

CE-234a
11/13 Supersedes 10/04

PENNTROWEL[®] NOVOLAC WATER CLEANABLE EPOXY GROUT

DESCRIPTION

PENNTROWEL Novolac Water Cleanable Epoxy Grout is a high performance chemically resistant novolac epoxy based floor grout designed as a tile and paver grout, where maximum chemical and thermal resistance is required. It is ideal for both new construction and quick maintenance/repair projects. PENNTROWEL Novolac Water Cleanable Epoxy Grout is formulated with proprietary adhesion promoting additives to maximize bond to smooth, dense porcelain and vitreous industrial tile units. PENNTROWEL Novolac Water Cleanable Epoxy Grout also contains a unique antimicrobial additive that does not promote the growth of potentially concerning bacteria or fungus such as listeria, salmonella, and others. PENNTROWEL Novolac Water Cleanable Epoxy Grout meets or exceeds ANSI Specification A118.3 for Chemical Resistant Water Cleanable Tile Setting and Grout Epoxy, and performance requirements for ANSI Specification 118.5 for Chemical resistant furan grout. It also meets ASTM C-658 Specification for Chemical Resistant Resinous Epoxy Grouts. **Consult Corrosion Engineering specification [CES-309](#) for complete installation details.**

AREAS OF USE

Applications include floor and curb areas that require strong acid, alkali and solvent resistant joints as found in dairies, bakeries, bottling plants, distilleries, pharmaceutical and other food processing and handling plants. Low viscosity resin formulation results in excellent flow properties, making 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

- Unique hardener formulation results in easiest to clean grout in the industry - cleans easily with water during installation - if properly applied, it will not stain or smear faces of brick, tile, or 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.
- Resists steam cleaning and intermittent temperatures up to 250°F (121°C).
- Excellent physical properties - forms strong adhesive bond that is extremely tough.
- Broad chemical resistance to many strong acids, alkalis, solvents, cleaning agents, oils, fats and grease.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	PENNTROWEL® Novolac 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)	2,200 psi (15.1 MPa)
Flexural Strength (ASTM C-580)	4,000 psi (27.5 MPa)
Water Absorption (ASTM C-413)	0.23%
Shrinkage (ASTM C-351)	0.1% max.
Service Temperature	250°F (121°C)
Coefficient of Expansion (ASTM C-531)	2.4 x 10 ⁻⁵ in/in/°F (4.3 x 10 ⁻⁵ cm/cm°C)
Tensile Bond Strength to Fully Vitrified Tile	2500-2700 psi (17-18.5 MPa)
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)
Cleanability Time (ANSI 118.3)	95 minutes

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

PRODUCT	CODE	PACKAGING	COVERAGE
TTS Novolac Resin - Clear	29474	4.5 gal (43 lb) pail	A 6.0 gal (55 lb) unit of PENNTROWEL Novolac Water Cleanable Epoxy Grout, when used unfilled with power grouting (TTS System) consists of 1 x 4.5 gal pail of resin and 1 x 1.5 gal hardener.
TTS Novolac Resin - Clear	29481	4 X 0.75 gal (7.1 lb/3.2kg) cans/case	
PT Water Cleanable Grout Hardener	29443	1.5 gal (12 lb) can	As a filled grout, a 136 lb (1.46 cu ft) unit consists of 1 case resin, 1 case hardener and 2 x 50 lb bags filler.
PT Water Cleanable Grout Hardener	29429	4 x 0.25 gal (2.0 lb) cans/case	
PT WC Grout Filler - Natural	29430	50 lb bag	Square footage coverage per mixed unit will vary with tile size and joint depth. Consult estimating guide CE-145 for specific details.
TTS Grout Filler Fine – Black	29469	50 lb bag	
Other colors available			

Setting Bed Coverage: PENNTROWEL Novolac Water Cleanable Grout may also be used as a setting bed by doubling the amount of the filler component in the mix. A unit (236 lb) 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 unit theoretically covers 237 sq. ft. @ 1/8".

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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