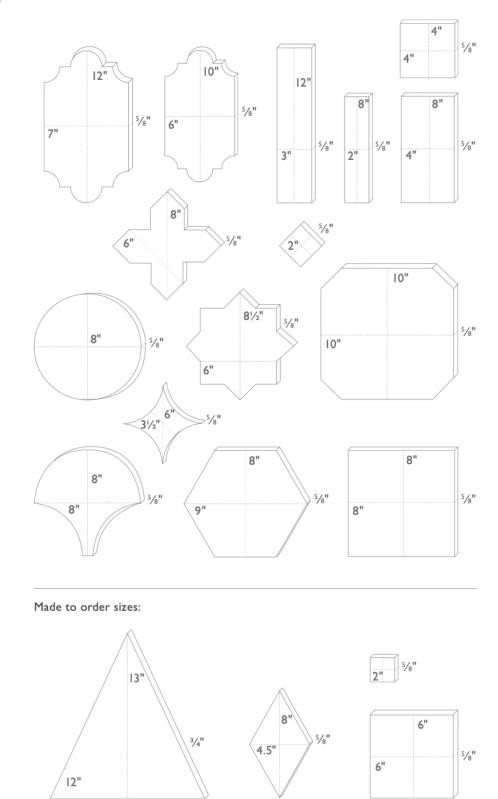
# ENCAUSTIC CEMENT

USAGE	Y / N
interior floor	Y
interior wall	Y
exterior floor	Y*
exterior wall	Y*
light residential traffic	Y
heavy residential traffic	Y
light commercial traffic	Y
heavy commercial traffic	Y
Industrial traffic	N
shower	Y*
steam shower	Ν
fountain	Ν
pool	Ν
freeze/thaw	Ν
UV resistant	Ν
radiant heating compatible	Y
heat resistant	Y
fireplace surround	Y*
stove backsplash	Y*
sink backsplash	Y*
grout joint size	<sup>1</sup> / <sub>16</sub> "



#### Standard thickness for cement under $12" \times 12"$ is $\frac{5}{8}"$ .

Standard thickness for cement over 12" x 12" is  $\frac{3}{4}$ ".

Please note all dimensions are nominal. Additionally, dimensions may vary +/- ½". \*There are specific installation requirements for this usage. Please review the "<u>Installation</u> <u>Areas</u>"and "<u>Grout</u>" sections below, and discuss with your installer.

# ENCAUSTIC CEMENT

What's in our tile: Our encaustic cement tiles do not use kilns or other firing processes, therefore no fossil fuels are burned during production. Instead they are processed in a way that allows them to be free of energy costs involved in the firing process of ceramic tiles. They are created using basic earth components—natural pigments mixed with ground marble dust, white portland cement and sand. Instead of firing, our cement tiles are made by pouring the materials into a mold, then being hydraulically pressed and stacked in a water bath to cure. The end result is a durable, safe and long lasting tile.

Our cement tiles are made up of three different layers:

Top layer = known as the 'color' and design layer is made of natural pigments mixed with ground marble dust and the finest white portland cement.

Middle layer = a mortar made of fine sand and portland cement that provides for compression reinforcement for heavy traffic and furniture.

Bottom layer = solid concrete made to be strong and porous for impact strength before and after installation.

Due to the handmade craftsmanship of our tiles and the variety of materials used, there will be degrees of variation in color, shade 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 Encaustic cement tiles will feature degrees of variation in color and shade. Irregular or chipped edges and cracked surfaces are to be expected and normal. ALSO dust and shipping residue are to be expected and should be cleaned prior to installing.
- BLEND BLEND BLEND due to the natural pigments used in production of cement tiles, there will be degrees of variation in color and shade in your order, therefore it is 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.
- ORDER EXTRA! industry standard suggests adding at least 15% overage due to tile cuts, potential shipping breakage, or future repairs. However, if the natural variation in shade and color of our encaustic cement tiles does not fit your project's needs, we recommend ordering 20-30% overage. This will allow your contractor to cherry-pick the tiles most desirable for your project.
- SHIPMENTS ARE SUBJECT TO WEATHER tiles may be exposed to moisture and/or condensation during production or shipping which may affect the color of the tiles once received. Setting the tiles out to dry prior to installation will return the color to normal. Do not install tiles until fully dried.

- \* NOTE: Smudging caused by friction during shipping, and clouding of the tile surface due to humidity are uncommon, but these issues can sometimes occur.
  - □ Smudging tends to be more common/ noticeable on contrasting black and white patterned tiles.
  - In general, our recommended 15% overage should cover any smudging or clouding found within an order. Smudging or clouding can occur on cement tiles but generally comes off by itself during the installation process. If needed, the tiles can easily be sanded down by hand with 400 grit sandpaper to fully remove these marks prior to grouting/sealing.
  - □ All our cement tiles have a pigment layer that is roughly 1/8" (+/- 1/16") thick, so sanding will ONLY effectively remove the top-most micro-layer of the tile surface to access the fresh pigment underneath.

# **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. Any 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 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. 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).

# ■ REQUIRE YOUR INSTALLER PERFORM A "DRY RUN" BEFORE BEGINNING YOUR

**INSTALLATION** – before installing, make sure to lay out and blend ALL BOXES of your tiles so that your variations in color, and tiles that bear chips and pits are artfully placed as you would like. clé selects our tiles for their hand-hewn variations and their inherent surface and color variations, which include pits, cracks, and chipping. The best placement of these nuances throughout 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. We cannot guarantee that the tape will not erode or damage our products.
- 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 your next step 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. This is a STANDARD PRACTICE for seasoned installers as it enables the end-user and their design professional to test all the tile layouts in mock-up form and, also will allow for 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 prior to the installation of cabinets, fixtures, etc., you'll need be refinish the tile after those 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 alleviate common shipping imperfections.). Make sure to account for this final step in your project timeline and budget.
- To accommodate variations in tile sizes, wedge spacers should be used when needed to keep tile lines straight.
- Cement tiles are not UV resistant and will fade over time from sun exposure. dark colors such as black, dark blue, purple, and green colors will fade faster than others.
- TCNA and ANSI for more information please refer to the current edition of the TCNA Handbook for best installation results and ANSI A137:1 American National Standard Specifications for Ceramic Tile.

# **INSTALLATION AREAS**

- Cement tiles can be installed on interior floors and walls.
- Cement tiles can be installed in areas of heavy residential and heavy commercial traffic.
- Cement tiles are not freeze/thaw rated.
- Cement tiles can be installed on exterior floors. In cold-weather areas, they must be installed above-grade on covered decks or verandas and sealed with a water-repellent sealer.
- Cement tiles can be used on exterior walls. In cold-weather areas there must be flashing or roofing overhead and the tiles must be sealed with a water-repellent sealer.
- Cement tiles are not UV resistant and will fade over time from sun exposure. Dark colors such as black, dark blue, purple, and green colors will fade faster than others.
- Cement tiles should not be installed in pools, fountains, or water lines.
- Cement tiles are radiant heating compatible.
- Cement tiles can be used on fireplace surrounds, but are not heat resistant, and should be kept out of direct heat.
- Cement tiles can be installed on backsplashes, in bathrooms and showers with the application of a penetrating sealer.
- Cement tiles should not be installed in steam showers or saunas (wet or dry).
- Cement tiles can be used as a stove backsplash. Please consult with your installer to see if a range splash is required for your installation.

# GROUT

- clé recommends a 1/16" grout joint with this collection.
- Cement tiles are porous and prone to staining during the grouting process. To minimize this risk, we recommend sealing your tiles before grouting. Please refer to our <u>Sealing, Maintenance, and Care Guide</u> for more information.
- clé recommends using mortar and non-pigmented grout that comply with the ANSI A118 or ISO 13007 classifications suitable for your project. Please consult with your installation professional to make these determinations.
- 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 patterned cement tiles, 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 pattern that you would like to accentuate.
- If your contractor is having any issues or questions regarding the grout chosen, please reach out to the grout manufacturer directly as they are the best and fastest line of contact.

# SEALING, MAINTENANCE, AND CARE

- Please follow Laticrete's <u>Sealing</u>, <u>Maintenance</u>, and <u>Care Guide</u> for more guidance on 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.

# COLOR, TEXTURE AND SIZE VARIATION

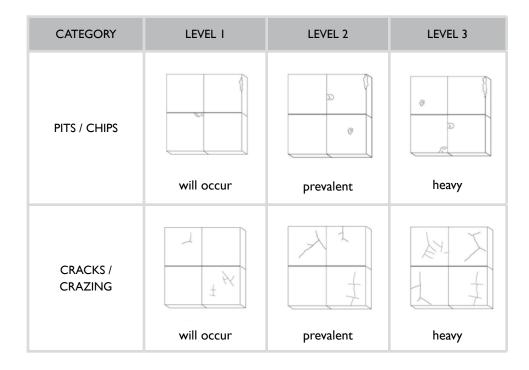
Due to the handmade craftsmanship of many of our tiles and the variety of materials used, there are degrees of variation in our tiles color, shade and texture. These differences are more pronounced in certain types of tiles than others, especially in tiles from separate production lots, or "batches". This makes it unlikely that your sample will be a perfect match with your actual order or that your add-on order will be a perfect match to your first order. You can also expect to have both chips and cracks in the tiles.

The following is a guide for the different degrees of variation that we have assigned our tiles: Cement tiles are rated 'level 3 medium' for color variation, 'level 1 smooth' for texture variation, and 'level 1 slight' for size variation.

CATEGORY	LEVEL I	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
COLOR VARIATION	low	slight	medium	heavy	extreme
TEXTURE VARIATION					
					n/a
	smooth	slight	medium	heavy	
size Variation					n/a
	slight	medium	heavy	extreme	

# IMPERFECTIONS

Cement tiles are rated 'level I will occur' for chips, and 'level I will occur for cracks.



# FLOOR RATING

Cement tiles are rated IV (can be used for light residential to heavy commercial 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 offices, doctor's offices and boutiques. 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**

Hydraulic pressed handmade cement tiles.

# **PRODUCT COMPONENTS**

Wear colored layer: 3 to 4 mm +/- thickness affixed to the tile body by 1,700 PSI mechanical pressure, composed of: white portland cement, marble dust and mineral pigments for color (oxides and organic).

Tile Body: 12 mm +/- in thickness, composed of gray portland cement & sand.

Our cement tiles are made up of three different layers:

Top layer = known as the 'color' and design layer made of natural pigments mixed with ground marble dust and the finest white portland cement.

Middle layer = a mortar made of fine sand and portland cement that provides for compression reinforcement for heavy traffic and furniture.

Bottom layer = solid concrete made to be strong and porous for impact strength before and after installation.

# DIMENSIONS

	Piece Dimensions	Weight
Bouchon	5 cm x 5 cm x 1.6 cm (2" x 2" x ⁵⁄₅")	0.08 kg per tile (0.18 lb)
Circle	20 cm x 20 cm x 1.6 cm (8" x 8" x ⁵⁄₀")	0.68 kg per tile (1.5 lbs)
Cross	I5 cm x 20 cm x I.6 cm (6" x 8" x ⁵⁄՞в")	0.69 kg per tile (1.54 lbs)
Diamond	I I cm x 20 cm x I.6 cm (4.5" x 8" x ⁵⁄ଃ")	I.36 kg per tile (3 lbs)
Hexagon	l5 cm x l8 cm x l.6 cm (6" x 7" x ⁵⁄₀")	0.71 kg per tile (1.5 lbs)
	20 cm x 23 cm x 1.6 cm (8" x 9" x ⁵⁄₀")	I.36 kg per tile (3 lbs)
Lantern	l5 cm x 25 cm x l.6 cm (6" x l0" x ⁵⁄ଃ")	I kg per tile (2.2 lbs)
	l8 cm x 30 cm x l.6 cm (7" x l2" x ⁵⁄ଃ")	I.27 kg per tile (2.8 lbs)
Losange	15 cm x 9 cm x 1.6 cm (6" x 3½" x 5/8")	0.29 kg per tile (0.66 lbs)
Octagon	25 cm x 25 cm x 1.6 cm (10" x 10" x 5⁄⊮")	2 kg per tile (4.5 lbs)
Rectangle	5 cm x 20 cm x 1.6 cm (2" x 8" x ⁵⁄₀")	0.34 kg per tile (0.75 lb)
	10 cm x 20 cm x 1.6 cm (4" x 8" x ⁵⁄₀")	0.68 kg per tile (1.5 lbs)
	7.6 cm x 30.5 cm x 1.6 cm (3" x 12" x ⁵⁄₀")	0.77 kg per tile (1.7 lbs)

\* Please note all dimensions are nominal and may vary +/-  $^{1}/_{8}$  ".

# **DIMENSIONS** (continued)

	Piece Dimensions	Weight
Scallop	20 cm x 20 cm x 1.6 cm (8" x 8" x ⁵⁄ଃ")	0.68 kg per tile (1.5 lbs)
Square	5 cm x 5 cm x 1.6 cm (2" x 2" x ⁵⁄ଃ")	0.08 kg per tile (0.18 lb)
	10 cm x 10 cm x 1.6 cm (4" x 4" x ⁵⁄ଃ")	0.34 kg per tile (0.75 lb)
	l5 cm x l5 cm x l.6 cm (6" x 6"x ⁵⁄₃")	0.71 kg per tile (1.5 lbs)
	20 cm x 20 cm x 1.6 cm (8" x 8" x ⁵⁄ଃ")	I.36 kg per tile (3 lbs)
Star	I5 cm x 20 cm x I.6 cm (6" x 8" x ⁵⁄ଃ")	0.89 kg per tile (1.98 lbs)
Triangle	30 cm x 33 cm x 1.9 cm (12" x 13" x ¾")	I.59 kg per tile (3.5 lbs)

\* Please note all dimensions are nominal and may vary +/-  $\frac{1}{8}$ ".

# AVERAGE COEFFICIENT OF FRICTION (DCOF ACUTEST)

	Wet DCOF
8" × 8"	0.74 (wet, exterior floors)

\*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)

Cement tiles are not freeze/thaw resistant.

#### WATER ABSORPTION (ASTM C373)

avg. 10.9%; non-vitreous.

## ACID RESISTANCE

Cement tiles are not resistant to acids and should be cleaned with pH neutral cleaner.

## 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.

Our cement tiles are considered 'inherently non-emitting sources' under the Low-emitting Materials Credit of LEEDv4/v4.1, but our current pre-seal offering is not compliant with LEED. Because we offer them finished in a pre-polish & pre-seal format to support stain resistance, we would recommend ordering them without the sealant, in the pre-polish format only, in order to qualify for the Low-emitting Materials Credit.

'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 hope to have these available Q1/Q2 of 2020.

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 cement tiles can withstand the tests of time while remaining timeless.* 

# **RECYCLED CONTENT**

There is no recycled content in our cement 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**

We currently do not have fire testing results for our cement tiles and are exploring our testing options.