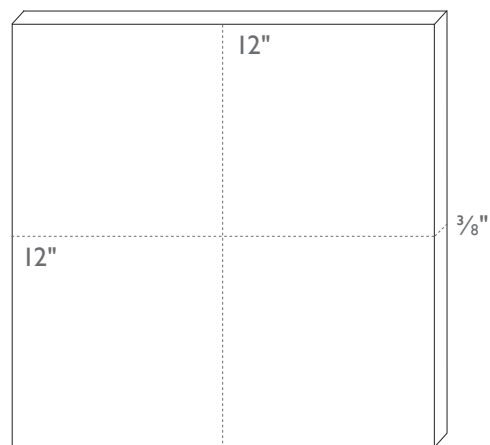


clé LITHOGRAPHY— MUCH LOVE ME, MALACHITE

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



Standard thickness for lithography is 3/8". Please note all dimensions are nominal and can vary plus or minus 1/8".

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

clé LITHOGRAPHY—TRADE

INSPECTING YOUR SHIPMENT

- Each clé lithography tile is carefully hand crafted by our tile artisans to create a decorative pattern on a smooth, honed stone surface.
- **IMPORTANT:** It is very important to blend the tiles from all boxes once they arrive and place them in their installation area to ensure you have the layout you want before installing. Do not install without blending tiles from all boxes.
- Industry standard suggests adding at least 15% overage due to tile cuts, potential breakage, or future repairs.
- Dust and residue from shipping should be cleaned prior to installing.

INSTALLATION

- 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 natural stone installer who can provide the exact specifications for your project.
- Please refer to the current edition of the TCNA Handbook for detailed natural stone installation methods for your project's needs.
- 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.
- To ensure proper bonding when setting, we recommend lightly wiping the back of each tile if there is excessive dust.
- Be sure to have 95% or more adhesive on the back of the tile to ensure the best bond when setting tiles 8" x 8" or larger.
- **IMPORTANT: DO NOT USE TAPE** during product installation, or otherwise. We cannot guarantee our products safety against various construction tapes—INCLUDING BLUE TAPE.
- During installation, only soft cloths are recommended for cleaning the tile surface as well as for ongoing maintenance.
- Can only be installed on exterior walls and requires vertical weather flashing at the top and application of clé top coat kit, in non freeze/thaw locations only.
- **IMPORTANT:** Lithography tiles cannot be placed where heat is directed onto them (inside fireplaces, pizza ovens and oven venting). If you are wanting to install lithography 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.
- If installing next to something very hot like an industrial pizza oven, you should install the tile at least 6" away.

SEALANT

- clé ONLY recommends the use of the [clé top coat kit](#) for sealing lithography tiles.
- **IMPORTANT:** Use of any other sealant may strip the printed decoration off the surface of the tile.
- The top coat kit should be applied to the tile surface and grout lines as the final step of installation.
- For applications in wet areas, specific waterproofing precautions need to be taken such as using a waterproof membrane under the tile and sealing the grout lines and the tile surface with the top coat as the final step of installation.
- Exterior wall installations require vertical weather flashing at the top and application of clé top coat kit, in non freeze/thaw locations only.

GROUT

- clé ONLY recommends [Mapei Flexcolor CQ](#) grout 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.
- For patterns lithographed on stone, a wide grout joint is NOT recommended. A tight grout joint will ensure that the artwork has a continuous design flow.
- clé recommends a 1/16" grout joint.
- Do not apply a grout release or sealant prior to grouting as it may damage the decoration.
- 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 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.
- We recommend carefully finger grouting to keep grout in the joints and off the surface of the 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, wet cloth.
- Once a clé tile lithography 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.**
- Most installation issues arise when the installer has not properly cleaned the surface of the tiles after the grouting process. If the installer uses a typical grout scrub, they will damage the decoration.

- If the installer leaves a significant grout film on the surface of the tiles, it will mask the decoration. A grout film will not occur if the tile installer has finger grouted, as recommended.
- Clients using any of the latest permacolor grouts should take note that permacolor grout dries more quickly than common grouts. Therefore, extra care should be taken to ensure that the grout is NOT applied to the surface of the tile before it begins its immediate drying. Additionally, the working consistency of permacolor grout makes it more difficult to finger grout.
- 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 resolution.

MAINTENANCE

- Single coat reapplication of clé top coat kit is required once a year on grout lines and the tile surface in shower applications due to the continuous exposure to water.
- For showers, opening windows/doors to help some of the moisture dissipate faster after use will help rid extra moisture.

CLEANING

- As with any finely decorated stone product, clé warns against the use of any surface cleansers or scrubbing pads, especially during the installation process.
- Cleaning lithography only requires the use of mild soap, water and soft cloths in most cases.
- Lithography is chemically sensitive. Do not use any cleaners that are not pH neutral. This includes vinegar, and Simple Green brand products.
- Always avoid harsh chemicals and acidic or alkaline cleaning products.
- Showers and baths: soap scum can be minimized by using a squeegee after each use and using liquid as opposed to bar soaps.

clé LITHOGRAPHY SPECIFICATIONS

What's in our tile: The white mineral-based tones of limestone make it an attractive choice. It is a sedimentary rock which makes it highly durable. In fact limestone has been used in construction for centuries dating as far back as the Mayans who built their pyramids with it. European castles and churches built in the Middle Ages feature limestone as do many 19th century landmarks such as Grand Central Station. It is limestone's ability to withstand exposure and its carving properties for decorative elements that have made it such a popular material in construction.

COLOR AND TEXTURE VARIATION

Lithography is rated VI–V2 / T1

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”.

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

FLOOR RATING

Lithography field tile is rated I. (can be used for light residential 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.)

PRODUCT DESCRIPTION	Hand lithographed artist images on honed limestone.	
PRODUCT COMPONENTS	Honed limestone, ink	
DIMENSIONS	Printed Tiles	30.5 cm x 30.5 cm x 0.95 cm (12" x 12" x 3/8") / 2.3 kg per tile (5 lbs)
	Field Tile	30.5 cm x 30.5 cm x 0.95 cm (12" x 12" x 3/8") / 2.3 kg per tile (5 lbs)
	* Please note all dimensions are nominal and can vary plus or minus 1/8".	
FREEZE/THAW RESISTANCE (ASTM C1026)	Lithography tiles are not freeze/thaw resistant.	
WATER ABSORPTION TEST (ASTM C373)	Honed limestone substrate—avg. 4.78%; semi-vitreous	

RADIANT HEAT COMPATIBLE

Lithography tiles are not radiant heat compatible.

ACID RESISTANCE

Lithography tiles are not resistant to acids and only mild, pH neutral cleaners should be used.

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.

Lithography tiles are considered 'inherently non-emitting sources' under the Low-emitting Materials Credit of LEEDv4/v4.1. **This is a credit for our lithography 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 hope to have these available Q1/Q2 of 2020.

Disclosures for MR Credit Environmental Product Declarations under LEEDv4/v4.1, 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, applies if there is recycled content, bio-based materials, wood or reused products included in the tile.

RECYCLED CONTENT

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

FIRE RATING

Typically, natural stone tile does not need to have fire rating testing performed. It is our understanding from TCNA that the explanation that natural stone 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.

Natural stone tile falls under the description, "because stone 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." Please follow the link for a TCNA document supporting this and many other positive attributes to using natural stone tiles. TCNA Bulletin: Ceramic Tile for a Safe & Healthy Home.

WET AREA APPLICATION

Lithography can be installed on backsplashes, shower walls and bathroom walls only if specific waterproofing precautions are taken:

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

- A waterproof membrane is used under the tile and clé top coat kit is applied to the grouted areas and the tile surface.
- Single coat reapplication of clé top coat kit is required once a year in shower applications due to the continuous exposure to water.
- * Lithography cannot be used in steam showers.
- * Lithography cannot be used in pools or fountains.
- * Lithography is not recommended for exterior areas that regularly experience freezing temperatures.

