



INSTALLATION PHOTO  
FORM Concrete Porcelain – Grey – FLSRI711

# FORM CONCRETE PORCELAIN

Monolithic yet rich with intricate characteristics, **FORM Concrete Porcelain** offers the rough hewn of industrial materials with worn, weathered textures and a unified palette of muted earth tones for the perfect intersection of form and function.

## SPECIFICATIONS

<b>SIZE</b>	<b>TILES:</b> : 18" x 36", 12" x 24" nominal; <b>Grey and Frost only:</b> 6" x 36"; <b>MOSAICS:</b> 2" x 2" on 12" x 12" Mesh Mounted Sheet; <b>TRIM PIECES:</b> Cove Base: 6" x 12"; Bullnose: 3" x 24"
<b>THICKNESS</b>	3/8" nominal
<b>FINISH</b>	Honed
<b>APPLICATION</b>	Floors and Walls; Interior or Exterior
<b>ASI® ADVANTAGE</b>	Proprietary antimicrobial and anti-pollution coating is available with a 5000 sq.ft. minimum; GREENGUARD Gold Certification; Made in the USA; Trim Pieces Available.



**FLSRI716**  
FROST

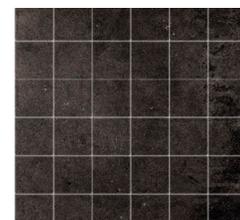


**FLSRI711**  
GREY



**FLSRI725**  
CHARCOAL

### MOSAICS: 2" X 2"



\* Spec ID#s are listed for 18" x 36" \* In Stock products are subject to availability.  
\* Please note that variations in color and texture may occur due to the nature of the material



**INSTALLATION PHOTO**

FORM Concrete Porcelain – Charcoal – FLSRI725



**INSTALLATION PHOTO**

FORM Concrete Porcelain – Frost – FLSRI716

Properties	ASTM Test	Industry Standard	Results
Water Absorption	C373	Impervious < 0.5%	≤ 0.1%
Thickness Dimension	C499	Range ±0.04" max	≤ ±0.04"
Facial Dimension	C499	±0.25%	≤ ±0.25%
Warpage Average	C485	±0.40% on any edge	≤ ±0.40%
Warpage Average	C485	±0.40% on any diagonal	≤ ±0.40%
Wedging Average	C502	±0.25%	≤ ±0.25%
Bond Strength	C482	≥ 50 psi	≥ 200 psi
Breaking Strength	C648	≥ 250 lbf	≥ 400 lbf
Hardness (Mohs)	C1895	Range 0 - 10	≥ 7
Visible Abrasion Resistance for Glazed Tile	C1027	"No requirement. Range 0 - 5"	Class 4
Frost Resistance (Freeze/Thaw)	C1026	No sample shows alteration to surface	No evidence of damage
Chemical Resistance	C650	"No requirement. Range E - A"	Class A
Stain Resistance	C1378	"No requirement. Range E - A"	Class A
DCOF (Matte/Honed)	ANSI A 326.3	≥ 0.42	≥ 0.50 - ≤ 0.60*
Aesthetic Classification	Visual Evaluation - Shade & Texture	"No requirement. Range V0 - V4"	V2

\*All values are given for matte or honed material. No values are given for polished material. ASI does not recommend polished surfaces in areas subject to exposure from grease, oil or water.

## LAYING THE PORCELAIN

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.

(1) Select a suitable thin-set mortar and prepare it using the manufacturer's instructions.

Spread the mortar with a smooth spatula and then comb it with the tooth part. **ASI strongly suggests the use of polymer-modified thin-set mortar to increase the lifetime of your installation.**



(2) For heavy traffic floors, a **double layer** of thin-set mortar is recommended by wetting the back of the porcelain tile with thin-set mortar. This procedure prevents the possible creation of holes that could cause breakage.



The difference between spreading and double spreading is shown below.



(3) After approximately 24-48 hours, 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 achieve an ideal end result.

## CUTTING THE PORCELAIN

It is necessary to use suitable, professional tools, always checking 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, create a template (eg. a pattern of the part to be cut), lay the template on the corresponding tile area, and transfer the shape with a pencil. Using a diamond-cutting disk, cut without exerting excessive pressure (see diagrams below).



## CREATING HOLES IN THE PORCELAIN

It is necessary to use a water milling cutter or a continuous crown diamond-cutting disk.

(1) Pencil on the back of the product - the perimeter of a square within which the hole must be made.



(2) Use the cutting tool to cut perpendicular and diagonal lines and then concentric circles towards the outside within the penciled square.



(3) When the central thickness of the hole has become very thin, turn the piece over and open up the hole by tapping lightly. For holes in tiles a diamond point's drill for granite must be used. It is important to remember to cool the points often while working.

## INITIAL CLEANING DURING INSTALLATION

The most important step in the care and maintenance of your ASI flooring is the initial cleaning.

It is paramount that you completely remove setting material, grout residue, and/ or any construction residue from the surface of the tiles before they have a chance to dry. In most cases, ASI tiles can be cleaned successfully by scrubbing the installation with a neutral detergent cleaner followed by a thorough rinsing. If grout residue still remains, rinse again, cleaning the tile several times with clean water to be certain you have removed any trace of grout residue from the surface of the tiles.

Grout manufacturers provide detailed instructions for the proper cleaning of grout residues. The grout manufacturers' directions should be followed if grout film is present on the surface of the ASI tiles.

Once the initial cleaning process has been completed, ASI flooring just needs to be swept or vacuumed and damp mopped with a neutral detergent cleaner followed by a thorough rinsing.

## SPECIAL GROUTING PRECAUTIONS

ASI recommends that a test patch be completed prior to grouting the installation to determine if contaminations of grout pigment will occur on the tile—especially when using light-colored tiles or polished tiles that are to be grouted with a dark contrasting colored grout, or when dark-colored tiles are to be grouted with a light-colored grout. If discoloration does not occur on the surface of the tile, then proceed with grouting. If discoloration occurs, contact the grout manufacturer to request the proper procedure for the protection of the flooring surface.

## PROPER CARE DURING CONSTRUCTION PHASE

ASI porcelain tiles are a finished flooring material. ASI strongly recommends using a protective cover, such as cardboard, construction paper, plywood, and/or other covering, to protect the porcelain tile during the initial construction phase. The use of plastic as a cover is not recommended as plastic becomes slippery when construction residue comes in contact with it. In addition, plastic has a tendency to delay the natural curing process of the thin-set and/or grout.

## GLAZED, MATTE, HONED & TEXTURED TILES

ASI porcelain tiles do not require the use of sealers, surface coatings, or waxes on the glazed, matte, honed, or textured porcelain tiles. The surface of the matte tiles is so smooth, and non-absorbing, Stain Test results show that the tiles are essentially stain-resistant. Applying a sealer or surface coating to matte finish porcelain tiles will only add unnecessary steps to the overall maintenance program—without enhancing the overall appearance of the tile.

## GLAZED, MATTE, HONED & TEXTURED TILES CONT.

The use of sealers on impervious porcelain paver tiles will turn a low-maintenance tile into labor intensive high-maintenance tile, and in most cases, these applied surface sealers will change and/or diminish the slip resistance of the porcelain tile.

## POLISHED TILES

If 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, 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 that a recommended sealer is used and applied according to manufacturer's instructions.

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## DAILY MAINTENANCE

Neutral cleaners are sufficient to clean and maintain ASI porcelain tiles. It is important that the cleaner used is a non-oil, non-soap, and non-animal-fat-based product as these cleaners have a tendency to act like a magnet and attract dirt and dust. Water and a soft sponge will remove most contaminants from the porcelain tile. If a cleaning product other than water is used for general cleaning, only a neutral pH cleaner (with the characteristics described above) should be used. Neutral pH cleaners are available from most sealer manufacturers and can be found at a local hardware store or tile distributor. Cleaners, such as Formula 409, Fantastic, or Windex, can sometimes be used on unsealed tiles, but most are alkaline in nature and could damage the surface finish. If using such a cleaner, always test a small area first. If you are not able to remedy the situation as detailed above, refer to the **Heavy Duty Maintenance** section.

## HEAVY DUTY MAINTENANCE

Some contaminants may require the use of a stronger cleaner. Use caution in selecting the product for heavy duty cleaning as many chemicals can damage the installation, as well as discolor and/or stain certain types of tiles. Always test cleaners on a small test area to confirm that the product is suitable for the removal of the contaminant in question. Please refer to the **Stain Removal Guide** for information about particular stains and manufacturer information. The information listed is only a guide. For more information, please contact one of the manufacturers listed. Always follow the directions from the manufacturer of the cleaning product you intend to use.

# MAINTENANCE CONT.

## STAIN REMOVAL GUIDE

Stain Type	Miracle Sealants	Aqua Mix	FILA Chemicals
<b>Food Stains</b> Coffee, Wine, Grape, Juice, Tea, Mustard, Ketchup, Soda, Other Foods	Porcelain and Ceramic Tile Cleaner or Miraclean #1***	Concentrated Stone & Tile Cleaner or Heavy-Duty Tile & Grout Cleaner for heavier stains	PS/87 or SR/95*
<b>Oil-Based Stains</b> Coffee, Wine, Grape, Juice, Tea, Mustard, Ketchup, Soda, Other Foods	Porcelain and Ceramic Tile Cleaner or Liquid Poultrice***	Heavy-Duty Tile & Grout Cleaner	PS/87
<b>Oil-Based Paint</b>	Porcelain and Ceramic Tile Cleaner or Liquid Poultrice***	Sealer and Coating Remover	PS/87 or No Paint
<b>Other Stains</b> Ink, Felt Marker, Crayon	Porcelain and Ceramic Tile Cleaner or Poultrice Powder with Liquid Poultrice	Sealer and Coating Remover	PS/87 or SR/95*
<b>Pencil</b>	Porcelain and Ceramic Tile Cleaner or Poultrice Powder with Liquid Poultrice	Phosphoric Acid Cleaner with Poultrice Stain Remover	PS/87
<b>Paint (H2O-Based)</b>	Porcelain and Ceramic Tile Cleaner or Poultrice Powder with Liquid Poultrice	Sealer and Coating Remover	PS/87 or No Paint
<b>Grout</b> Cement, Latex/ Polymer	MiraSeal GCFR, H2O Strip or Epoxy Grout Film Remover	Sulfamic Acid Crystals or Phosphoric Acid Cleaner (after 10 days on new grout) or Grout Haze Clean-up (first 1-10 days)*	Deterdek
<b>Epoxy</b>	Epoxy Grout Film Remover	Sealer and Coating Remover	PS/87

\* SR/95 for difficult to remove and colored stains.

\*\* Grout haze Clean-Up, Sulfamic Acid Crystals, and Phosphoric Acid Cleaner should not be used on polished or acid sensitive surfaces.

\*\*\* Miracle Sealants offers additional products for removal of these stains. Refer to manufacturer's literature.

#### Cleaner Manufacturers Contact Information:

Aqua Mix	250 Benjamin Drive, Corona, CA 92879	Phone: 951-256-3040
FILA Chemicals	10800 NW 21st Street #170, Miami, FL 33172	Phone: 305-513-0708
Miracle Sealants Company	12318 Lower Azusa Road, Arcadia, CA 91006	Phone: 800-350-1901 Extension 3013

## PLEASE READ BEFORE THE INSTALLATION

ASI guarantees that its products will be free of manufacturing defects and that they will meet or exceed the performance specifications set forth in ANSI 137.1.

### One Year Limited Commercial and/or Residential Warranty

- This collection is approved for commercial and residential projects and installations.
- Our products must be examined **prior to installation**.
- Missuses of the product by the purchaser including negligence, physical or chemical abuse is not covered by this warranty.
- Installation defects are not covered by this warranty.
- Visual defect or non-conformities apparent prior to installation are not covered by this warranty.
- This warranty will cover our products purchased by a residential or commercial user for up to 12 months from the date material is shipped.
- Certain factors on a jobsite are beyond our control and not covered under warranty; these include installation, structural design and environmental conditions.
- In the event of latent defects caused by improper manufacture, defined as tiles not conforming to industry standards, ASI will either refund the price for the defective pieces or provide replacement material of the same kind. ASI will not be responsible for any costs of labor, installation and/or removal of our products.
- ASI does not warrant that our glazed and unglazed porcelain will not scratch, chip or showsigns of wear.
- ASI makes no implied warranties of merchantability or fitness for a particular purpose or any other warranties expressed, or implied warranties implied, except as otherwise set forth above. Under no circumstances shall ASI 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.

For further information, please contact [sales@archsystems.com](mailto:sales@archsystems.com).