

TUFCHEM™

TILING SYSTEMS





TUFCEM Tiling Systems

Superior Performance by Design

TUFCEM Tiling Systems are durable, hygienic floor finishes designed for the most demanding food, beverage and pharmaceutical processing environments.

Why Choose TUFCEM Tiling Systems?

◆ SUPERIOR IMPACT RESISTANCE

Engineered for high performance, TUFCEM Tiling Systems have high flexural strength, which reduces the risk of chipping and cracking under pressure. TUFCEM's Vibration Set System Installation increases impact resistance by eliminating voids under tiles, ensuring that a floor can withstand heavy loads.

◆ ANTIMICROBIAL BY DESIGN

Hygiene is at the core of TUFCEM Tiling Systems. Our materials and installation methods are optimized to eliminate voids, which are potential harborage sites for microbes. With adhesives and grouts formulated with antimicrobial agents, our systems offer an extra layer of protection, making them ideal for environments where hygiene is critical.

◆ UNMATCHED CHEMICAL-RESISTANCE

In industries where aggressive sanitizers and chemicals are part of daily operations, TUFCEM Tiling Systems stand out. Our extensive range of high-performance adhesives, grouts and mortars is designed to resist even the most corrosive substances, ensuring your flooring remains intact and functional over the long term.

Applications

VERSATILE SOLUTIONS FOR EVERY INDUSTRY

TUFCHEM Tiling Systems are not just durable – they're versatile. These systems are engineered to meet the specific demands of various industries:

- **FOOD PROCESSING:** Where hygiene is paramount, TUFCHEM Tiling Systems provide a surface that is easy to clean and maintain, helping to meet stringent health and safety standards.
- **BEVERAGE PROCESSING:** Offering a sterile, impervious surface that supports the strictest cleanliness protocols, TUFCHEM Tiling Systems ensure a contamination-free environment.
- **PHARMACEUTICAL MANUFACTURING:** Conductive TUFCHEM Tiling Systems resist solvent attack and dissipate static electricity to prevent it from igniting flammable ingredients found in pharmaceutical processing facilities.



Ready to Upgrade Your Facility?

ELEVATE YOUR ENVIRONMENT WITH TUFCHEM TILING SYSTEMS

When it comes to choosing the right flooring for your facility, don't settle for less. Tailored to meet the demands of your industry, TUFCHEM Tiling Systems offer the perfect blend of durability, hygiene and chemical resistance – all while providing an aesthetic customers know and appreciate.



TUFCHEM Tiling Systems: Product Catalog

Available in a striking array of colors, impervious, fully vitrified TUFCHEM Tiling Systems feature a choice of integrally molded, slip-resistant surface textures in either traditional rectangle or contemporary hexagon format. A complementary range of coordinating tile accessories, chemical-resistant adhesive and grout, and expansion joint materials completes the system.

Tile Colors



TITAN GRAY

SHAPE	SURFACE TEXTURE		
RECTANGLE	R11	R12	*
HEXAGON	R11	*	*



LIGHT GRAY

SHAPE	SURFACE TEXTURE		
RECTANGLE	R11	R12	R13
HEXAGON	R11	R12	R13



BEIGE

SHAPE	SURFACE TEXTURE		
RECTANGLE	R11	R12	R13
HEXAGON	R11	R12	R13



SAND YELLOW

SHAPE	SURFACE TEXTURE		
RECTANGLE	R11	*	*
HEXAGON	R11	*	*



ANTHRACITE

SHAPE	SURFACE TEXTURE		
RECTANGLE	R11	R12	*
HEXAGON	R11	*	*



MARS RED

SHAPE	SURFACE TEXTURE		
RECTANGLE	R11	R12	*
HEXAGON	R11	*	*



ALL COLORS ARE AVAILABLE IN RECTANGLE (4" x 8" x 3/4") AND HEXAGON (4 1/4" x 5" x 3/4") SHAPES.

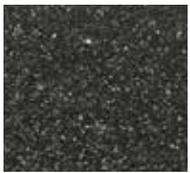
MINIMUM ORDERS ARE REQUIRED FOR SOME TILES.

*COLOR AND SURFACES AVAILABLE ON REQUEST WITH MINIMUM ORDER QUANTITY

COLORS ARE APPROXIMATE DUE TO VARIATIONS IN PRINTING AND VIEWING ON A MONITOR.

PENNTROWEL EZ Grout Fillers

GROUT FILLER COLOR OPTIONS



BLACK



GRAY



BUFF



LIGHT BEIGE



TAN

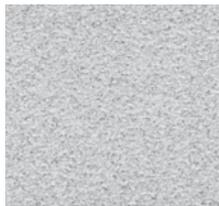
COLORS ARE APPROXIMATE DUE TO VARIATIONS IN PRINTING AND VIEWING ON A MONITOR. ADDITIONAL COLOR OPTIONS AVAILABLE.

Surface Textures

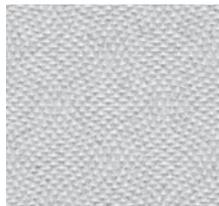
SURFACE TEXTURES FOR TILES



R11



R12



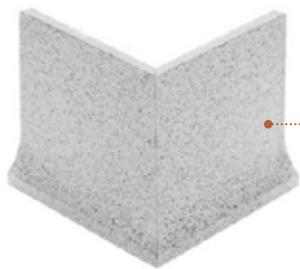
R13

Accessories

RIGHT-ANGLE COVERED BASE SKIRTING

4" TALL FLUSH-FIT, FLAT-TOP COVE BASE

EXTERNAL RIGHT-ANGLE COVERED BASE SKIRTINGS



LIGHT GRAY

TITAN GRAY

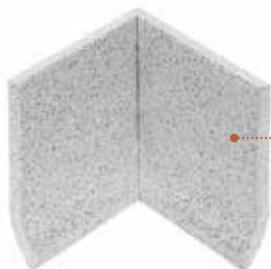
ANTHRACITE

BEIGE

SAND YELLOW

MARS RED

INTERNAL RIGHT-ANGLE COVERED BASE SKIRTINGS



LIGHT GRAY

TITAN GRAY

ANTHRACITE

BEIGE

SAND YELLOW

MARS RED

CORNERS

4" TALL FLUSH-FIT, FLAT-TOP COVE BASE

EXTERNAL CORNER



LIGHT GRAY

TITAN GRAY

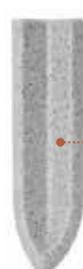
ANTHRACITE

BEIGE

SAND YELLOW

MARS RED

INTERNAL CORNER



LIGHT GRAY

TITAN GRAY

ANTHRACITE

BEIGE

SAND YELLOW

MARS RED

Vibration Set System Installation

Engineered to Endure

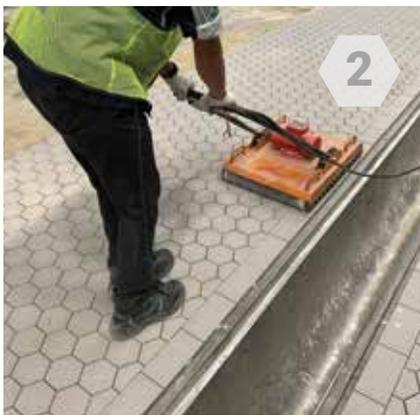
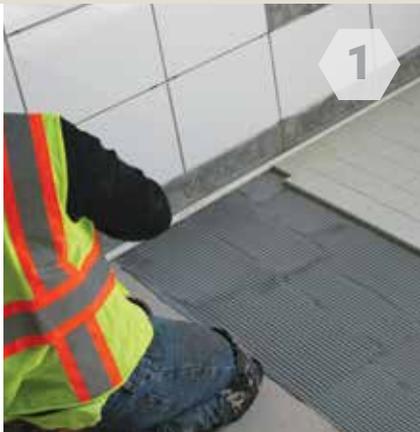
Our fully vitrified tiling system features discrete, half-height spacers that touch when the tiles are butted together. In addition to producing consistently narrow 3 mm (1/8") side joints, the spacers enable vibration setting when service conditions favor the use of compatible grouts.

When properly executed, vibration setting speeds installation and enhances impact resistance by:

- A** Maximizing contact between the bonding surfaces of the tile, adhesive and substrate.
- B** Minimizing voids under the tiles that can lead to flexural cracking under loads.
- C** Leveling adjacent tiles to reduce lipped edges and minimize the risk of tile edges chipping.

Wheeled traffic rolls over the narrow 3 mm (1/8") side joints quietly and with less impact on tile edges. Hexagonal tiles conform to the contours of sloped floors better than rectangular tiles set in a running bond pattern, reducing lippage on floors that slope toward a central drain.





TUFCHEM Tiling's Vibration Setting System makes full use of the tiles' integrally molded spacers to produce a floor with impressive impact resistance. Unwaxed tiles are vibrated into Thinset Adhesive, reducing lippage and voids under the tiles that can lead to chips and cracks. To fully penetrate the narrow 3 mm (1/8") side joints, PENNTROWEL™ EZ Grout is deconstructed, and its highly flowable wet and dry components are installed separately. Power grouting and floor buffing equipment make quick work of grouting and cleaning larger areas.

Installation Process

- 1 Spread THINSET Adhesive on prepared concrete and set tiles on fresh adhesive with spacers touching.
- 2 Vibrate tiles into adhesive bedding before adhesive loses plasticity, and then allow adhesive to cure.
- 3 Install deconstructed PENNTROWEL EZ GROUT water cleanable grout components and power grout.
- 4 Scrub grout residue from tile surfaces using warm, soapy water and rinse thoroughly.

While running bond (brick bond) is the most popular arrangement for rectangular tiles, the side joint spacers accommodate stacked bond or herringbone patterns as well. Hexagonal tiles form a single tight honeycomb pattern that minimizes lippage on complex sloped floors.

The Vibration Set System installation method requires special knowledge and equipment, including vibration setting, power grouting and floor buffing machines. The sequence and timing of the installation steps are critical to achieving a durable, hygienic, chemical-resistant floor. Installers must complete classroom and practical training to qualify for factory-authorized status.



CONTACT ARMOR TODAY TO LEARN MORE ABOUT HOW OUR TILING SYSTEMS CAN BE CUSTOMIZED TO FIT YOUR SPECIFIC NEEDS. OUR EXPERTS ARE READY TO GUIDE YOU IN SELECTING THE PERFECT SOLUTION FOR YOUR FACILITY. PH: 1-877- 982-7667



Armor provides sophisticated solutions to complex corrosion problems facing the chemical process, food and beverage, and power industries. Our portfolio of chemical-resistant linings and materials protects steel and concrete structures such as floors, wastewater trenches and pits, equipment pads and piers, containment dikes, tanks and process vessels, as well as power plant chimneys and ductwork.

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