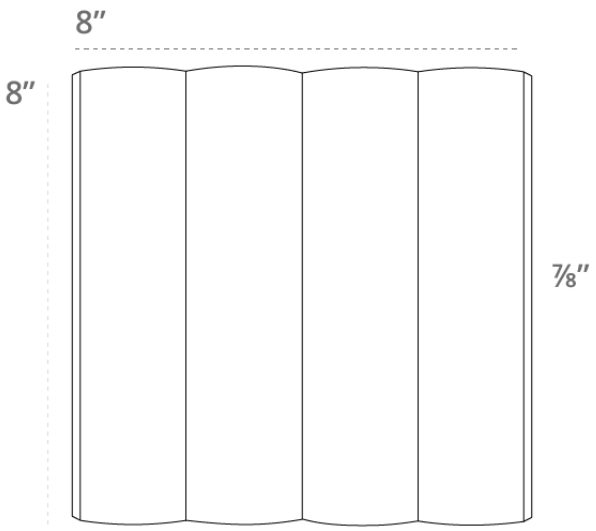
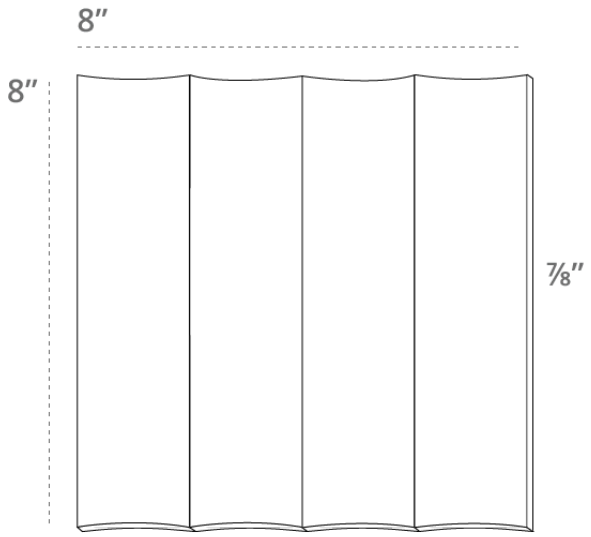
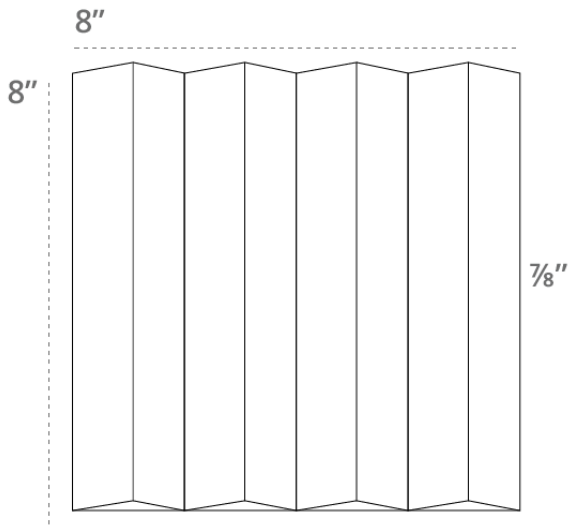
OUTERclé ORIGAMI

USAGE	Y / N
freeze/thaw	N
slip resistant	N/A
UV resistant	N
heat resistant	N
radiant heating	Y
exterior wall	Y*
exterior floor	N
light residential traffic	N
heavy residential traffic	N
light commercial traffic	N
heavy commercial traffic	N
Industrial traffic	N
fountain	N
fountain waterlines	N
pool	N
pool waterlines	N
pool coping	N
shower floors	N
shower walls	Y*
stove backsplash	Y*
sink backsplash	Y*
fire pit surround	Y*
pizza oven surround	Y*
grout joint size	1/16"







Standard thickness for Origami is 7/8".
Please note all dimensions are nominal and can vary +/- 1/8".
* There are specific installation requirements for this usage. Please review the "Installation Areas" section below and discuss with your installer.

ORIGAMI

What's in our tile: Sculptural, bold, and wrought in OUTERclé's signature cement, Origami evokes classic themes in a thoroughly modern way. The ultimate in versatility, hue shows the way: from classism and brutalism to modernism and postmodernism, Origami makes a statement.

Our Origami tiles are made up of three different layers:

Top layer = known as the 'color' and design layer. Made of natural pigments mixed with ground marble dust and the finest white portland cement.

Middle layer = a mortar made of fine sand and portland cement. Provides compression reinforcement for heavy traffic and furniture.

Bottom layer = solid concrete, strong and porous for impact strength before and after installation.

Due to the handmade craftsmanship and variety of materials in our tiles, color, shade and texture may vary across production lots or batches. As such, your sample may not be a perfect match with your actual order, and an add-on order may not be a match to either. **This is the beauty of artisanal tile!**

INSPECTING YOUR SHIPMENT

- **WHAT TO EXPECT** – Origami tiles feature variation in color and shade. Irregular or chipped edges and surface cracks are normal as well. ALSO - dust and shipping residue should be expected and cleaned prior to installing.
- **BLEND BLEND BLEND** - The natural pigments used in the production of Origami create variation in color and shade. Before installing, blend tiles from all boxes and place them in their installation area to ensure you have the layout you want.
- **ORDER EXTRA!** - Industry standard suggests adding at least 20% overage for cuts, shipping breakage, or future repairs. If Origami's variations in shade and color do not fit your project's needs, we suggest ordering 20-30% overage to let your contractor cherry-pick the tiles most desirable for your project.
- **SHIPMENTS ARE SUBJECT TO WEATHER** – Tiles may be exposed to moisture and/or condensation during production or shipping which may affect the tiles' color once received. Setting the tiles out to dry before installation will return the color to normal. Do not install until fully dried.

INSTALLATION FYIs

- **GENERAL GUIDELINES, NOT INSTRUCTIONS** - OUTERclé offers general information about our tiles and their unique qualities and usages. Proper installation is only possible by installers with years of experience with artisan tiles. Inexperienced installers will likely cause failed installations.

- **EXTERIOR INSTALLATIONS HAVE UNIQUE CHALLENGES** - Outdoor installations face environmental challenges. All components (substrate, mortar, tile, grout, and sealant) must work as a cohesive system to withstand the elements. Expansion joints are critical, especially outdoors. Consult your project architect, structural engineer, installer, and material manufacturers for best results.
- **CEMENT TILES & COLD TEMPERATURES -** Cement tiles, despite not being freeze/thaw rated, can be installed in cold-weather areas with some added precautions. Review the "installation areas" section below for these suggestions.
- Rich vibrant colors on cement tiles are prone to fading when installed in direct sunlight.
- Due to environmental exposure, expect your tiles to vary in appearance from day two to 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, installation deems acceptance of materials. Do not install tiles with visible issues. If unsure of what qualifies as a visible issue, contact us BEFORE installation. Our tiles feature variation in color, texture, size, and finish. Misuse by contractor or end-user including but not limited to negligence, physical and/or chemical abuse, or order shortages ARE NOT an OUTERclé responsibility and therefore, not covered under warranty.
- **TILE IS A MATERIAL. INSTALLATION ERRORS ARE NOT THE FAULT OF THE MATERIAL** – OUTERclé tile is a material. It is merely the surface of your construction. Installation problems arise from inexperienced artisan tile installers, substrate, or construction engineering and/or installation issues. Refer to your project architect, structural engineer and/or installer for best results.
- **PLEASE CONFIRM YOUR LANDSCAPE INSTALLER'S LEVEL OF ARTISAN TILE EXPERIENCE** - Your installation will only be as good as your installer. This is particularly true for outdoor installations. Please ensure your installer is experienced not only with artisanal tile and outdoor installations, but also in the type of installation specific to your project (pavers, wet, submerged, etc).
- **REQUIRE YOUR INSTALLER PERFORM A "DRY RUN" BEFORE BEGINNING YOUR INSTALLATION** – Lay out and blend tiles from ALL BOXES to achieve your desired mix of color and character. OUTERclé celebrates the hand-hewn qualities and inherent variation of our limited-availability tiles, including pits, cracks, and chips. Placing these within your installation must be guided by you and/or your design professional to realize the best possible result. Your install 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. 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 lessen the risk of tile damage.
- **REQUIRE MOCK-UP BOARDS** – To ensure your layout, grout color and joint size, as well as sealant, meet your design professional's specifications- we recommend having your installer create mock-up boards. A STANDARD PRACTICE for seasoned installers, mock-up boards let the end-user and their design professional test and view layouts in the space and lighting where the tiles will be used. Before creating mock-ups, complete a "DRY RUN", laying out and blending tiles as described above.

- **"FINAL FINISH" – WHAT IT IS AND WHY MAY YOUR PROJECT NEED IT?** - If your tile is installed before cabinets, fixtures, etc., it will need to be refinished afterwards, in what we call the "final finish". 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 installation. (Another benefit is that refinishing can lessen common shipping imperfections). Be sure to account for this final step in your project timeline and budget.
- **TCNA and ANSI** - Refer to the current edition of the TCNA Handbook for best installation results.

INSTALLATION AREAS

- **Freeze/Thaw Rating**
  - Origami tiles are not freeze/thaw rated.
- **UV Resistant**
  - Origami tiles are not UV resistant. Richer, more vibrant colors are prone to fading when installed in direct sunlight.
- **Walls**
  - Origami tiles can be used on exterior walls.
  - In cold-weather areas there must be flashing or roofing overhead and the tiles must be sealed with a water-repellent sealer (Miracle 511 Porous Plus, for example).
- **Radiant Heating**
  - Origami tiles are radiant heating compatible
- **Pools & Fountains**
  - Origami tiles are not suitable for use in pools, fountains, waterlines or as coping.
- **Showers**
  - Origami can be used on shower walls with application of a water-repellent sealer.
- **Fire Pits & Ovens**
  - Origami tiles are not heat resistant, but can be used in fire pit and pizza oven surrounds, provided they are not exposed to direct heat.
- **Backsplashes**
  - Origami can be installed on sink backsplashes with application of a water-repellent sealer.
  - Origami Tiles can be used as a stove backsplash. Consult with your installer to see if a range splash is required for your installation.

MORTAR & GROUT

- OUTERclé recommends a $^{1}/_{16}$" grout joint with this collection.
- Origami tiles are very porous. To help prevent staining during the grouting process, we recommend applying a sealer or grout release before grouting.
- OUTERclé recommends using mortar and non-pigmented unsanded cementitious 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.
- 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.
    - OUTERclé does not recommend using grout colors that contrast the primary color of your tiles.
- If you are working with 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 installation that you would like to accentuate.
- If your contractor is having any issues or questions regarding mortar or grout, please reach out 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

FREEZE/THAW RESISTANCE (ASTM C1026)

Origami tiles are not freeze/thaw resistant.

Freeze/Thaw resistance is a valuable tool for choosing tiles suitable to environments where freezing and thawing may occur.

WATER ABSORPTION (ASTM C373)

Avg. 10.9%; non-vitreous.

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, wet or not.

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.

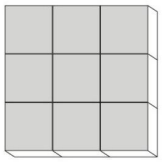
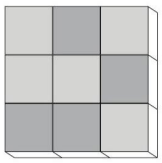
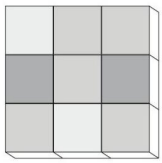
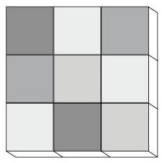
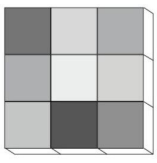
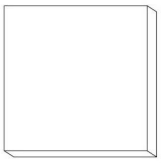
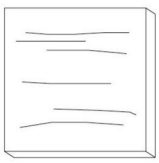
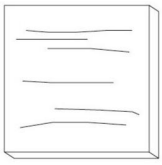
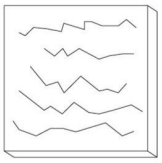
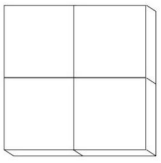
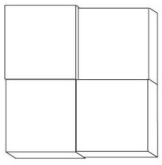
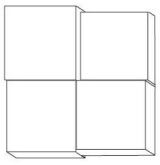
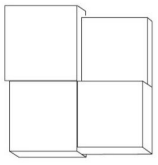
LEED Credit for Heat Island Reduction requires the use of outdoor pavers achieving an Sri score of at least 29 for the overall project.

ACID RESISTANCE

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

COLOR, TEXTURE AND SIZE VARIATION

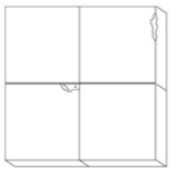
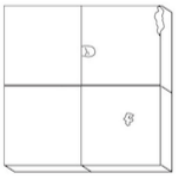
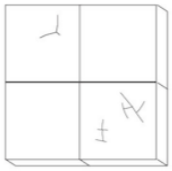
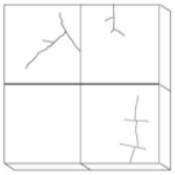
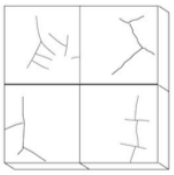
Color variation: level 3 - medium
Texture variation: level 1- smooth
Size variation: level 1- slight

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

IMPERFECTIONS

Pits/chips: level 1 - will occur

Cracks: level 1 - will occur

CATEGORY	LEVEL 1	LEVEL 2	LEVEL 3
PITS / CHIPS	 will occur	 prevalent	 heavy
CRACKS / CRAZING	 will occur	 prevalent	 heavy

PRODUCT DESCRIPTION

Hydraulic pressed cement tiles.

PRODUCT COMPONENTS

Wear colored layer: 3 to 4 mm +/− thickness affixed to the tile body by 1,700 PSI mechanical pressure, composed of: white portland cement, marble dust and mineral pigments for color (oxides and organic).

Tile Body: 12 mm +/− in thickness, composed of gray portland cement & sand.

Our Origami tiles are made up of three different layers:

Top layer = known as the ‘color’ and design layer made of natural pigments mixed with ground marble dust and the finest white portland cement.

Middle layer = a mortar made of fine sand and portland cement that provides for compression reinforcement for heavy traffic and furniture.

Bottom layer = Bottom layer = solid concrete, strong and porous for impact strength before and after installation.

DIMENSIONS

SHAPE	DIMENSIONS	WEIGHT
CORDS	20.3 cm x 20.3 cm x 2.2 cm (8" x 8" x ⅞")	1.36 kg per tile (3 lbs)
COVES	20.3 cm x 20.3 cm x 2.2 cm (8" x 8" x ⅞")	1.36 kg per tile (3 lbs)
PLEATS	20.3 cm x 20.3 cm x 2.2 cm (8" x 8" x ⅞")	1.04 kg per tile (2.3 lbs)

* 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.

Our Origami tiles are considered 'inherently non-emitting sources' under the Low-emitting Materials Credit of LEEDv4/v4.1, but our current pre-seal offering is not compliant with LEED. Because we offer them finished in a pre-polish & pre-seal format to support stain resistance, we would recommend ordering them without the sealant, in the pre-polish format only, to qualify for the Low-emitting Materials Credit.

'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 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, 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 cement tiles can withstand the tests of time while remaining timeless.*

RECYCLED CONTENT

There is currently no recycled content in our Origami tiles. 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 our Origami tiles. See Material Sourcing disclosure above.

FIRE RATING

We currently do not have fire testing results for our Origami tiles and are exploring our testing options.