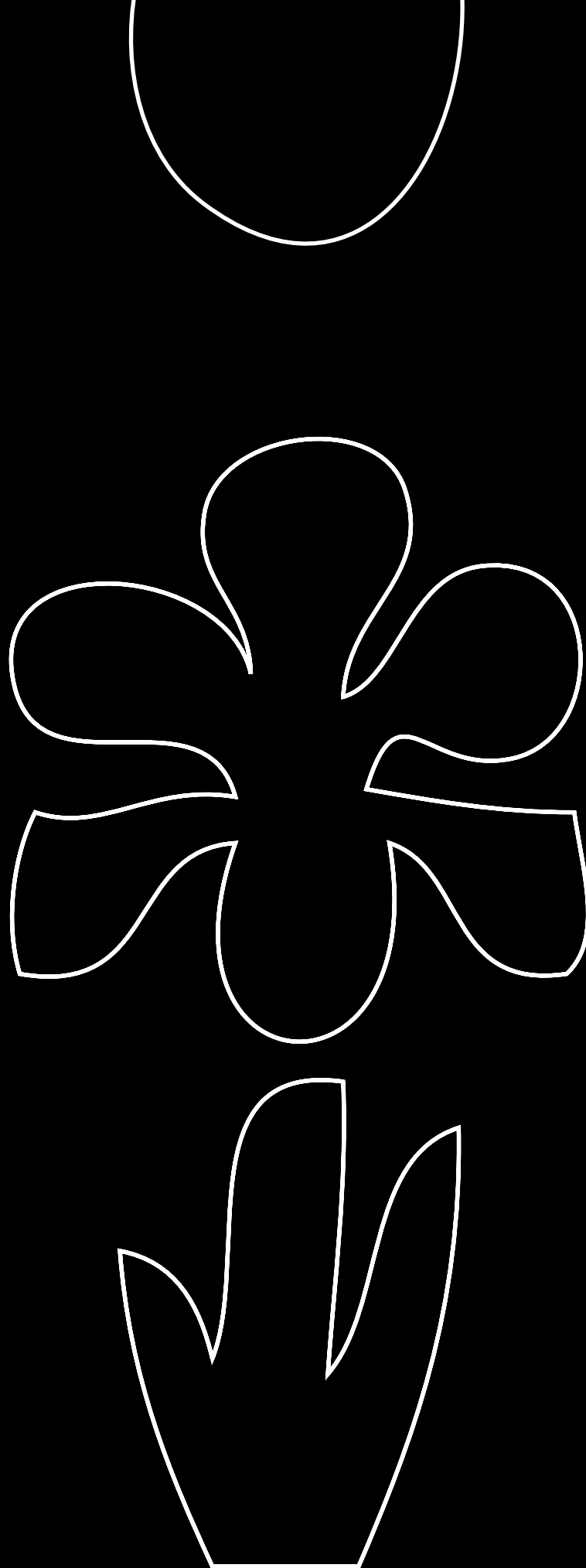


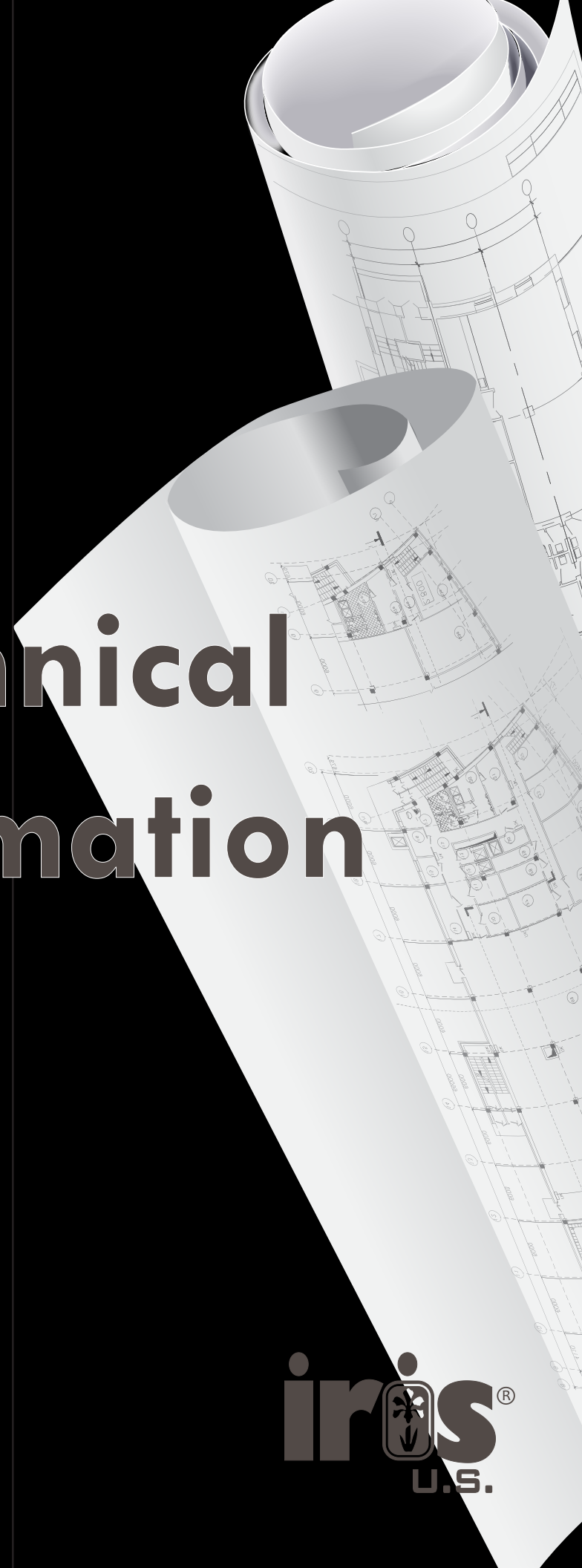
Iris U.S. Customer Service
800.323.9906
www.irisus.com



USIR1113



Technical Information



Made in the USA



**East Coast Distribution Center
& Production Plant
238 Porcelain Tile Drive
Crossville, Tennessee 38555**



**Iris U.S. RDC
1360 South Vernon Street
Anaheim, California 92805**

Our Mission



Iris U.S., a division of Iris Ceramica, was established in December 2004, as an American division to deliver U.S. made products to the flooring industry and to promote Iris Group products throughout the nation. With corporate offices based in Anaheim, CA and production in Tennessee, Iris U.S. can domestically produce and ship material all over the U.S., selling not only American made products, but also having the ability to sell the diverse majority of Iris Group products, which enables them to effectively accommodate all requests of sizes, textures, and designs, for interior and exterior, residential and commercial applications.

Distribution Centers



LEED™ & Sustainability



Contributing to LEED™ Certification Points

LEED™ is an acronym that stands for Leadership in Energy and Environmental Design. The U.S. Green Building Council has developed a suite of LEED™ Green Building Rating Systems that allows builders, owners, and tenants to evaluate the impact of their design on energy and environmental issues. They can obtain points toward LEED™ certification of a project resulting from choices they make while designing, constructing, and operating a new or existing building or major renovation. It is important to note that no product is “LEED™ Certified.” Only buildings can be LEED™ certified. However, when Iris U.S. products are included in a project, they can contribute points towards attaining different levels of certification. Our materials can help reduce the environmental impacts of building operation by delivering exceptional durability and low maintenance requirements.

Iris U.S. tiles can contribute to LEED™ points in the following ways:

- **Recycled Materials Content (MR Credit 4):** The Bureau Veritas has certified the percentage of pre-consumer and post-consumer recycled material in our products.
- **Regional Materials (MR Credit 5):** Materials from our USA production facility qualify if used in projects within 500 miles of Cumberland County, Tennessee.
- **Low-Emitting Materials (EQ Credit 4.3):** Iris U.S. is compliant with this credit as certified by GREENGUARD
- **Heat Island Effect (SS Credits 7.1 and 7.2):** If requested, Iris U.S. can provide testing regarding solar reflective index (SRI).
- **Innovation in Design (Credit 1):** (Approved on a case by case basis) e.g. ventilated facades, photocatalytic tiles, 4 mm tiles etc., Iris US has the ability to produce tile with photocatalytic properties.

For more information regarding the USGBC or LEED™ points system, please visit www.usgbc.org

Iris U.S. is a member of the U.S. Green Building Council, a non-profit organization that certifies residential and commercial buildings as healthy and safe for man and the environment.

GreenGuard Certified



The GREENGUARD Certification Program™ is internationally recognized for evaluating product emissions and certifying building materials, furnishings, finishes and cleaning products and processes that meet stringent indoor air quality criteria defined by GREENGUARD Environmental Institute (GEI). Products undergo rigorous, third-party testing to determine their impact on indoor air pollution with requirements for ongoing verification. The GREENGUARD Environmental Institute recently announced that all flooring products certified to the stringent GREENGUARD Children & Schools™ standard can earn valuable LEED™ credits across multiple building rating systems.

Iris U.S. has more than 70 flooring products certified that can help earn up to four (4) points under the low-emitting material credit (EQ 4.3).



Iris U.S., an Iris Group company, with internationally recognized porcelain factories in Italy, Germany, and the USA, have successfully merged cutting edge technological expertise with innovative design offerings. Iris brings to the American marketplace, the most impressive, advanced “green,” unglazed, glazed, and colored-body porcelain products available in the world today.

All Iris U.S. “Green Choice” materials are manufactured in the USA. The raw materials used to produce the body of our tiles are all natural and quarried within 500 miles of our production facility in Crossville, TN. Our company takes great pride in our efforts to be environmentally conscious, using recycled material in our production processes whenever possible.

The total “Green Choice” percentage shown includes a percentage of pre-consumer recycled material, plus six percent (6%) post-consumer recycled glass. This type of recycled content is rarely available in porcelain tile. Iris U.S. products have been third party certified and may possibly contribute to LEED™ points under the construction materials category.



For more information on our company's commitment to the environment, please visit our website: www.irisus.com

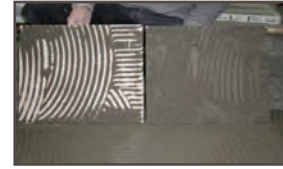
Installation



1



2



3



4

Laying

How a floor is laid is of great importance. A well-laid floor enhances all of the aesthetic qualities of the material used.

- Check that the bed (concrete slab) is perfectly level and completely dry and smooth
- Use a cleaning device, such as a vacuum, to carefully remove dust and residues.

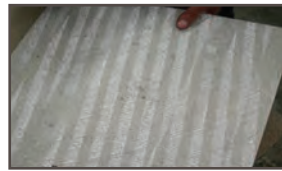
After having chosen a suitable glue and having prepared it following the manufacturer's instructions, spread the glue with a smooth spatula and then comb it with the tooth part (1).

Iris US strongly suggests the use of polymer-modified thin-set mortar. Polymer-modified thin-set mortar will increase the lifetime of your installation.

For heavy traffic floors, a double layer of glue is recommended (2). Thus, wetting the back of the product itself with glue (2). This procedure prevents the possible creation of holes that could cause breakage (see the difference between spreading and double spreading) (3). After approximately 24 - 48 hours, it is safe to proceed to grout. The laid floor must be cleaned carefully and then grouted all over its surface using a rubber spatula. It is advisable to use colors similar to the floor, in order to obtain a harmonious end result.



5



6



7



8

Fabricating

How to cut:

It is necessary to use suitable, professional tools, always checking their cutting capacity and replacing worn parts when necessary. For accurate cutting use a traditional cutter, checking the state of the cutting wheel before starting.

For circular cutting, after having made a template (that is to say a pattern of the part to be cut), lay it on the part in question and transfer the shape with a pencil. Using a diamond-cutting disk, cut without exerting excessive pressure (4-5).

How to make holes:

It is necessary to use a water milling cutter or a continuous crown diamond-cutting disk for stoneware and granite tiles. After having penciled (6) – on the back of the product – the perimeter of a square within which the hole must be made, use the cutting tool to cut perpendicular and diagonal lines and then concentric circles towards the outside (7). The pictures at the side illustrate in detail the cuts to follow.

When the central thickness of the hole has become very thin, turn the piece over and open up the hole by tapping lightly (8).

For making holes in tiles, a diamond point drill for granite must be used. It is important to remember to cool the points often while working.

Grouting

Grouting and grout cleanup of Iris U.S. materials can be achieved quickly and efficiently if the contractor follows the directions from the grout manufacturer. Many grout manufacturers produce products specifically for use with unglazed porcelain tile, and by following their instructions, a beautiful and durable installation is ensured. Special attention should be given when using contrasting grouts --- specifically, light colored tile with dark grouts. All installations using a black grout should be field tested for compatibility. Performing a test area using the specified grout and Iris U.S. materials is recommended to determine if the inclusion of a grout release agent, it is necessary to use one that will not affect the bonding of the grout to the sides and edges of the joint.

Surface Coatings

Iris U.S. materials do not require the use of sealers or waxes; in fact, adding surface coatings only increases the maintenance of this flooring system. Surface coatings may actually diminish the exceptional performance characteristics of Iris U.S. materials by creating a thin barrier that can modify skid resistance properties. The dense, low-porosity nature of Iris U.S. materials inhibits not only the absorption of stains, but also the absorption of sealers and waxes. Application of these products may produce a spotty or streaked appearance on the tile. In the event a polished finish is used in an area prone to excessive spills or dirt, it may be advisable to treat the tile with a penetrating type sealer. During the polishing process, microscopic pores are sometimes exposed. Although the pores are shallow, spills can fill them making standard cleaning procedures inadequate. By using a penetrating type sealer, these microscopic pores are filled preventing stains from setting in. A penetrating type sealer is designed only to fill pores, not to coat the tile surface. You will not alter the polished tile's appearance, provided a recommended sealer is used and applied according to the manufacturer's instructions.

Stain Chart

	FILA USA 8180 NW 36TH ST SUITE 303 MIAMI, FL 33166 305.513.0708	WALTER G LEGGE COMPANY 444 CENTRAL AVE PEEKSKILL, NY 10566 800.345.3443	AQUA MIX 949 ANN ST SANTA FE SPRINGS, CA 90670 800.366.6877	MIRACLE SEALANT 12806 SCHABARUM AVE BLDG A IRVINDALE, CA 91706 931.456.3983	HILLYARD, INC. 302 North 4th Street St. Joseph, MO 64501 800.365.1555	
STAIN	SPECIALTY CLEANER	SPECIALTY CLEANER	SPECIALTY CLEANER	SPECIALTY CLEANER	SPECIALTY CLEANER	COMMON CLEANERS
Food Groups Mustard Ketchup Mayonaisse Tea Ice Cream Beer / Wine Orange Juice Grape Juice Coffee Soy Sauce	• PS / 87	• Citronex • Neutral Cleaner	• Tile Grout Cleaner • Tile Plus More	• Porcelain & Ceramic Tile Cleaner		• Mr. Clean • Formula 409 • Spic n' Span • Comet • Windex • Lysol
Oil & Grease Vegetable Mineral Petroleum Wax Sealer Meat Grease Hydraulic Oil Transmission Fluid Linseed Oil Lipstick Rubber Shoe Polish Paint (oil based)	• PS / 87 • No Spot	• Grout Stripper • Legge Solve It	• Heavy Duty Tile & Grout Cleaner	• Porcelain & Ceramic Tile Cleaner		• Mr. Clean • Formula 409 • Spic n' Span • Comet • Windex • Lysol • Fantastic • Soft Scrub
Markers / Graffiti Felt Tip Ink Water Marker Permanent Fluorescent Crayon	• PS / 87 • No Paint	• Legge Solve It	• Heavy Duty Tile & Grout Cleaner • Sealer & Adhesive Remover	• Porcelain & Ceramic Tile Cleaner		• Mr. Clean • Comet • Soft Scrub
Water Based Agents Paint (water based) Other water based stain	• PS / 87 • No Paint	• Grout Stripper	• Heavy Duty Tile & Grout Cleaner • Sealer & Adhesive Remover	• Porcelain & Ceramic Tile Cleaner		• Mr. Clean • Comet
Tile Grout Cement	• Deterdek	• Grout Stripper	• Phosphoric Acid Grout Cleaner • Nano Scrub • Haze Clean Up	• GFCR		• White Vinegar • Lime A Way
Latex or Polymer	• Deterdek	• Grout Stripper	• Haze Clean Up	• GFCR		
Epoxy	• Deterdek	• Legge Solve It	• Nano Scrub • Sealer & Adhesive Remover	• Epoxy Grout Film Remover		
Lead or Metal Residue					• Hillyard Creme Clean	

Cleaning & Maintenance

Appropriate cleaning and maintenance will enhance the unique beauty of Iris U.S. materials, which are recognized for their ease of maintenance. Following the specific, yet simple guidelines outlined below will ensure a long lasting, beautiful installation.

Initial Cleaning

The complete removal of construction dirt and grout haze from Iris U.S. materials during the initial cleaning will ensure ease of future, daily maintenance.

If construction dirt has collected on the surface of the tile, it will be necessary to use a heavy duty cleaner and possibly a scrubber to release the dirt. A wet vacuum can be used to aid in the pickup of the suspended dirt in the cleaning solution. The floor should then be rinsed thoroughly to leave the surface free and clear of any cleaner residue, which if left on the surface could attract dirt or become slippery when wet.

Grout haze or residue, however, will require special products. There are two situations that can occur with grout residue; a cementitious residue, which generally can be seen, or an invisible residue left by additives often used in grouts. It is important that both residues be removed to leave your floor thoroughly cleaned. Either residue will increase soiling and create ongoing maintenance problems.

Acid washing is not recommended, especially with the use of colored grouts. Use of acids can cause discoloration of the grout joints and, in some instances, cause the color pigment to attach itself to the surface of the tile making it more difficult to clean. If tracking and soiling are consistently occurring, it can usually be associated with grout haze or buildup of cleaners. A cleanup of the grout as directed above, or a thorough cleansing and rinsing of the floor to remove cleaner buildup, should eliminate excessive soiling and tracking.

1. Sweep, using a soft, natural bristle broom, or vacuum floor of debris.
2. Using product from a reputable manufacturer of tile cleaner or grout stripper, prepare a cleaning solution as recommended by the manufacturer's instructions. Dispense a generous amount of solution onto the floor by mop or sponge applicator.
3. Allow the solution to sit on the surface a few minutes to increase the suspension of the dirt particles and produce a cleaner surface.
4. Using a nylo-grit brush, scrub slowly in an overlapping figure eight pattern. If the area is very dirty or has grout or sealer film, a 175 rpm rotary scrubber must be used to get the proper results. If the area is only lightly soiled, an auto scrubber can be used, making several passes before picking up the solution.
5. Have several rinse buckets with clean water available before pick up the scrubbed solution. Use a wet vacuum to pick up the solution and immediately rinse the surface with clean, cold water. Pick up the rinse water and repeat until the surface is completely free of solution.
6. Remove excess water from the floor.

Many general purpose, neutral cleaners are effective for the regular cleaning and maintenance of Iris U.S. materials. It is important that the selected cleaner have a non-oil, non-animal fat, non-soap base. Cleaners with these ingredients may cause problems due to residues left behind in the cleaning process, which can trap dirt. For best results, the following maintenance procedures are recommended for the various finishes of Iris U.S. products.

Unpolished (Matte, Semi-Matte, Honed)

For moderate soiling:

1. Sweep, using a soft, natural bristle broom or vacuum floor of debris.
2. Saturate the floor with the recommended amount of general purpose, neutral cleaner and agitate the solution. An auto-scrubber may be used.
3. Allow the solution to sit on the surface a minimum of five minutes to increase the suspension of the dirt particles and produce a cleaner surface.
4. Remove the dirty cleaning solution from the floor with either a wet vacuum or mop, and rinse with clean water.
5. Remove excess water from the floor. Buff with dry mop or towel.

For heavy soiling:

1. Sweep or vacuum floor of debris.
2. If there are deeply soiled areas or apparent staining on the surface of the tile, first attempt to identify and pre-treat them. Different surface contaminants require different cleaning methods and chemicals (see chart).
3. Scrub with a cleaning compound and floor machine equipped with an abrasive pad or stiff, natural bristle brush. For residential and small areas, use a scrub brush.
4. Remove the dirty cleaning solution with a wet vacuum and rinse the floor more than once to thoroughly remove the cleaning agent from the surface.
5. Remove excess water from the floor.

Polished

1. Sweep or vacuum the floor of loose dirt. An untreated, dry dust mop may be more effective than a soft bristle broom.
2. Wipe or mop with a diluted solution of neutral cleaner or clean, clear water.
3. If cleaning solution is used, rinse thoroughly with clean water.
4. Dry or buff to increase shine and water spots.

Slate and Industrial Finishes

Iris U.S. material's slate and industrial finishes offer an excellent safety feature due to their high degree of slip-resistance. However, they require a slight variation in cleaning procedure. Due to the undulation and texture of the tile surface, it will be necessary to reach the soil that rests on the low points of the tile. Standard wet mopping will not be completely effective in cleaning these textured surfaces.

1. Sweep or vacuum floor. If sweeping, use a soft bristle broom. The choice of brush bristles is important because a strong, thorough bristle action is required to remove debris. Sweep in two directions. First, follow the direction of the tile, and then sweep diagonal to the tile to ensure complete removal of all foreign material.
2. Saturate the surface with a neutral cleaning solution (use a degreaser in food preparation areas). Agitate and allow the mixture to remain on the floor for a few minutes, giving the cleaner time to activate. Use a scrub machine or bristle brush to scrub. Once again, use a cross action pattern to ensure soil removal.
3. Rinse the floor with clean water and remove with a wet vacuum or dry toweling to eliminate dirty water from escaping into low points of the surface.

Note: Several factors will effect the frequency of maintenance and type of procedure required, including pedestrian traffic, weather conditions, walk off mats, color of floor (lighter floors show more soiling) and environment. Please take these conditions under consideration when planning your maintenance schedule.

Iris U.S. highly recommends the use of low VOC, non-hazardous, and non-polluting products for the cleaning and maintenance of tile and grout products.

Symbols



The colors on the surface of the tile are the same as the colors used in the body of the tile, making it ideal for high-traffic areas.



Tiles which have no glaze present, deriving color and texture from the materials of which the body is made and/or processes performed on the surface of the tile such as polishing, honing, or staining.



Tile with a fused impervious facial finish composed of ceramic materials, fused to the body of the tile.



The tiles are mechanically finished with precise edges, allowing for tighter grout joint spacing during installation.



A new glazing technology which allows for no repetition and a natural effect through high resolution, computer-generated images and consistent shading production



Total "Green Choice" percentage for each color includes a percentage of pre-consumer recycled material, plus six percent (6%) post-consumer recycled glass. This type of recycled content is rarely available in porcelain tile.

Iris U.S. Warranty

Iris U.S. warrants that its products meet or exceed the performance specification outlined in ANSI A137.1-2008. Our goal is to provide first quality products through our state-of-the-art facilities throughout Europe and our newest manufacturing plant in Tennessee.

Disclaimer

Merchandising materials and samples are for general reference only. Our products should be examined prior to installation. Tile by its nature is subject to variation in color and/or veining as well as technical specifications, including COF, due to the inherent variability in the raw materials and production process. Iris US products differentiate themselves than other ceramic products by using several raw materials (such as, Kaolin, Clay, Feldspar, Quartz, Sand, etc.) gathered from different U.S. quarries. These raw materials are put through a particular production process, where they are dried, pressed and fired together at the high temperature of 2600° F. This causes each new Iris US production to be subject to continual pattern variations, just as found within nature. Technical data sheets or specifications are not guarantees of maximum or minimum thresholds of performance. Misuse of the product by the Buyer including negligence, physical, or chemical abuse is not covered by this warranty. Installation defects are not covered by this warranty. Visual defects or non conformities apparent prior to installation are not covered by this warranty.

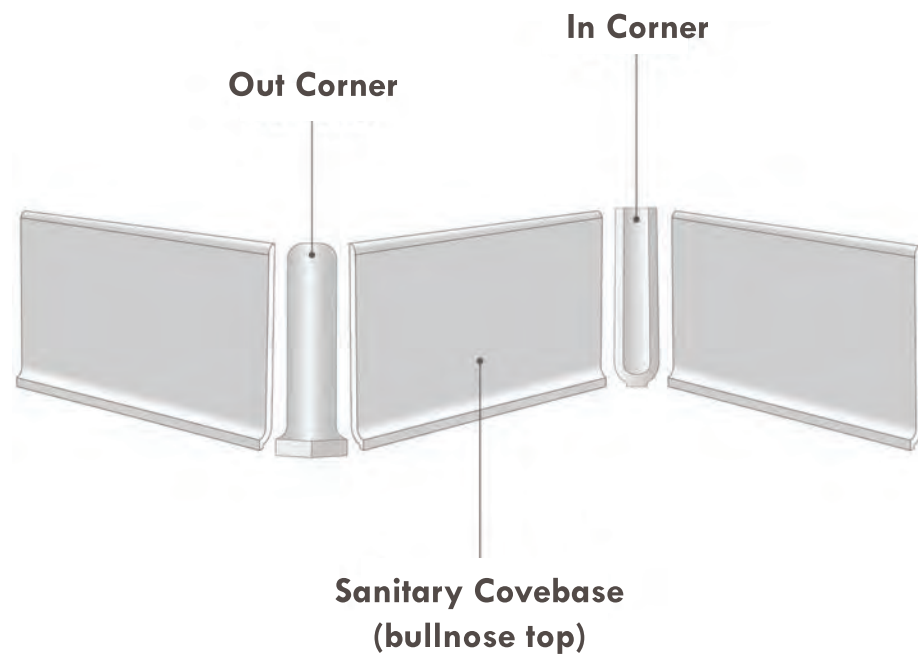
One Year Limited Warranty

This warranty will cover our products purchased by a residential or commercial user for up to 12 months from the date we ship the products. Certain factors, however, are beyond our control, including installation of our products, structural design and environmental conditions. Accordingly, Iris US cannot accept responsibility for the performance of our products purchased by a residential or commercial user after they are installed. In the event of latent defects caused by improper manufacture, defined as tiles not conforming to industry standards, Iris US will either refund the price for the defective pieces or provide replacement material of the same kind. Iris US will not be responsible for any costs of labor, installation and/or removal of our products.

Iris US does not warrant that our glazed and unglazed porcelain will not scratch, chip, or show signs of wear.

Iris US makes no implied warranties of merchantability or fitness for a particular purpose or any other warranties expressed or implied, except as otherwise set forth above. Under no circumstances shall Iris US be liable for incidental or consequential losses, damages, or expenses, directly or indirectly arising from the sale, handling or use of our products. No consequential (including loss of profits) or incidental damages are recoverable.

Trims



Color Shade Variations

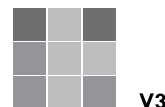
As in nature, our products vary piece to piece. Please refer to the graph for variations.



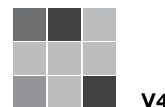
V1
Difference among pieces from the same color are minimal



V2
Shade variance within the same color



V3
Significant shade variation within the same color



V4
Extreme shade variation, piece to piece, within the same color

