GREEN CHOICE MATERIALS
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 325 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. As indicated on the individual pages
in this catalog, the total “Green Choice” percentage shown includes a percentage of pre-consumer recycled material, plus two percent (2%) post-consumer recycled glass. For more information on our company’s commitment to the environment, please visit our website: www.irirus.com.
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.

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

Total “Green Choice” percentage for each color includes a percentage of pre-consumer recycled material, plus two percent (2%) post-consumer recycled glass.

<table>
<thead>
<tr>
<th>SIZE</th>
<th>BOX (PIECES)</th>
<th>BOX (SQ. FT.)</th>
<th>PALLET (BOXES)</th>
<th>PALLET (SQ. FT.)</th>
<th>THICKNESS (INCHES)</th>
<th>WEIGHT (LBS/SQ.FT.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18” x 18”</td>
<td>11</td>
<td>10.77</td>
<td>60</td>
<td>646.32</td>
<td>3/8”</td>
<td>4.55</td>
</tr>
<tr>
<td>12” x 12” Stair tread</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6” x 8” Corebase</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3” x 12” Bullnose</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3” x 12” Double Bullnose Left</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3” x 12” Double Bullnose Right</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1” x 6” In Corner</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1” x 6” Out Corner</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## American Standards

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Test</th>
<th>Industry Standards</th>
<th>Iris Elements (As Tested By TCNA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Absorption</td>
<td>ASTM C-373</td>
<td>Tile Shall be Impervious (Less Than 0.5% for Porcelain Tile)</td>
<td>Less Than 0.05%</td>
</tr>
<tr>
<td>Size</td>
<td>ASTM C-499</td>
<td>Average Facial Dimension ≤ 1.5% of largest value</td>
<td>0.15%</td>
</tr>
<tr>
<td></td>
<td>ASTM C-485</td>
<td>Average Major Thickness ≤ 0.04 in.</td>
<td>0.018 in.</td>
</tr>
<tr>
<td></td>
<td>ASTM C-502</td>
<td>Average Warpge 1% on any edge</td>
<td>0.91%</td>
</tr>
<tr>
<td>Bond Strength</td>
<td>ASTM C-482</td>
<td>≥ 50 PSI or Greater</td>
<td>&gt; 380 PSI</td>
</tr>
<tr>
<td>Thermal Shock Resistance</td>
<td>ASTM C-484-66</td>
<td>No Sample Must Show Visible Effects</td>
<td>Resistant</td>
</tr>
<tr>
<td>Frost Resistance</td>
<td>ASTM C-1026</td>
<td>No Sample Must Show Alternation to Surface</td>
<td>Frost Proof <em>(No Cracking or Spalling Occurred)</em></td>
</tr>
<tr>
<td>Chemical Resistance</td>
<td>ASTM C-650</td>
<td>To 10% HCl Acid – No Sample Must Show Visible Signs of Chemical Attack – to 10% KOH Alkali</td>
<td>Unaffected</td>
</tr>
<tr>
<td>Breaking Strength</td>
<td>ASTM C-648</td>
<td>≥ 250 Lbs. or Greater</td>
<td>≥ 700 Lbs.</td>
</tr>
<tr>
<td>Color Resistance to Light</td>
<td>DIN 51094</td>
<td>No Noticeable Color Change</td>
<td>No Change in Brightness or Color</td>
</tr>
<tr>
<td>Light Reflectance Value</td>
<td>ASTM C-609</td>
<td>N/A</td>
<td>Light Reflectance Value 50.22</td>
</tr>
<tr>
<td>Impact Resistance</td>
<td>ASTM C-386</td>
<td>N/A</td>
<td>Color Difference 2.97 Judds</td>
</tr>
<tr>
<td>Flexural Resistance</td>
<td>ASTM C-477</td>
<td>N/A</td>
<td>9192.92 PSI (63.39 N/mm²)</td>
</tr>
<tr>
<td>Skid Resistance (Average Coefficient of Friction)</td>
<td>ASTM C-1028</td>
<td>Department of Justice ADA Title III Regulations 28 CFR Part 36, Section A4.5.1; Recommends minimum of 0.60 SCOF for horizontal surfaces</td>
<td>Dry Results Min. 0.68* Wet Results Min. 0.60*</td>
</tr>
<tr>
<td>Hardness (Moh’s Scale)</td>
<td>ASTM C-1378</td>
<td>No requirement</td>
<td>0</td>
</tr>
<tr>
<td>Stain Resistance</td>
<td>ASTM C-1378</td>
<td>Material exposed to test solutions for 24 hours at 74°F</td>
<td>No staining</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- contrasting grout</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- carbons lamp black</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- waterproof ink</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- washable ink</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- potassium permanganate solution 1%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- methylene solution 1%</td>
<td></td>
</tr>
<tr>
<td>Resistance to Wear</td>
<td>ASTM C-501</td>
<td>100</td>
<td>267.38</td>
</tr>
<tr>
<td>Resistance to Abrasion</td>
<td>ASTM C-1027</td>
<td>Class 5 - Tile resistant to stains and wear after 12,000 abrading revolutions</td>
<td>Class 5 or 4, depending on color; results available upon request.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Class 4 - Tile resistant to wear after 1,500 abrading revolutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Class 3 - Tile resistant to wear up to 1,500 abrading revolutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Class 2 - Tile resistant to wear up to 500 abrading revolutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Class 1 - Tile resistant to wear up to 150 abrading revolutions</td>
<td></td>
</tr>
</tbody>
</table>

* These results are obtained from an average of overall sample data tested by Smith Emery Laboratories and TCNA. Coefficient of friction test results are available upon request.

## Color/Shade Variations

As in nature, our products vary piece to piece. Please refer to 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
Air

**SIZES**

- 12x12
  - IRM1212001 Matte
  - IRP1212001 Polished (Rectified)

**TRIMS** Available in Matte finish only

- Covebase
  - 6" x 8"
  - IRM68C0001

- In Corner
  - 1" x 6"
  - IRM16IC001

- Out Corner
  - 1" x 6"
  - IRM16OC001

- Bullnose
  - 3" x 12"
  - IRM312B001

- Double Bullnose Left
  - 3" x 12"
  - IRM312B301

- Double Bullnose Right
  - 3" x 12"
  - IRM312B601

- Stairtread
  - 12" x 12"
  - IRM12ST001
Alloy

SIZES

12x12
IRM1212005 Matte
IRM1212013 Polished (Rectified)

TRIMS

Available in Matte finish only

Covebase
6" x 8"
IRM68C0005

Bullnose
3" x 12"
IRM312B005

Stairtread
12" x 12"
IRM12ST005

In Corner
1" x 6"
IRM16IC005

Double Bullnose Left
3" x 12"
IRM312B305

Double Bullnose Right
3" x 12"
IRM312B605

Out Corner
1" x 6"
IRM16OC005

Double Bullnose Left
3" x 12"
IRM312B305

Double Bullnose Right
3" x 12"
IRM312B605
Sizes

- 12x12  
  IRM1212004 Matte  
  IRP1212004 Polished (Rectified)

Trims • Available in Matte finish only

- Covebase  
  6'' x 8''  
  IRM68C0004

- In Corner  
  1'' x 6''  
  IRM16IC004

- Out Corner  
  1'' x 6''  
  IRM16OC004

- Bullnose  
  3'' x 12''  
  IRM312B004

- Double Bullnose Left  
  3'' x 12''  
  IRM312B304

- Double Bullnose Right  
  3'' x 12''  
  IRM312B604

- Stairtread  
  12'' x 12''  
  IRM12ST004
Fire

**SIZES**

<table>
<thead>
<tr>
<th>12x12</th>
<th>IRM1212006 Matte</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IRP1212006 Polished (Rectified)</td>
</tr>
</tbody>
</table>

**TRIMS** Available in Matte finish only

- **Covebase** 6" x 8" IRM68C0006
- **In Corner** 1" x 6" IRM16IC006
- **Out Corner** 1" x 6" IRM16OC006
- **Bullnose** 3" x 12" IRM312B006
- **Double Bullnose Left** 3" x 12" IRM312B306
- **Double Bullnose Right** 3" x 12" IRM312B606
- **Stairtread** 12" x 12" IRM12ST006
Water

SIZES

12x12
IRM1212002 Matte
IRP1212002 Polished (Rectified)

TRIMS Available in Matte finish only

Covebase
6" x 8"
IRM68C0002

Bullnose
3" x 12"
IRM312B002

Stairtread
12" x 12"
IRM12ST002

In Corner
1" x 6"
IRM16IC002

Double Bullnose Left
3" x 12"
IRM312B302

Double Bullnose Right
3" x 12"
IRM312B602

Out Corner
1" x 6"
IRM16OC002
SIZES

- 12x12
  - IRM1212003 Matte
  - IRP1212003 Polished (Rectified)

TRIMS  Available in Matte finish only

- Covebase
  - 6" x 8"
  - IRM68C0003

- In Corner
  - 1" x 6"
  - IRM16IC003

- Out Corner
  - 1" x 6"
  - IRM16OC003

- Bullnose
  - 3" x 12"
  - IRM312B003

- Double Bullnose Left
  - 3" x 12"
  - IRM312B303

- Double Bullnose Right
  - 3" x 12"
  - IRM312B603

- Stairtread
  - 12" x 12"
  - IRM12ST003
LAYING

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

1. Check that the bed (concrete slab) is perfectly level and completely dry and smooth
2. 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.

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.
Iris U.S. products will maintain their beauty long after the material is installed. To keep it looking as new as the day it was put in, regular routine maintenance is usually sufficient. The following chart outlines the most appropriate cleaner for each type of stain listed. Common household cleaners such as Mr. Clean and Spic’n’Span are generally sufficient if a good cleaning routine is kept. For specific stains, the following specialty cleaning products are recommended. For more information, please contact Iris U.S. toll-free at 800.323.9906.

<table>
<thead>
<tr>
<th>Stain</th>
<th>Specialist Cleaners</th>
<th>Common Cleaners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Markers/Graffiti</td>
<td>- Felt Tip - Ink - Water Marker - Permanent - Fluorescent - Crayon</td>
<td>No Paint - Legge-Solve-It</td>
</tr>
<tr>
<td>Water-Based Agents</td>
<td>Water-Based Paint or Stain</td>
<td>No Paint - Grout Stripper</td>
</tr>
<tr>
<td>Latex or Polymer</td>
<td>Deterdek</td>
<td>Grout Stripper</td>
</tr>
<tr>
<td>Epoxy</td>
<td>Deterdek</td>
<td>Legge-Solve-It</td>
</tr>
</tbody>
</table>
Specialty Trims
TECHNICAL SPECIFICATIONS

The covering for (floor or wall) shall be in first-quality porcelain tiles available in the following sizes: ..., inches (12x12), with a thickness of 9 mm. Surface finish shall be: matte or honed or polished. The selected type, called (see collection), belongs to the ..., range by Iris US, is ..., in color (see collection). The veining, throughout this material, must not be repetitive in shape or design, and therefore must be variable on each individual tile. This material is made from an atomized mixture of: quartzes, feldspars, clays, and kaolins, pressed (600kg/cm²), sintered at 2700°F, and is homogeneous throughout its thickness. The elements resulting from this procedure belong to the CI UGL “completely vitrified” group (UNI EN 176 or Bla ISO 13006 regulations). The requirements of the following material must present the average values: width and length, rectilinear and orthogonal measurements and planarity: ± 0.2% (ISO 10545.2 testing method regulations); thickness: ± 2% (ISO 10545.2 testing method regulations); water absorption: 0.04% (ISO 10545.3 testing method regulations); deep abrasion resistance: 120 mm³ (ISO 10545.6 testing method regulations); flexion resistance: 55N/mm² (ISO 10545.4 testing method regulations). They must also be resistant to chemical aggression, staining, and frost.
ONE YEAR LIMITED WARRANTY

Iris U.S. warrants to purchasers (“Buyer”) that its products meet or exceed the performance specification outlined in ANSI A137.1-2008 at the time of production and for twelve (12) months from the date of shipment from our factory or until they are installed, whichever date occurs first.

Certain factors are beyond our control, including installation of our products, structural design and environmental conditions. Accordingly, Iris U.S. does not warrant its products after they are installed. In the event of latent defects caused by improper manufacture, defined as tiles not conforming to industry standards, Iris U.S. will either refund the purchase price for the defective pieces or provide replacement material of the same kind. Iris U.S. will not be responsible for any costs of labor, installation or removal of our products. Iris U.S. does not warrant that our glazed and unglazed porcelain will not scratch, chip or show signs of wear.

EXCEPT AS EXPRESSLY STATED ABOVE, THIS LIMITED WARRANTY STATES THE SOLE AND EXCLUSIVE REMEDY OF BUYER AND THE SOLE AND EXCLUSIVE WARRANTY OF IRIS U.S. AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED BY STATUTE OR OTHERWISE, WHETHER OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR USE OR OTHERWISE, ON THE PRODUCTS, OR ON ANY PARTS OR LABOR FURNISHED DURING THE SALE, DELIVERY OR SERVICING OF THE PRODUCTS.

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. 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 nonconformities apparent prior to installation are not covered by this warranty.

LIMITATION OF LIABILITY

IN NO EVENT SHALL IRIS U.S. BE LIABLE TO BUYER FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR AS A RESULT OF, THE SALE, DELIVERY, NON-DELIVERY, SERVICING, ASSEMBLY, USE, LOSS OF USE OR FAILURE OF THE PRODUCTS OR ANY PART THEREOF, OR FOR ANY CHARGES OR EXPENSES OF ANY NATURE INCURRED WITHOUT IRIS U.S.’S PRIOR WRITTEN CONSENT, EVEN IF IRIS U.S. MAY HAVE BEEN NEGLIGENT. IN NO EVENT SHALL IRIS U.S.’S LIABILITY UNDER ANY CLAIM MADE BY BUYER EXCEED THE PURCHASE PRICE OF THE PRODUCTS IN RESPECT OF WHICH DAMAGES ARE CLAIMED.
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,” through-body porcelain products available in the world today.

FREQUENTLY ASKED QUESTIONS

ARE IRIS U.S. MATERIALS “GREEN?”
Yes. Our materials are made with 100% natural minerals, including:
- Quartz
- Clay
- Feldspar
- Natural coloring agents

They are also green because of what isn’t there.
- No sealants
- No waxes

COULD A “GREEN” BUILDING USE IRIS U.S. MATERIALS?
Yes. Our materials contribute to a safe, healthy indoor environment. No man-made chemicals, epoxies, binders, or coatings are used that would release volatile organic compounds (VOCs) into a building environment through off-gassing.

VOC - a chemical agent that can adversely affect the health of building occupants.

Off-gassing - the process of a gradual release of chemical compounds into the air by materials as the materials or coatings cure after installation. Collection of these compounds can have a negative affect on the health of building occupants.

DO IRIS U.S. MATERIALS CONTAIN RECYCLED MATERIALS?
Yes. Our “Green Choice” products contain as much as 99% recycled materials, which includes pre-consumer recycled material and 2% post-consumer recycled glass.
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 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).

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.

Iris U.S. Products are 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).

For more information, please visit www.greenguard.org
Distribution Centers

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

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