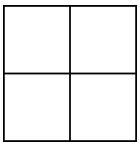
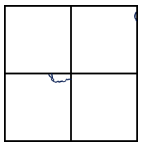
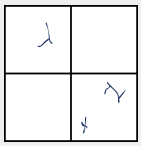
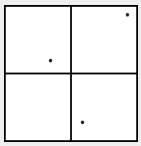
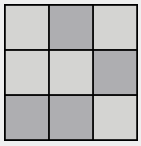
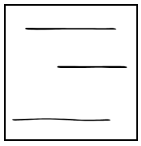
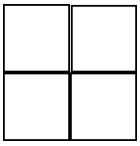
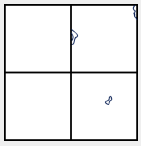
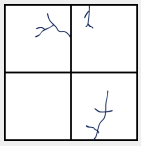
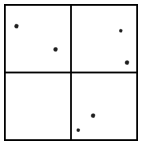
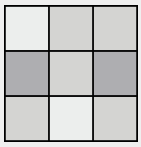
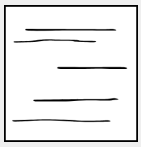
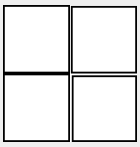
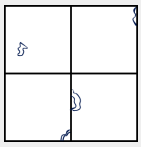
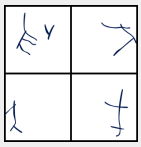
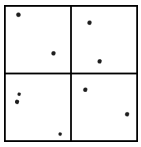
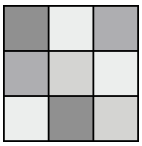
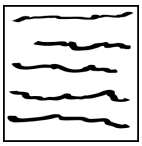
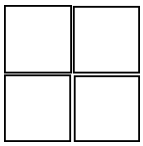
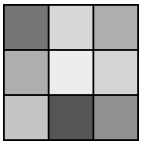
SEALING, MAINTENANCE, AND CARE

- please follow laticrete's sealing, maintenance, and care guide for more guidance on sealing, cleaning, maintaining, and caring for your tile installation.
- **if you have any questions regarding laticrete products or how to use them, please contact laticrete directly by phone: 1-800-243-4788 x 1235.**

additional specifications

VARIATION & IMPERFECTIONS

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

COLOR VARIATION	TEXTURE VARIATION	SIZE VARIATION	PITS / CHIPS	CRACKS / CRAZING	IRON SPOTS
SLIGHT - MEDIUM	**MEDIUM**	**HEAVY**	**PREVALENT - HEAVY**	**WILL OCCUR - HEAVY**	**WILL OCCUR**
 low	 smooth	 slight	 will occur	 will occur (unglazed)	 will occur
 slight (unglazed)	 slight	 medium	 prevalent	 prevalent (glazed)	 prevalent
 medium (glazed)	 medium	 heavy	 heavy (charred cedar)	 heavy (charred cedar)	 heavy
 heavy	 heavy	 extreme	n/a	n/a	n/a
 extreme	n/a	n/a	n/a	n/a	n/a

FLOOR RATING

zio and sons are rated III (can be used for light residential to light commercial foot traffic). to help maximize your floor's beauty and longevity, aside from not exposing tiles to traffic beyond its capacity, floors should be kept clean of abrasive debris and stains should be cleaned as quickly as possible.

I **light residential**

for residential areas with light foot traffic. for example: bathroom, bedroom, formal dining and living
please note the following:
not suitable for shoes with hard sole profiles (cleats, stilettos, etc.)

II **heavy residential**

for residential areas with continuous foot traffic. for example: entry, hallway, kitchen, foyer, laundry, and mud rooms.

III **light commercial**

for commercial areas with light foot traffic. for example: commercial offices, doctor's offices, and boutiques

IV **heavy commercial**

for commercial areas with continuous foot traffic. for example: hotel lobby, retail, corridors in an office building, shopping malls and restaurants.

V **industrial**

standard industrial floor use with no extreme, heavy breakage or spillage. for example: restaurant kitchens, bar work areas, winery production, exterior hotel entry, airport, car showroom, driveway.

PRODUCT DESCRIPTION

handmade, glazed terracotta tiles.

PRODUCT COMPONENTS

clay, glaze, pigments.

PITTING, CRACKING & CHIPPED EDGES

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.

DIMENSIONS

SHAPE	PIECE DIMENSIONS	WEIGHT
OCTAGON	10.16 cm x 10.12 cm x 0.95 cm (4" x 4" x ⅜")	0.18 kg per tile (0.40 lb)
BOUCHON	3.18 cm x 3.18 cm x 0.95 cm (1 ¼" x 1 ¼" x ⅜")	0.05 kg per tile (0.10 lb)
BORDER	20.3 cm x 8.9 cm x 1.27 cm (8" x 3 ½" x ½")	0.30 kg per piece (0.67 lb)

* Please note all dimensions are nominal and can vary +/- ¼".

AVERAGE COEFFICIENT OF FRICTION (DCOF ACUTEST)

unglazed zellige meets ansi a326.3 standard for exterior, wet usage
glazed zellige meets the ansi a326.3 standard for interior, dry usage

FINISH	WET DCOF	DRY DCOF
UNGLAZED	0.80	n/a
GLAZED	0.25	0.53

*application of an anti-slip sealer or treatment can help increase slip resistance.

*dcof is only one factor and should be considered together with levelness of surface to be tiled, type of use, expected traffic, contaminants, maintenance, and wear when choosing a tile for your project

per ansi a326.3 standards:

- interior floors meant to be walked on *when dry* should have a *dry* dcof of at least 0.42,
- interior floors intended to be walked on *when wet* should have a *wet* dcof of at least 0.42,
- exterior floors intended to be walked on *when wet* should have a *wet* dcof of at least 0.55

FREEZE/THAW RESISTANCE (ASTM C1026)

zellige tiles are not freeze/thaw resistant.

WATER ABSORPTION (ASTM C373)

natural: avg. 21.9%
glazed: avg. 22.9%

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 terracotta 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.”