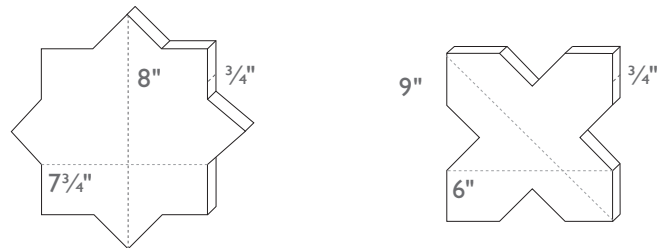
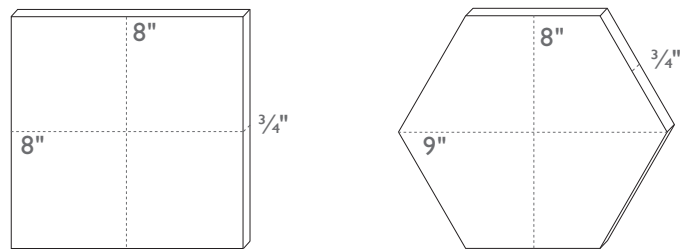
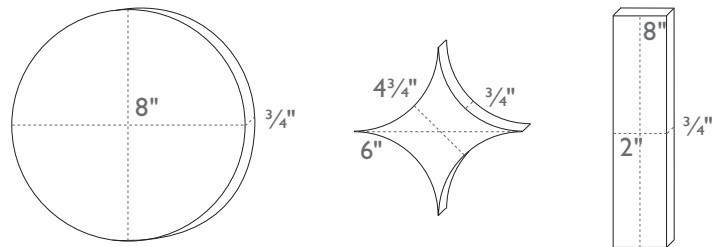


# BELGIAN REPRODUCTION

USAGE	Y/N
interior floor	Y*
interior wall	Y*
exterior floor	Y*
exterior wall	Y*
residential heavy traffic	Y
commercial heavy traffic	Y
radiant heating compatible	Y
fireplace surround	Y
shower	Y*
steam shower	Y*
fountain	N
freeze thaw	N
pool	N
heat resistant	Y
sink backsplash	Y*
stove backsplash	Y*
grout type	flexcolor cq ** polyblend #60 **
grout joint size	1/2" *
UV resistant	Y



Standard thickness for all Belgian Reproduction is 3/4".

Please note all dimensions are nominal and can vary plus or minus 1/2".

\* There are specific installation requirements for this usage, read more information under the installation, sealing, grout, and wet area application sections of this document

\*\* There are different grouts for the different looks to be achieved. Read more information under the grout sections of this document.

# BELGIAN REPRODUCTION

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## INSPECTING YOUR SHIPMENT

- We prize our belgian reproduction tiles for their variation and surface imperfections, which are a result of the hand mixed nature of their clay body, further enhanced during the firing process. noticeable variations in thickness, size, shade and color are to be expected.
- **IMPORTANT:** Due to the noticeable variations in size and color, 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 tiles from all boxes.
- 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 installation.

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## 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 who can provide the exact specifications for your project.
- Please refer to the current edition of the TCNA Handbook for best installation results and ANSI A137.1 American National Standard Specifications for Ceramic Tile to reference for specifications.
- 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.
- To ensure proper bonding when setting, we recommend lightly wiping the back of each tile if there is excessive dust.
- Be sure to have 95% or more adhesive on the back of the tile to ensure the best bond when setting tiles 8"x8" or larger.
- **DO NOT USE TAPE** during product installation, or otherwise. We cannot guarantee our products' safety against various construction tapes—INCLUDING BLUE TAPE.
- Please note, due to the very large grout joints and extremely varied sizes of the tiles, spacers are not required as the tiles won't fit perfectly with the use of them. Spacers can be used but be aware the space will not be standard throughout.
- Depending on the look you are trying to achieve, there are two methods that can be used to install Belgian Reproduction—the light look and the dark look:
  - The light look entails using a float and Miracle 511 Porous Plus sealant.
  - The dark look entails intentionally staining the surface of the tile with dark grout by floating grout over the surface and using Miracle 511 Seal & Enhance Sealant to further enhance the dark color.

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DARK LOOK  
SEALANT

- **IMPORTANT: Critical Installation Notes For Creating a Dark Look:**
    - Do not seal or use grout release prior to grouting if you will be intentionally staining the tile with grout for the darker look.
    - If sealant or grout release is applied to the tile prior to grouting this will prevent the dye in the grout from penetrating into the tile.
  - clé only recommends Miracle 511 Seal & Enhance to further enhance the dark finish.
  - Apply a minimum of two coats of Miracle 511 Seal & Enhance to the entire installation (tile surface and grout lines) following the manufacturer's instructions. Up to four coats of sealant may be added to further enhance the dark color.
  - We recommend sealing the grout lines and the tile surface as the final step of installation for all applications.
  - For wet applications, it is required that the grouted areas and the tile surface are sealed as the final step of installation.
  - 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 this sealant, please have them reach out to Miracle tech support directly at 1-877-385-8155, 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 and oil do not bead up on the surface of your tiles then the sealant was not applied properly.

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DARK LOOK  
GROUT

- **IMPORTANT: Critical Installation Notes For Creating a Dark Look:**
  - Note that in order to achieve a darker look with belgian reproduction flemish black tiles (dark grey/black finish), pieces can be intentionally stained with grout by allowing the grout to penetrate into the tile.
- We highly recommend using Custom Building Products Polyblend #60 Charcoal Sanded Grout—this grout will stain the tile and help gain a dark consistency.
- clé recommends a grout joint size of at least ½". Should you find extreme variations in length between the pieces of your order, particularly with bundles, we recommend increasing or decreasing the grout joint size as needed within your installation to compensate and create a cohesive look.
- Mix enough grout to fill the joints and have more on hand to smear over the tiles to stain them.
- Working in small areas, quickly fill the ½" joints.
- Do not clean your grout joints yet.
- Float grout over the section that was just filled.
- To stain the tile, apply the grout in a thin layer on the tile surface using a rubber float.
- The grout will be difficult to move around a dry tile so you may continue to lightly dampen the tile with a sponge as you float grout.
- Do not flood the tile with water as this could cause issues with the grout as well as efflorescence.
- Remove excess grout with a trowel (do not scratch the tile) or a clean, slightly damp sponge.
- After grouting, clean any remaining spots of grout from the surface.
- If your contractor is having any issues or questions regarding this grout, please reach out to Custom Building Products tech support directly at 1-800-282-8786 as they are the best and fastest line of contact.

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LIGHT LOOK  
SEALANT

**Installation Notes For Creating a Light Look:**

- Belgian Reproduction tiles are highly porous and must be sealed to maintain their appearance and avoid staining.
- clé only recommends [Miracle 511 Porous Plus](#) for an invisible, water and stain resistant sealant finish.
- You must apply sealant or a grout release prior to grouting to minimize risk of grout haze and to allow for easy clean up.
- After grouting is completed and dried following manufacturer's instructions, apply a second layer of sealant to the tile surface and grout lines as the final step of installation.
- For wet applications, it is required that the grouted areas and the tile surface are sealed as the final step of installation.
- For light or heavy commercial traffic floor installations or areas susceptible to grease build-up we recommend three to five coats of [Miracle Mira Matte](#) top-coat sealant in addition to sealing.
- If you are installing Belgian Reproduction on a busy kitchen backsplash where heavy staining is a concern, we recommend applying the [clé top coat kit](#) to the tile surface and grouted areas instead of using Miracle 511 Porous Plus. The clé top coat kit can provide even more protection against stains on backsplashes. Apply the top coat kit as the final step of installation.
- 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 this sealant, please have them reach out to Miracle tech support directly at 1-877-385-8155, 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 and oil do not bead up on the surface of your tiles then the sealant was not applied properly.

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LIGHT LOOK  
GROUT

**Installation Notes For Creating a Light Look:**

- 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.
- clé recommends a grout joint size of at least ½". Should you find extreme variations in length between the pieces of your order, particularly with bundles, we recommend increasing or decreasing the grout joint size as needed within your installation to compensate and create a cohesive look.
- 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 your contractor selects brands other than Mapei grout or Miracle sealant, please have them reach out to the respected representatives of those manufacturers for advice and support on failures.
- Working in small areas, fill the grout joints and then float grout over the section that was just filled.
- **IMPORTANT:** During grout application, immediately remove any excess grout off the face of the tile with a trowel (do not scratch the tile) or a clean, damp cloth/sponge. Do not allow grout to cure on the face of the tile as it could cause grout haze and will be hard to remove.
- Grout staining is only a problem if the guidelines set for Flexcolor CQ by Mapei aren't followed properly.
- Please make sure to follow the Mapei Flexcolor CQ application and cleanup instructions to avoid the risk of staining/grout haze and to allow for easy application and cleanability. -Read all installation instructions thoroughly before use. Using consistent application procedures will produce consistent results.  
Some of these procedures for Mapei Flexcolor CQ include:
  - During grout application, immediately remove any excess grout off the face of the tile with a clean, damp cloth/sponge.
  - Use a "clean as you go" approach to spreading and washing the grout, to ensure that cleaning begins before the grout skins over and dries on the tile surface.
  - Grout small areas of between 30 to 40 sq. ft. (2.79 to 3.72 m<sup>2</sup>) at a time, so that cleaning can begin before the grout skins over and dries on the tile surface.
  - Change your water bucket frequently to prevent the development of a haze on the tile surface.
- Grout haze left by Mapei Flexcolor CQ can be removed with [Mapei Ultracare Heavy-Duty Stone, Tile & Grout Cleaner](#).
- If your contractor is having any issues or questions regarding this grout, please reach out to Mapei tech support directly at 1-800-992-6273 as they are the best and fastest line of contact.

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#### WET AREA APPLICATION

Belgian Reproduction tiles can be installed on backsplashes, showers and steam showers with application of a waterproofing, penetrating sealant.

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 grouted areas and the tile surface. We recommend using either Miracle 511 Porous Plus sealant or Miracle 511 Seal & Enhance.
  - Single coat reapplication of the penetrating sealant is required once a year in shower applications due to the continuous exposure to water.
  - Reapplication is needed more frequently if installation is in a steam shower.
  - For superior water repellency in steam showers, we recommend applying Miracle 511 Impregnator in addition to Miracle 511 Porous Plus.
- \* Belgian Reproduction is not suitable for pool or fountain use.
- \* Belgian Reproduction is not suitable for exterior areas that regularly experience freezing temperatures.

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EXTERIOR  
INSTALLATIONS

- **IMPORTANT:** Belgian Reproduction tiles are not freeze thaw rated. Therefore we do not recommend and cannot warrant installing these outdoors in areas that regularly experience freezing temperatures\*

\* If you plan on installing these outdoors in areas that experience freeze/thaw, we cannot guarantee there won't be installation failures. Installations in freeze/thaw locations require flashing the top of vertical installations to prevent moisture from dripping behind the installation and installing the tiles above grade for horizontal installations. In addition, the installation must be completely sealed and maintained with a weather resistant sealant like Miracle 511 Porous Plus.

With application of Miracle Sealant, these tiles can have resistance to freeze/thaw issues. However, oftentimes there are installation failures because the specific installation guidelines and sealant maintenance is not properly followed. But if completed and maintained correctly (see manufacturer's instructions) then you can proceed WITH CAUTION.

If you can comply with all of the above and understand that without the sealant your install won't hold up—then it's up to you to proceed with installing this tile in a freeze/thaw location. We recommend your contractor reach out to both Mapei tech support for installation support and Miracle Sealant tech support on the waterproofing of the tiles.

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MAINTENANCE

- Over time, a natural patina will occur on floors as they are maintained and naturally wear.
- Topical sealants like Mira Matte and 511 Seal & Enhance will require periodic stripping and re-application of sealant - please refer to a professional for this.
- Single coat reapplication of the penetrating sealant is required once a year in shower applications due to the continuous exposure to water.
- Reapplication is needed more often if installation is in a steam shower. Please refer to a professional for this.
- For steam 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 for best advice on applying and maintaining sealants.

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## CLEANING

- Immediately clean up spills—do not allow liquids to sit on the tile surface. Excess liquid and moisture can stain, pit and crack tile—even when properly sealed.
- Mild, pH neutral soaps should be sufficient for most cleaning—test before general use.
- Clean using soft materials, like a cloth, instead of coarse materials.
- Always avoid harsh chemicals and acidic or alkaline cleaning products.
- Vacuum or sweep regularly—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.
- Mop floors when necessary with warm, clean water and pH neutral cleaner.
- Interior wall installations can be cleaned with warm water and damp microfiber cloth.
- Shower and steam shower installations should be squeegeed after each use to prevent hard water stains, soap scum and mildew.
- Grout lines can be cleaned with warm water and a soft bristled cleaning brush.
- Most stains can be removed with a pH neutral dish soap, hot water and the scrub side of a sponge.
- clé recommends the use of Miracle Porcelain & Ceramic Tile Cleaner to remove stubborn stains, grease build up, soap scum, hard water deposits and everyday grime.
- Miracle Tile & Stone Cleaner is effective as an ongoing maintenance cleaner and is gentle for everyday use.
- To remove difficult mildew, mold or soap scum, we recommend Miracle Sealants Liquid Powlitice.
- Oil stains are difficult to remove from terracotta. They will require the use of a powlitice, like Miracle Sealants Powlitice Plus to draw out the stain. Follow the manufacturer's instructions for application and use.

# BELGIAN REPRODUCTION TRADE SPECIFICATIONS

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What's in our tile: We've long admired the grand courtyards of Northern Europe, the gray patinas and refined rusticity of Belgian design. We have been on a quest to find a tile that would echo these elements and would look equally good both indoors and out. We discovered this exquisite blackened clay, and took a restored form of terracotta to create these Belgian Reproduction tiles perfect for grounding projects with an austerity as striking as an antique belgian surface.

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## COLOR AND TEXTURE VARIATION

Belgian Reproduction tiles are rated V5, T3

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

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## FLOOR RATING

Belgian Reproduction tiles are rated IV  
(can be used for light residential to heavy commercial 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	Belgian Reproductions are unglazed, non-vitreous terracotta tiles, which are hand formed, and fired.														
PRODUCT COMPONENTS	Clay														
DIMENSIONS	<table border="1"> <tr> <td><b>Rectangle</b></td> <td>5 cm x 20 cm x 1.9 cm (2" x 8" x 3/4") / .36 kg per tile (.8 lb)</td> </tr> <tr> <td><b>Losange</b></td> <td>12 cm x 15 cm x 1.9 cm (4 3/4" x 6" x 3/4") / .36 kg per tile (.8 lb)</td> </tr> <tr> <td><b>Circle</b></td> <td>20 cm x 20 cm x 1.9 cm (8" x 8" x 3/4") / 1.13 kg per tile (2.5 lbs)</td> </tr> <tr> <td><b>Square</b></td> <td>20 cm x 20 cm x 1.9 cm (8" x 8" x 3/4") / 1.8 kg per tile (4 lbs)</td> </tr> <tr> <td><b>Star</b></td> <td>19.7 cm x 20 cm x 1.9 cm (7 3/4" x 8" x 3/4") / 1.13 kg per tile (2.5 lbs)</td> </tr> <tr> <td><b>Cross</b></td> <td>15 cm x 23 cm x 1.9 cm (6" x 9" x 3/4") / 1.13 kg per tile (2.5 lbs)</td> </tr> <tr> <td><b>Hex</b></td> <td>20 cm x 23 cm x 1.9 cm (8" x 9" x 3/4") / 1.6 kg per tile (3.5 lbs)</td> </tr> </table>	<b>Rectangle</b>	5 cm x 20 cm x 1.9 cm (2" x 8" x 3/4") / .36 kg per tile (.8 lb)	<b>Losange</b>	12 cm x 15 cm x 1.9 cm (4 3/4" x 6" x 3/4") / .36 kg per tile (.8 lb)	<b>Circle</b>	20 cm x 20 cm x 1.9 cm (8" x 8" x 3/4") / 1.13 kg per tile (2.5 lbs)	<b>Square</b>	20 cm x 20 cm x 1.9 cm (8" x 8" x 3/4") / 1.8 kg per tile (4 lbs)	<b>Star</b>	19.7 cm x 20 cm x 1.9 cm (7 3/4" x 8" x 3/4") / 1.13 kg per tile (2.5 lbs)	<b>Cross</b>	15 cm x 23 cm x 1.9 cm (6" x 9" x 3/4") / 1.13 kg per tile (2.5 lbs)	<b>Hex</b>	20 cm x 23 cm x 1.9 cm (8" x 9" x 3/4") / 1.6 kg per tile (3.5 lbs)
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\* Please note all dimensions are nominal and can vary plus or minus 1/4".

AVERAGE COEFFICIENT OF FRICTION (DCOF ACUTEST)	<p>“Wet Dynamic Coefficient of Friction” (DCOF)—avg. 0.81*</p> <p>* Application of Miracle 511 Porous Plus and/or Miracle 511 Impregnator can help increase slip resistance.</p>
FREEZE/THAW RESISTANCE (ASTM C1026)	Belgian Reproductions are not freeze/thaw resistant.
WATER ABSORPTION TEST (ASTM C373)	Avg. 14.0%; non-vitreous.
ACID RESISTANCE	Belgian Reproductions are not resistant to acids and should be cleaned with pH neutral cleaners.
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>Belgian Reproductions tiles are considered ‘inherently non-emitting sources’ under the Low-emitting Materials Credit of LEEDv4/v4.1. <b>This is currently the only credit for our Belgian Reproductions tile that is eligible to be used toward LEED.</b></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/v4.1, 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 stone tiles can withstand the test of time while remaining timeless.</i></p>

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RECYCLED CONTENT

There is no recycled content in our Belgian Reproduction tiles at this time. See Material Sourcing disclosure above.

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

There is no pre-consumer or post-consumer material content in our tiles at this time. See Material Sourcing disclosure above.

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FIRE RATING

Typically, ceramic tile does not need to have fire rating testing performed. It is our understanding from TCNA that the explanation that ceramic 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. Also, the temperatures observed in the testing are typically lower than the temperatures at which ceramic tiles are fired.

Terracotta is a ceramic tile and falls under the description, "because ceramic 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 terracotta tiles. TCNA Bulletin: Ceramic Tile for a Safe & Healthy Home.

