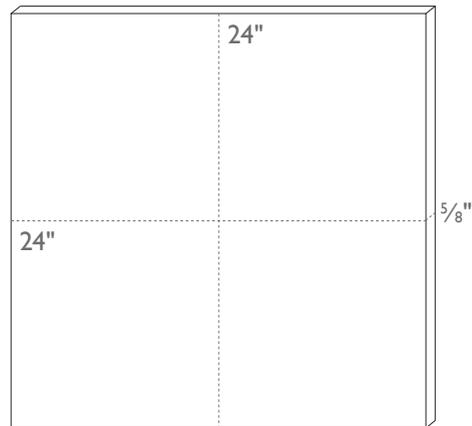
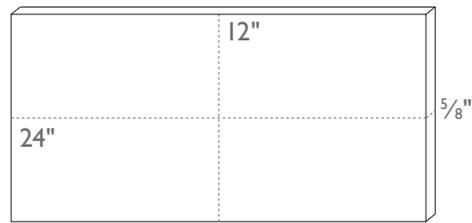
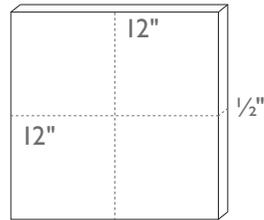


FORAGE TERRAZZO

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



Standard thickness for 12"x24" and 24"x24" is 5/8" and 1/2" for 12"x12".

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.

FORAGE TERRAZZO—TRADE

INSPECTING YOUR SHIPMENT

- With the Forage Terrazzo collection you will find a polished surface with slight beveled edges and extreme color variation derived from natural aggregate set in a cement base.
- **IMPORTANT:** Due to the extreme color and shade variations, 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.
- 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.
- **NOTE:** Forage Terrazzo pieces come packed face to face and back to back with an application of wax strips applied to one face of each of the face to face tiles. The wax strips can easily be removed with a plastic putty knife or similar.

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.
- **IMPORTANT:** Before installing, make sure to lay out your tile and blend so that variations in color are where you would like them to be and are evenly distributed throughout the installation. Do not install without blending tiles from all boxes.
- To ensure proper bonding when setting, we recommend lightly wiping the back of each tile if there is excessive dust.
- A minimum of 95% thin-set coverage is recommended on the back of the tile with no voids exceeding two square inches and no voids within 2" of the edges. All corners and edges must be fully supported and back buttering is required on tiles larger than 12" to reach these requirements.
- As with natural stone, we do not offer trim for our Forage Terrazzo. However, they can simply be finished to match the polished surface of the tiles or finished to create most forms of edge finishes—bullnose etc.
- For cutting or potentially mitering terrazzo, we recommend using a wet saw with a diamond blade.

- To increase slip resistance on shower floors, tiles can be "scored" with a tile blade in desired increments to create grooves or cut down to 4" x 4" (or smaller) squares. Please refer to a professional stone installer for this.
- Not all steam shower companies can accommodate stone surfaces so be sure to check with your plumber for an appropriate steam shower supplier.
- Please note, when using a waterproofing membrane for wet applications of Forage Terrazzo, we recommend the use of a premium rapid setting mortar to ensure the best performance.
 - We recommend [Mapei Ultralite SI Quick](#) or [Mapei Ultraflex LFT Rapid](#).
- [Mapei Ultralite mortar](#) can be used for dry applications of Forage Terrazzo.

SEALANT

- Forage Terrazzo tiles are applied with an initial protectant—3M [Scotchgard Stone Floor Protector](#); a high performance floor surface hardener and protective clear coat for porous stone surfaces. It is highly resistant to scuffs, black marks, stains, scratches and soil.
 - Please note, the initial 3M protectant on each tile is water resistant but not waterproof, therefore we recommend application of a waterproof, penetrating sealer to further protect the tile and grout lines in wet areas.
 - For wet area applications, clé ONLY recommends the use of [Miracle 511 Porous Plus](#) for an invisible sealant finish. Grout lines and the tile surface must be sealed as the final step of installation.
 - For dry applications including floors, we recommend sealing the grout lines with [Miracle 511 Porous Plus](#) as the final step of installation. Sealing will further protect the grout lines against staining.
 - Always test sealers in a small area to ensure it provides the finish you prefer.
 - If your contractor is having any issues or questions regarding these sealants, please have them reach out to Miracle tech support directly at 1-877-385-8155 and 3M tech support directly at 1-800-626-8578 as they are the best and fastest line of resolution.
 - PLEASE FOLLOW ALL MIRACLE SEALANT INSTRUCTIONS FOR BEST RESULTS as well as MAINTENANCE UPKEEP RECOMMENDATIONS.*
- * **HINT:** if water or oil does not bead up on the grout lines then the sealant was not applied properly.

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.
- Because of the initial 3M protectant that is applied on the terrazzo, applying additional sealant or a grout release prior to grouting isn't required when using Flexcolor CQ grout.
- However If you choose to use a grout other than Flexcolor CQ, especially a highly pigmented grout, it is recommended to use a grout release prior to grouting. A test area is recommended to ensure the grout release was adequately applied.
- clé recommends a 1/16" grout joint.

- 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.
- If your contractor selects brands other than Mapei grout, 3M or Miracle sealant, please have them reach out to the respected representatives of those manufactures for advice and support on failures.
- If a slight grout haze occurs, it can be effectively removed from the tile by using a 3MTM Eraser Pad 3600 Pink pad with water and/or 3MTM Neutral Cleaner.
- If your contractor has any issues or questions, please reach out to Mapei tech support directly at 1-800-992-6273 for grout and 3M tech support directly at 1-800-626-8578 for 3M products.

MAINTENANCE

- Over time, a natural patina will occur on floors as they are maintained and naturally wear.
- No stripping is required to repair or recoat floors with 3M Scotchgard Stone Floor Protector.
- Flooring may be periodically burnished using a Scotch-Brite Purple Diamond Floor Pad Plus to maintain gloss. No additional Scotchgard Stone Floor Protector needs to be applied to restore gloss. A suggested burnishing schedule is:
 - Heavy traffic commercial areas: 1-2 times per week
 - Medium traffic areas: 3-4 times per month
 - Light traffic residential areas: 1-2 times per month
- Scotchgard Stone Floor Protector will wear down over time due to foot traffic. When traffic areas are no longer returned to gloss by burnishing, then reapplication of Scotchgard Stone Floor Protector should be applied.
 - Heavy traffic floors should be recoated at least once every 6 months or as needed.
 - Light to moderate traffic floors should be recoated at least once a year or as needed.
- Please reference the separate [Scotchgard Stone Floor Protector maintenance guide](#) and follow their procedures for reapplication.
- If scratches occur on the surface, the surface can be repaired by burnishing with Scotch-Brite Purple Diamond Floor Pad Plus and then a 3M Tan Burnish Pad 3400.
- Single coat reapplication of the penetrating sealant (Miracle 511 Porous Plus) is required once a year on grout lines and the tile surface in shower applications due to the continuous exposure to water or steam.
- For showers, opening windows/doors to help some of the moisture dissipate faster after use will help rid extra moisture.
- Check with the Miracle Sealant tech support directly at 1-877-385-8155 and 3M tech support directly at 1-800-626-8578 for best advice and procedures on maintaining sealants.

CLEANING

- Always avoid harsh chemicals and acidic or alkaline cleaning products.
- Do not use spray buff products or chemical dust mop treatments.
- Clean up spills immediately and use a damp mop to mop lightly soiled floors with a neutral cleaner like 3M Neutral Cleaner.
- Dust mop, vacuum or sweep regularly to remove sand, dust and other contaminants off the surface. Abrasive dirt and materials can scratch the surface.
- Non-slip mats or area rugs should be placed inside and outside entrance ways to remove abrasive materials that can scratch and dirty the tile surface. Sand, dirt, and grit do the most damage to stone surfaces due to their abrasiveness.
- To ensure proper slip resistance, flooring should be cleaned regularly to keep dust, sand, oils and other contaminants off the surface.
- For more aggressive cleaning use a mechanical buffer or auto scrubber along with a 3MTM Red Buffer Pad 5100 and Neutral Cleaner per the manufacturer's recommendations.
- For cleaning combined with light polishing, the Scotch-Brite Purple Diamond Pad Plus may be used on an auto scrubber.
- Showers and baths: soap scum can be minimized by using a squeegee after each use and using liquid as opposed to bar soaps.
- Interior wall installations can be cleaned with warm water and damp microfiber cloth.
- Grout lines can be cleaned with warm water and a nonmetal bristled cleaning brush.

FORAGE TERRAZZO SPECIFICATIONS

What's in our tile: Crafted in America, our polished terrazzo tile is made from tumbled stone in a cement base. These materials lend our forage collection natural, neutral shades that offer the quiet versatility of solid-color tile with the visual interest of a pattern. Perfectly at home in a mid-century setting, surrounded by wood paneling and an earthy palette, it also complements the classic glamor of marble and plaster or the clean serenity of ultramodern design.

COLOR AND TEXTURE VARIATION

Forage Terrazzo is rated V4 / 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

Forage Terrazzo is rated V (can be used for light residential to industrial 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 Hydraulic pressed cement terrazzo tiles which are polished and slightly beveled on each side.

Forage Terrazzo tiles are applied with an initial protectant—3M [Scotchgard Stone Floor Protector](#), a high performance floor surface hardener and protective clear coat for porous stone surfaces

PRODUCT COMPONENTS Portland cement, concrete sand, various natural aggregates and mineral pigments for color (organic and inorganic oxides)

DIMENSIONS	
Square	30.5 cm x 30.5 cm x 1.3 cm (12" x 12" x 1/2") / 3.04 kg per tile (6.7 lbs) 61 cm x 61 cm x 1.6 cm (24" x 24" x 5/8") / 14.5 kg per tile (32 lbs)
Rectangle	30.5 cm x 61 cm x 1.6 cm (12" x 24" x 5/8") / 7.26 kg per tile (16 lbs)

* Please note all dimensions are nominal and can vary plus or minus 1/8".

AVERAGE COEFFICIENT OF FRICTION (DCOF ACUTEST) “Wet Dynamic Coefficient of Friction” (DCOF) / Average 0.46. Testing was performed on a 12" x 12" x 1/2" tile.

* Forage Terrazzo tiles are applied with an initial protectant—3M Scotchgard Stone Floor Protector, which is certified by the National Floor Safety Institute (NFSI) for high traction. Application of Miracle 511 Porous Plus can help increase slip resistance in wet areas like showers.

To ensure proper slip resistance, flooring should be cleaned regularly to keep dust, sand, oils, and other contaminants off the surface.

FREEZE/THAW RESISTANCE (ASTM C1026)	Forage Terrazzo is not freeze/thaw resistant and is for interior use only.
WATER ABSORPTION TEST (ASTM C373)	<5%; semi-vitreous
ACID RESISTANCE	Forage terrazzo is not resistant to acids and only mild, pH neutral cleaners should be used.
LEED CREDITS	<p>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.</p> <p>Forage Terrazzo tiles are considered ‘inherently non-emitting sources’ under the Low-emitting Materials Credit of LEEDv4/v4.1. This is currently the only credit for Forage Terrazzo that is eligible to be used toward LEED.</p> <p>‘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.</p> <p>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).</p> <p>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.</p> <p>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.</p> <p>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. <i>Tile can last hundreds of years but fashions often change, which is the dominant reason for its removal. We work hard to ensure our terrazzo tiles can withstand the test of time while remaining timeless.</i></p>
RECYCLED CONTENT	There is no recycled content in Forage Terrazzo 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 Forage Terrazzo at this time. See Material Sourcing disclosure above.

WET AREA APPLICATION

Forage Terrazzo can be installed on backsplashes, in bathrooms and showers only if specific waterproofing precautions are taken and maintenance guidelines are followed:

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

- A waterproof membrane is used under the tile and a waterproof, penetrating sealer is used to seal the grout lines and the tile surface. clé recommends Miracle Sealants 511 Porous Plus for this sealing.
- When using a waterproofing membrane, we recommend the use of a premium rapid setting mortar to ensure the best performance.
- Please note, the initial 3M protectant on each tile is water resistant but not waterproof, therefore we recommend application of a waterproof, penetrating sealer to further protect the tile and grout lines in wet areas. clé recommends Miracle Sealants 511 Porous Plus for this sealing.
- Single coat reapplication of the penetrating sealer is required at least once a year in shower applications due to the continuous exposure to water.
- To increase slip resistance on shower floors, tiles can be "scored" with a tile blade in desired increments to create grooves or cut down to 4" x 4" (or smaller) squares. Please refer to a professional stone installer for this.
- Contact Miracle sealant tech support directly at 1-877-385-8155 for sealant maintenance questions.

* Forage Terrazzo is not suitable for pool or fountain use.