FOUNDRY FLATS FORGE



PRODUCT USAGE	interior floor	interior wall	exterior floor	exterior wall	residential light traffic	residential heavy traffic	commercial light traffic	commercial heavy traffic	radiant heating compatible	fireplace surround
PETROL, BRAZE	Y*	Y*	Y*	Y*	Y	Y	Υ	Υ	Υ	Υ
FACTORY, VOLCANIC, CAST IRON	N	Y*	N	Y*	N	N	N	N	Υ	Ν
SAWDUST, SEDIMENT, ALLOY FLUX	Y*	Y*	Y*	Y*	Y	N	N	N	Υ	Υ

PRODUCT USAGE	shower walls	steam shower	fountain	freeze thaw	pool	heat resistant	sink backsplash	stove backsplash	UV resistant
PETROL, BRAZE	Y*	Y*	N	Y	N	Υ	Y*	Y*	Υ
FACTORY, VOLCANIC, CAST IRON	Y*	N	N	N	N	N	Y*	Y*	Υ
SAWDUST, SEDIMENT, ALLOY FLUX	Y*	Y*	N	Y	N	Υ	Y*	Y*	Υ

Please note all dimensions are nominal. Additionally, dimensions can vary +/- 1/8".

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^{*}There are specific installation requirements for this usage. Please discuss with your installer.

FOUNDRY FLATS FORGE

What's in our tile: We scoured the country looking for a thin brick and discovered these Foundry Flats at a family-run business with a long history of working with clay. Sourced from materials located within 25 miles of the factory, the flats are solidly made with a body that reflects a color palette that is both modern and enduring. Made from clay and water, Foundry Flats are a classic American, affordable, and recyclable product. Forge thin bricks have been manufactured with an artisan approach, manipulated at different stages of the production to create varied surfaces with visceral appeal.

Due to the handmade craftsmanship of our tiles and the variety of materials used, there will be degrees of 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 Foundry Flats Forge tiles are thin unglazed bricks featuring a distinctive patina and a textured surface. Variations in depth, thickness, size, color and shade are inherent to this collection. ALSO Dust and shipping residue are to be expected and should be cleaned prior to installing.
- When specifying unglazed bricks, if color consideration is paramount, always work from a sampling of three or more bricks, which represents the range of color you can expect on the job.
- **BLEND BLEND** Unglazed brick colors vary from brick to brick, some more than others. These variations are a result of production methods and choice of raw materials. 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 bricks from all boxes.
- 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. 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 https://www.cletile.com/blogs/cle-notes/how-to-choose-contractor-installer).
- REQUIRED 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 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.
- **TCNA** and **ANSI** Please refer to the current edition of the TCNA Handbook and the Thin Brick Veneer technical notes from The Brick Industry Association (BIA) for best installation results.

INSTALLATION AREAS

- Foundry Flats Forge thin brick tiles have specific installation area usage depending on color and finish. Please reference the graphic on page 1.
- Foundry Flats Forge thin brick tiles can be used on interior floors and exterior floors, with the exception of factory, volcanic, and cast iron colorways. Please note that the coating on sawdust, sediment, and alloy flux will fade over time in floor installations.
- Foundry Flats Forge thin brick tiles can be used on fireplace surrounds, with the exception of factory, volcanic, and cast iron colorways.
- Foundry Flats Forge thin brick tiles are radiant heat compatible.

- Foundry Flats Forge thin brick tiles can be installed on backsplashes, in bathrooms and showers with the application of a penetrating sealer.
- Foundry Flats Forge thin brick tiles can also be installed in steam showers with the exception of factory, volcanic, and cast iron colorways. Additionally, you can install braze tile in steam shower walls, but avoid installing on steam shower floors.
- All Foundry Flats Forge thin brick tiles can be used as a stove backsplash, please consult with your installer to see if a range splash is required for your installation.
- All Foundry Flats Forge thin brick tiles can be installed on interior and exterior walls. Please refer to the "Sealing, Maintenance, and Care" section below for exterior sealing recommendations.
- All Foundry Flats Forge thin bricks are not suitable for pool and fountain installations.
- Foundry Flats Forge thin bricks are freeze/thaw resistant with the exception of factory, volcanic and cast iron colorways.

GROUT

- clé recommends non-pigmented cementitious sanded grout to reduce the risk of grout haze and staining.
- clé recommends a ¾" grout joint with this collection.
- 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.
- 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.
- Due to the texture of the bricks we recommend applying a sealant or a grout release prior to grouting to minimize risk of grout haze and to allow for easier clean up. Given that it will be difficult to remove grout from the textured surface of brick even when using a grout release, we also recommend that a grout bag or gun be used for grouting and to work carefully.
- 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 <u>Sealing. Maintenance and Care</u> guide 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: I-800-243-4788 X 1235.

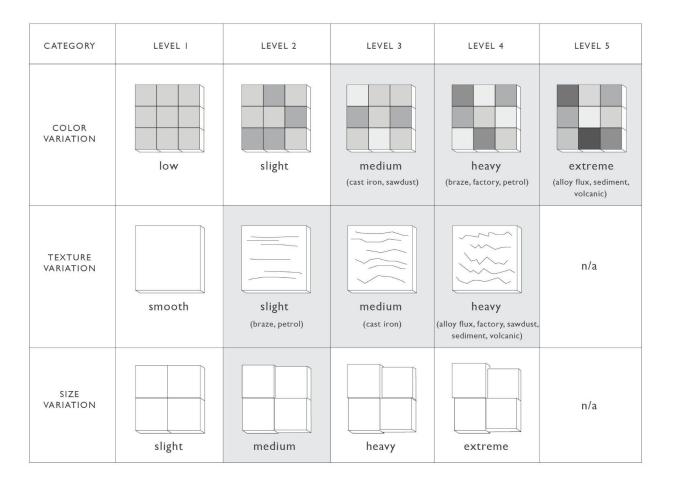
ADDITIONAL SPECIFICATIONS

COLOR, TEXTURE AND SIZE VARIATION

Due to the handmade craftsmanship of many of our bricks 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 either.

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

Color and size variation for Foundry Flats Forge thin brick tiles are varied. Color variation ranges from 'level 3 medium' to 'level 5 extreme'. Texture variation ranges from 'level 2 slight' to 'level 4 heavy'. Visit Foundry Flats Forge product pages on www.cletile.com for individual ratings. Size variation for all Foundry Flats Forge bricks is 'level 2 medium'.



FLOOR RATING

Foundry Flats thin bricks Petrol and Braze are rated IV (can be used for light residential to heavy commercial foot traffic), and Sawdust, Sediment and Alloy Flux are rated I (can be used for light residential foot traffic) as outlined below:

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.)
- I heavy residential

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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.)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

American made, Foundry Flats Forge thin brick tiles emphasize classic, industrial style and are manufactured to last and improve with age.

Foundry Flats Forge thin brick tiles shall be selected by the architect/designer/owner from manufacturer's standard sizes, shapes and glazes. Foundry Flats Forge thin brick tiles meets or exceeds ASTM-C1088 Type TBS or TBX.

PRODUCT DESCRIPTION

Clay and shale.

DIMENSIONS

Forge	6 cm × 20 cm × 2 cm* (2 ½" X 8" X ¾"* / .38 kg per tile (.85 lb)
Corner—Forge	6 cm x 20 cm x 9.5 cm (2 ½" X 8" X 3 ¾" / .45 kg per tile (1 lb)

^{*}Please note all dimensions are nominal. Additionally, dimensions between tiles can vary +/- 1/8". Standard thickness for Forge bricks is 3/4" with the exception of Factory which has a 1/2" thickness.

AVERAGE COEFFICIENT OF FRICTION (DCOF ACUTEST)

The textured, unglazed surface will provide slip resistance.

FREEZE/THAW RESISTANCE (ASTM C1026)

Foundry Flats Forge tiles are freeze/thaw resistant with the exception of Factory, Volcanic and Cast Iron.

^{*} Application of a sealant may help increase slip resistance.

WATER ABSORPTION (ASTM C373)

Alloy Flux	5 hr boil: avg. 12.00% / 24 hr cold soak: avg. 9.0% / Saturation Coefficient: avg. 0.75
Braze	5 hr boil: avg. 9.0% / 24 hr cold soak: avg. 5.7% / Saturation Coefficient: avg. 0.64
Cast Iron	5 hr boil: avg. 9.3% / 24 hr cold soak: avg. 6.2% / Saturation Coefficient: avg. 0.67
Factory	5 hr boil: avg. 9.4% / 24 hr cold soak: avg. 6.3% / Saturation Coefficient: avg. 0.67
Petrol	5 hr boil: avg. 14.0% / 24 hr cold soak: avg. 5.9% / Saturation Coefficient: avg. 0.64
Sawdust	5 hr boil: avg. 9.82% / 24 hr cold soak: avg. 6.7% / Saturation Coefficient: avg. 0.69
Sediment	5 hr boil: avg. 10.0% / 24 hr cold soak: avg. 6.9% / Saturation Coefficient: avg. 0.70
Volcanic	5 hr boil: avg. 9% avg / 24 hr cold soak: avg. 6.5% / Saturation Coefficient: avg. 0.70

ACID RESISTANCE

Foundry Flats Foundry Flats thin bricks 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.

Foundry Flats bricks are considered 'inherently non-emitting sources' under the Low-emitting Materials Credit of LEEDv4/v4.1. *This is a credit for Foundry Flats 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, applies as there is pre-consumer recycled content in our bricks. *This is a credit for Foundry Flats that is eligible to be used toward LEED.

* Foundry Flats can contribute to two LEEDv4/v4.1 points under the Low-emitting Materials Credit and under the MR Credit Material Sourcing.

RECYCLED CONTENT

The clay mix in our Foundry Flats bricks consists of grog (ground up brick and brick waste). See material sourcing disclosure above.

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

There is approximately 8.4% pre-consumer material content (grog) in each of our Foundry Flats bricks.

FIRE RATING

Brick masonry has traditionally been used to provide superior fire resistance and safety for occupants. Since the primary ingredient in brick is clay which is fired to around 2000 F, it is classified as a non-combustible material. As such, it is an excellent choice to resist or confine fires.