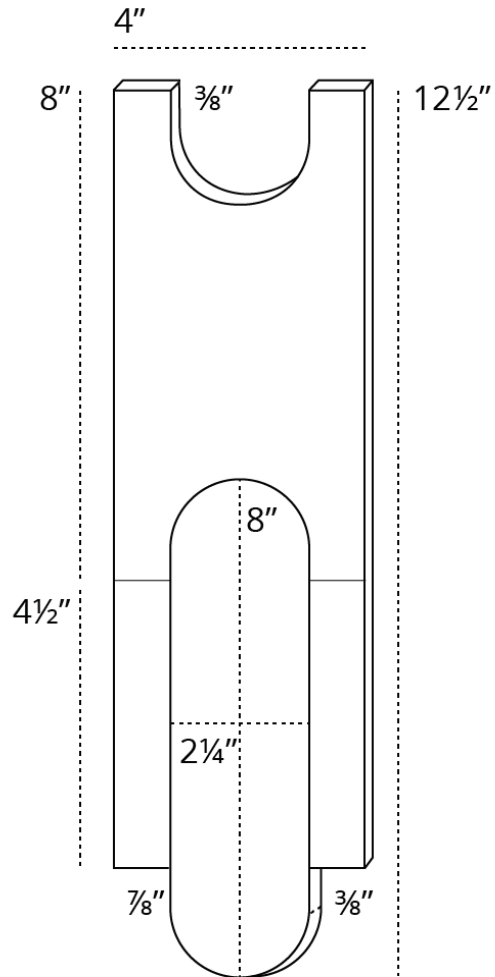


OUTERclé FORNACE BRIONI + CRISTINA CELESTINO TIVOLI TECH

USAGE	Y / N
freeze/thaw	Y
slip resistant	Y*
UV resistant	Y
heat resistant	Y
radiant heating	Y
exterior wall	Y
exterior floor	Y*
light residential traffic	Y
heavy residential traffic	Y
light commercial traffic	Y
heavy commercial traffic	Y
industrial traffic	N
fountain	Y
fountain waterlines	Y
pool	Y
pool waterlines	Y
shower floors	Y
shower walls	Y
stove backsplash	Y
sink backsplash	Y
fire pit surround	Y
pizza oven surround	Y
grout joint	1/8"



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

* There are specific installation requirements for this usage. Please refer to the "Installation Areas" and "Additional Specifications" sections below and discuss with your installer.

TIVOLI TECH

What's in our tile: Italian wit, flair and sophistication go outdoors. Inspired by traditional Italian garden design, Tivoli Tech from Fornace Brioni + Cristina Celestino brings to life the Milanese designer's signature muted-but-colorful palette in an extraordinary through-body technical ceramic tile of extraordinary quality. An Italian dream-come-true for statement-making pools and fountains.

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** – Fornace Brioni + Cristina Celestino Tivoli Tech tiles will show a colorful-but-muted palette in a through-body technical clay. These techniques lend themselves to variation in surface texture, color, shade, and size, which should be foreseen. ALSO- Dust and shipping residue are to be expected and should be cleaned prior to installing.
- **BLEND BLEND BLEND** - Due to the natural materials and production process of Fornace Brioni + Cristina Celestino Tivoli Tech tiles, there will be degrees of variation in color, shade, and size 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 20% 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** - OUTERclé 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 OUTERclé tiles and will likely result in failed installations.

- **EXTERIOR INSTALLATIONS HAVE UNIQUE CHALLENGES** - Exterior installations are subject to sun, rain, snow, changes in temperature, and other environmental factors. It is critical that your substrate, mortar, tile, grout, and sealant work together as a system to help your installation withstand the elements. Expansion joints are crucial to the success of any installation, especially exterior ones. Please consult your project architect, structural engineer, manufacturer of installation materials, and installer for best results.

- Due to the environmental factors tiles face in outdoor installations, do not expect your tiles to look the same on day two as they did on day one.

- **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 OUTERclé responsibility and therefore, not covered by OUTERclé's warranty.

- **TILE IS A MATERIAL. INSTALLATION ERRORS ARE NOT THE FAULT OF THE MATERIAL** - OUTERclé 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 LANDSCAPE INSTALLER'S LEVEL OF ARTISAN TILE EXPERIENCE** - We strongly suggest choosing installers who have shown their commitment to their craft and remained current with the latest methods and materials. We suggest requiring references and a portfolio along with a bid or estimate to ensure the installer has successfully completed work of similar size, scope, and complexity. Your installation will only be as good as your 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. OUTERclé 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 to 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 for best installation results.

INSTALLATION AREAS

- Tivoli Tech tiles are freeze/thaw rated.
- Tivoli Tech tiles are slip resistant.*
- Tivoli Tech tiles are UV resistant.
- Tivoli Tech tiles are heat resistant and suitable for fire pit and pizza oven surrounds.
- Tivoli Tech tiles can be used on exterior walls and floors in areas of heavy residential and heavy commercial foot traffic.
- Tivoli Tech tiles can be used in showers, pools, and their water lines.
- Tivoli Tech tiles can be used on a sink backsplash.
- Tivoli Tech tiles can be used on a stove backsplash. Please consult with your installer to see if a range splash is required for your installation.
- Tivoli Tech tiles are radiant heating compatible.

* Please refer to the "Additional Specifications" section below for more details regarding slip resistance

MORTAR & GROUT

- OUTERclé recommends a $\frac{1}{8}$ " grout joint with this collection.
- OUTERclé recommends using mortar and grout that comply with the ANSI A118 and/or ISO 13007 classifications suitable for your project. Please consult with your installation professional to make these determinations.
- For waterline or submerged installations OUTERclé recommends using either an epoxy or polymer-fortified cement grout rated for submerged use.
- Grout color selection is always up to our client and/or their design professional. However, OUTERclé 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, OUTERclé would like to offer this general guideline on a grout color selection for any of your OUTERclé 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 your contractor is having any issues or questions regarding mortar or grout, please reach out directly to the manufacturer. They are the best and fastest line of contact.

SEALING, MAINTENANCE, AND CARE

- Please follow Laticrete's [Sealing, Maintenance, and Care 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: 1-800-243-4788 X 1235.**

ADDITIONAL SPECIFICATIONS

AVERAGE COEFFICIENT OF FRICTION (ANSI A326.3)

“Wet Dynamic Coefficient of Friction” (DCOF) / Average 0.58

“Wet Dynamic Coefficient of Friction” reflects a tile’s slip-resistance in wet conditions. For outdoor installations in areas subject to moisture, OUTERclé recommends choosing a tile with a DCOF ≥ 0.60 (per ANSI A326.3). This score should be used together with other information when deciding if a tile is suitable for a particular area, wet or not.

*Please note that the application of a grip-enhancing treatment/sealer will help increase slip-resistance.

FROST RESISTANCE (ISO 10545-12:1995)

Tivoli Tech tiles are frost resistant.

Frost resistance is a valuable tool for choosing tiles suitable to environments where freezing may occur.

WATER ABSORPTION (ISO 10545-3:2018)

Avg. 0.02%; impervious

A lower number generally means a tile is better suited for outdoor installations. This score should be used together with other information when deciding if a tile is suitable for a particular area.

Please note that application of a sealant may decrease a tile’s water absorption.

SOLAR REFLECTANCE INDEX (ASTM E1980)

Solar Reflectance Index: testing has not yet been completed

This test indicates how hot a tile is likely to become when solar radiation is present on the surface, The higher the score, the greater the tile’s capacity to reflect and release heat from the sun.

LEED Credit for Heat Island Reduction requires the use of outdoor pavers achieving an Sri score of at least 29 for the overall project.

ACID RESISTANCE

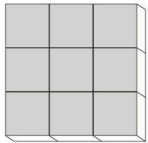
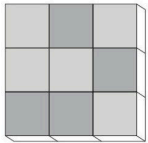
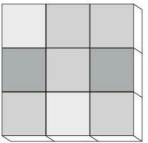
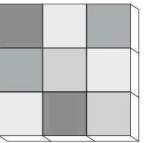
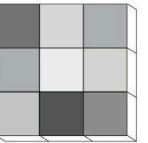
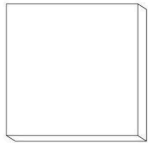
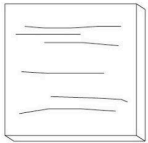
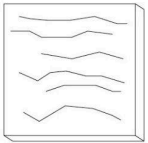
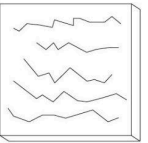
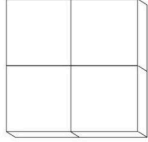
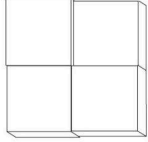
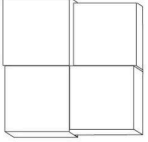
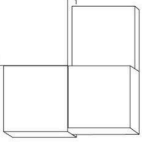
Tivoli Tech tiles are not resistant to acids and only mild, pH neutral cleaners should be used.

COLOR, TEXTURE AND SIZE VARIATION

Color variation: level 1 - low

Texture variation: level 1 - smooth

Size variation: level 1 - slight

CATEGORY	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
COLOR VARIATION	 <p>low</p>	 <p>slight</p>	 <p>medium</p>	 <p>heavy</p>	 <p>extreme</p>
TEXTURE VARIATION	 <p>smooth</p>	 <p>slight</p>	 <p>medium</p>	 <p>heavy</p>	n/a
SIZE VARIATION	 <p>slight</p>	 <p>medium</p>	 <p>heavy</p>	 <p>extreme</p>	n/a

PRODUCT DESCRIPTION

Colored technical clay

PRODUCT COMPONENTS

Clay and pigments

DIMENSIONS

Overall	10.2 cm x 31.8 cm x 1 cm per bundle (4" x 12 ½" x ⅜" per bundle) / 0.71 kg per bundle (1.56 lb)
Pill	5.7 cm x 20.3 cm x 1 cm per tile (2 ¼" x 8" x ⅜" per tile) / 0.26 kg per tile / (0.58 lb)
Listello	2.2 cm x 11.4 cm x 1 cm (7/8" x 4 ½" x ⅜" per tile) / 0.07 kg per tile / (0.15 lb)
H-Rectangle	10.2 cm x 20.3 cm x 1 cm (4" x 8" x ⅜" per tile) / 0.31 kg per tile / (0.68 lb)

* Please note all dimensions are nominal and can vary +/- ⅛".

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.

Fornace Brioni tiles are considered 'inherently non-emitting sources' under the Low-emitting Materials Credit of LEEDv4/v4.1. **This is currently the only credit for our Fornace Brioni 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 have not established a timeline for completion.

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, 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 tiles can withstand the test of time while remaining timeless.*

RECYCLED CONTENT

There is currently no recycled content in Fornace Brioni + Cristina Celestino Tivoli Tech. See material sourcing disclosure above.

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

There is currently no pre-consumer or post-consumer material content in Fornace Brioni + Cristina Celestino tiles. See Material Sourcing disclosure above.

FIRE RATING

We currently do not have fire testing results for our Fornace Brioni + Cristina Celestino tiles and are exploring our testing options.