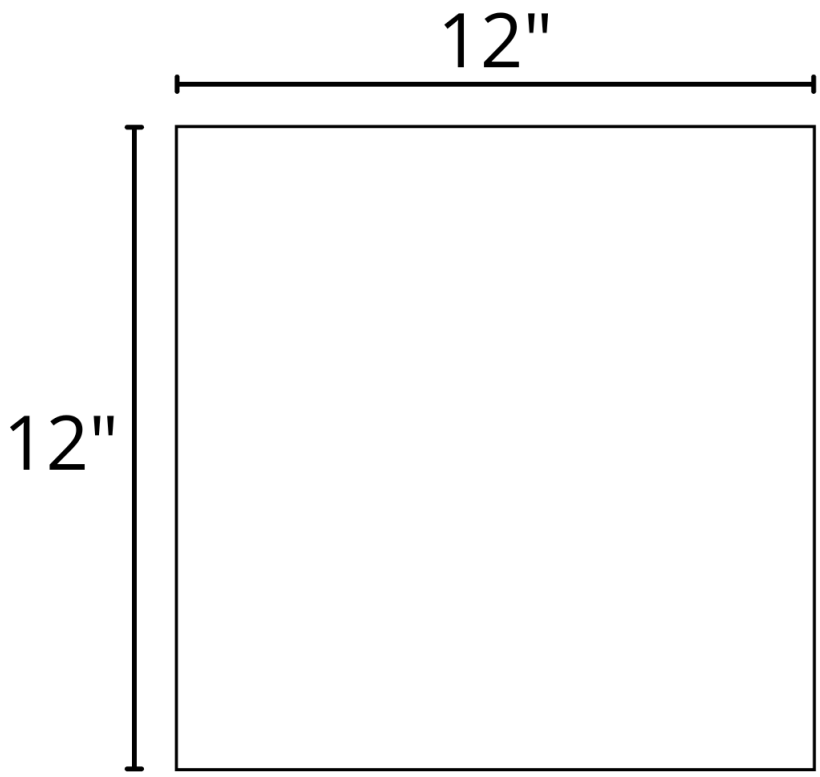
clé lapidary: lithography



grand stout

standard thickness for lithography is ⅜".
* please note all dimensions are nominal. additionally, dimensions can vary +/- ⅛ inch

USAGE		walls		floors						traffic rating			
	grout joint	interior	exterior	interior	exterior	entryway	mudroom	bathroom	kitchen	light res.	heavy res.	light comm.	heavy comm.
	1/16"	Y	Y*	N*	N	N	N	N*	N	N*	N	N	N

USAGE	shower		steam shower						resistant		fireplace		
	floors	walls	floors	walls	fountain	pool	waterline	freeze thaw	UV	heat	surround + hearth	backsplash	radiant heating
	N	Y*	N*	N*	N	N	N	N	N	N	Y*	Y*	N

* there are specific installation requirements for this usage.
please review the "installation areas", "grout" and "sealing, maintenance & care" sections below and discuss with your installer.

clé lapidary: lithography

you've got something special. Developed over several years, lithography is clé's proprietary process for reproducing high-resolution artwork onto fine stones like limestone. This technique allows us to realize artist collaborations and reinterpret classics such as malachite and delftware. Chosen for its luminous white tone and exceptional durability, limestone has been used for centuries in everything from Mayan pyramids to medieval European architecture and Grand Central Station.

expect variation. there will be variations in thickness, size, texture, shade and color 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** - each clé Lapidary: Lithography tile is carefully hand crafted by our tile artisans to create a decorative pattern on a smooth, honed stone surface. ALSO- dust and shipping residue should be expected and wiped off with a soft microfiber cloth prior to installing.
- **BLEND BLEND BLEND** - due to the handmade production methods used in creating our lithography tile there will be variation in color and pattern. it is crucial to blend tiles from all boxes 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.
- **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.

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).

- during installation, only soft cloths are recommended for cleaning the tile surface as well as for ongoing maintenance.

- **REQUIRE YOUR INSTALLER PERFORM A "DRY RUN" BEFORE BEGINNING YOUR INSTALLATION** – make sure to lay out and blend tiles from ALL BOXES so that variation in color, and tiles that bear chips and pits are artfully placed as you would like. we select our tiles for their hand-hewn qualities and inherent surface and color variations, including pits, cracks, and chips. Best placement of these nuances within your installation must be guided by you and/or your design professional to realize the best 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. the tape may 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** – to ensure your tiles are organized properly and your grout and joint size, as well as your sealant, are done to your design professional's specifications- we urge you to require your installer create mock-up boards before installation. a STANDARD PRACTICE for seasoned installers, it lets the end-user and their design professional test 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 creating mock-up boards, be 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 planning to install your tile before installing cabinets, fixtures, etc., you'll need to refinish the tile after the other features are installed in what we call the "final finish." here, your contractor should replace any broken or chipped tiles caused by construction damage, scuffing, or any deterioration of the tile surface. a professional refinisher should be hired for the final refinishing of your tile installation. (another benefit is that shipping refinishing can lessen common shipping imperfections.). be sure to account for this final step in your project timeline and budget.

TCNA, ANSI, AND ASTM - refer to the tcna handbook's latest edition for best installation results, and to the natural stone institute's dimension stone design manual for stone-specific guidance. for specifications, reference the astm standard that applies to your stone type (e.g., astm c503 for marble, astm c1527 for travertine, astm c568 for limestone).

INSTALLATION AREAS

- **walls**
  - suitable for use on interior and exterior walls
  - for exterior installations in cold-weather areas, there must be a flashing or roofing overhead and the tiles must be properly sealed. see the "sealing, maintenance, & care" section below.
- **floors**
  - printed lithography tiles are not suitable for floors
  - **unprinted** field tiles can be installed on interior floors in areas with light residential traffic.
- **showers**
  - suitable for use on shower walls with the application of the clé top coat kit to seal the installation.
  - not suitable for use in steams showers or saunas (wet or dry)
- **pools, fountains & waterlines**
  - not suitable for installations in pools, fountains or waterlines
- **freeze/thaw rating**
  - not freeze/thaw resistant
- **uv resistance**
  - lithography tiles are not uv resistant
- **fireplace surround and hearth**
  - lithography tiles can be used on fireplace surrounds
  - lithography tiles are not heat resistant and cannot be installed where they will be exposed to direct heat (inside fireplaces, pizza ovens, oven venting).
- **backsplashes**
  - can be used as a stove backsplash. please consult with your installer to see if a range splash is required for your installation.
  - suitable for sink backsplashes with the application of the clé top coat kit to seal the installation.

GROUT

- clé recommends a 1/16" grout joint with this collection.
- clé recommends using mortar and grout that comply with the ANSI A118 or ISO 13007 classifications suitable for your project. consult with your installation professional to make these determinations.
- further, clé recommends non-pigmented grout to reduce the risk of grout haze and staining. 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.
- 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 contractor complete your tile installation, except for the grout portion.
    - ask your contractor to bring grout color charts from his preferred grout manufacturer for your review.
    - choose a time of day when you are most pleased with the lighting in your space. in that lighting and at that time of day, choose the grout color that best matches your tile selection.
- if you are working with patterned 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 grout, please reach out to the grout manufacturer directly. they are the best and fastest line of contact.
- we recommend finger grouting carefully to keep grout in the joints and off the surface of the 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. any grout film left of the surface of the tile will damage the tile.
- 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. it is important to keep the surface of the tile clean.

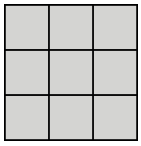
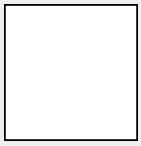
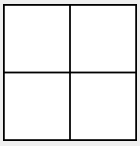
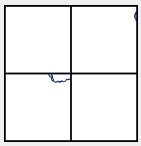
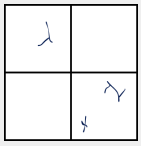
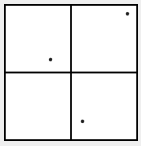
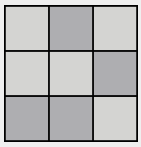
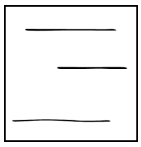
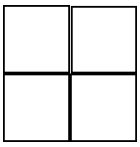
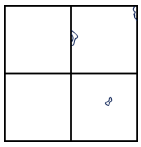
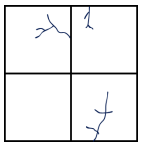
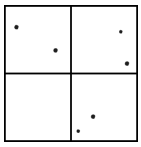
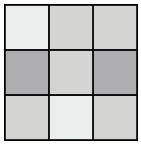
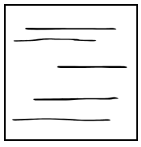
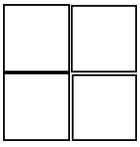
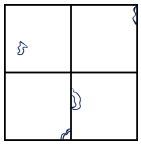
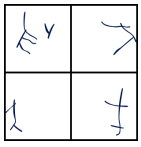
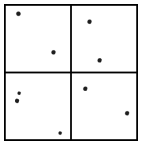
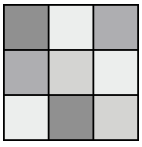
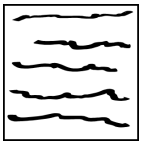
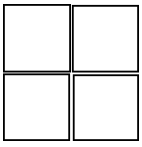
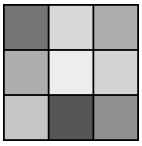
SEALING, MAINTENANCE & CARE

- clé recommends the use of the clé top coat kit for sealing all applications of lithography tiles. please note that the use of any other sealant may strip the hand painted decoration off the surface of the tile.
- we recommend applying a layer of the top coat to the tile surface and grout lines as the final step of installation for interior wall applications.
- we recommend applying 2 coats of the top coat to the tile surface and grout lines as the final step of installation for commercial wall applications where staining is a concern (restaurants, bars) and for exterior walls.
- 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 an additional application of the top coat as the final step of installation.
- exterior walls installations require vertical weather flashing or roofing overhead and application of the clé top coat kit.
- as with any finely decorated stone product, clé warns against the use of any surface cleansers or scrubbing pads, for maintenance cleaning or during the installation process.
- cleaning lithography only requires the use of mild soap, water, and soft cloth in most cases.
- lithography tiles are very sensitive to chemicals. do not use any cleaners that are not ph neutral and 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.

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	**SMOOTH**	**SLIGHT**	**WILL OCCUR**	**WILL OCCUR**	**WILL OCCUR**
 low	 smooth	 slight	 will occur	 will occur	 will occur
 slight	 slight	 medium	 prevalent	 prevalent	 prevalent
 medium	 medium	 heavy	 heavy	 heavy	 heavy
 heavy	 heavy	 extreme	n/a	n/a	n/a
 extreme	n/a	n/a	n/a	n/a	n/a

FLOOR RATING

unprinted lithography field tile is rated i (can be used for light residential foot traffic). printed lithography tiles are not suitable for floors and can only be installed on interior and exterior walls. 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

hand lithographed artist images on honed limestone.

PRODUCT COMPONENTS

honed limestone, ink.

DIMENSIONS

TILE	PIECE DIMENSIONS	WEIGHT
PRINTED TILES	30.5 cm x 30.5 cm x 0.95 cm (12" x 12" x ⅜")	2.3 kg per tile (5 lbs)
FIELD TILES	30.5 cm x 30.5 cm x 0.95 cm (12" x 12" x ⅜")	2.3 kg per tile (5 lbs)

* please note all dimensions are nominal and can vary +/- ⅛”

AVERAGE COEFFICIENT OF FRICTION (DCOF ACUTEST)

WET DCOF
≥ 0.42 (interior floors, wet)

*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 intended 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)

lithography tiles are not freeze/thaw resistant.

WATER ABSORPTION (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 LEEDv4/4.1, 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, 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.

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.