

CE-234
11/13 Supersedes 06/04

PENNTROWEL[®] WATER CLEANABLE EPOXY GROUT

DESCRIPTION

PENNTROWEL Water Cleanable Epoxy Grout is a three component high performance chemically resistant floor grout designed for use with industrial tiles and pavers, where superior chemical and temperature resistance are required. It is ideal for both new construction and quick maintenance/repair projects. PENNTROWEL Water Cleanable Grout is formulated with proprietary adhesion promoting additives to maximize bond to smooth, dense vitrified industrial tile units. PENNTROWEL Water Cleanable Epoxy Grout also contains a special antimicrobial additive that results in a grout that does not promote the growth of potentially concerning bacteria or fungus such as listeria, salmonella, and others. PENNTROWEL Water Cleanable Epoxy Grout meets or exceeds ANSI Specification A118.3 for Chemical Resistant Epoxy Grout, ANSI Specification 118.5 for Chemical resistant furan grout, and ASTM C-658 Specification for Chemical Resistant Resinous Epoxy Grouts. PENNTROWEL Water Cleanable Epoxy Grout is authorized for use in federally inspected dairy, meat, juice and other food processing facilities (USDA). **Consult Corrosion Engineering specification [CES-309](#) and [CES-311](#) for complete installation details.**

AREAS OF USE

Applications include floor and curb areas that require sanitary and hygienic floors resistant to acids, alkalis, or solvents such as food processing plants as found in dairies, bakeries, bottling plants, distilleries, pharmaceutical manufacturing facilities, and chemical process plants. Other commercial applications include cafeterias and institutional kitchens, where chemically resistant flooring systems are required. Excellent flow properties make it suitable for use with narrow 2 mm joint widths found with pre-spaced fully vitrified tile units as used in TUFCEM[®] Tiling Systems.

OUTSTANDING FEATURES

- Cleans easily with water during installation - if properly applied, it will not stain or smear faces of brick, tile, and pavers. No waxing of the tile face is required for clean-up.
- Ideal for re-grouting - 3 components allow for an adjustable mix for easy flow.
- Suitable for daily steam cleaning and sanitation programs requiring intermittent temperatures up to 230°F (110°C).
- Broad resistance to most strong acids, alkalis and cleaning agents.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	PENNTROWEL Water Cleanable Epoxy Grout
Wet Mortar Density	93 lbs./cu. ft. (1490 kg/m ³)
Compressive Strength (ASTM C-579)	16,500 psi (114 MPa), 28 days @ 70°F (21°C)
Tensile Strength (ASTM C-307)	2,300-2500 psi (15.8-17.2 MPa)
Flexural Strength (ASTM C-580)	4,000 psi (27.5 MPa)
Water Absorption (ASTM C-413)	0.23%
Service Temperature	230°F (110°C)
Coefficient of Expansion (ASTM C-531)	2.4 x 10 ⁻⁵ in/in/°F (4.3 x 10 ⁻⁵ cm/cm/°C)
Adhesion to Concrete (ASTM C-321)	Greater than strength of concrete
Shear Bond Strength (ANSI 118.3)	1,390 psi 7 days (9.6 MPa)
Tensile Bond Strength to Fully Vitrified Tile	2300-2500 psi (15.8-17.2 MPa)
Cleanability Time (ANSI 118.3)	95 minutes

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

PRODUCT	CODE	PACKAGING	COVERAGE
PT WC Grout Resin-Clear* * For Tufchem Tiling System	29418	4 X 0.75 gal (7.1 lb/3.2 kg) cans/case	A 136 lb (62 kg) unit consists of 1 case resin, 1 case hardener and 2 x 50 lb bags filler.
	29442	4.5 gal (43 lb/20 kg) pail	
PT WC Grout Resin - Gray	29428	4 x 0.75 gal (7.1 lb) cans/case	A 205 lb (93 kg) unit consists of 1 x 43 lb pail resin, 1 x 12 lb can hardener, and 3 x 50 lb bags filler.
PT WC Grout Resin - Black	19495 29479	4 x 0.75 gal (7.1 lb) cans/case 4.5 Gal (43 lb) pail	
PT WC Grout Hardener	29429 29443	4 x 0.25 gal (2.0 lb) cans/case 1.5 gal (12 lb) can	Mix consistency may be varied by reducing filler loading to improve flow into tight joints if required.
PT WC Grout Filler	29430	50 lb (23 kg) bag	When the Cold Room Hardener is substituted, small unit size is reduced to 133 lb (60 kg), and large unit is reduced to 201 lb (91 kg). Square footage coverage per mixed unit will vary with tile size and joint depth. Consult estimating guide CE-145 for specific details.
P/T WC Cold Room Hardener (use in place of 29429 or 29443)	29447	2.5 gal (9.5 L) 20 lb (9.1 kg) Jerrican	

Setting Bed Coverage: PENNTROWEL Water Cleanable Grout may also be used as a setting bed by doubling the amount of the filler component in the mix. A small unit (236 lb/107kg) unit when used as a setting bed consists of 1 case resin, 1 case hardener and 4 x 50 lb bags filler. As a setting bed, a 236 lb/107 kg unit covers theoretically 236 sq. ft. @ 1/8" (22 SM @ 3 mm). A large unit (355 lb/161kg) consists of 1 x 43 lb pail resin, 1 x 12 lb can hardener, and 6 x 50 lb bags filler, and covers theoretically 354 sq. ft. @ 1/8" (33 SM @ 3mm).

SAFETY PRECAUTIONS / DISCLAIMER

Mixes and applications of this product present a number of hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and [material safety data sheets](#) before using. While all statements, technical information, and recommendations contained herein are based on information our company believes to be reliable, nothing contained herein shall constitute any warranty, express or implied, with respect to the products and/or services described herein and any such warranties are expressly disclaimed. We recommend that the prospective purchaser or user independently determine the suitability of our product(s) for their intended use. No statement, information or recommendation with respect to our products, whether contained herein or otherwise communicated, shall be legally binding upon us unless expressly set forth in a written agreement between us and the purchaser/user.



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