

CE-158a
11/13 Supersedes 02/06

THINSET[®] NOVOLAC ADHESIVE-SILICA

DESCRIPTION

THINSET Novolac Adhesive-Silica is a three-component novolac epoxy based adhesive used to bond chemical-resistant brick, pavers and tiles. THINSET Novolac Adhesive-Silica is formulated for easy handling. Its buttery consistency enables the uniform placement of full bed joints at a nominal 1/8" thickness. THINSET Novolac Adhesive-Silica is a tough, resilient, adhesive that provides thermal shock and corrosion resistance. THINSET Novolac Adhesive-Silica may also be employed to bed steel floor plate. **Consult Corrosion Engineering specification [CES-309](#) for complete installation details.**

AREAS OF USE

Because of its strength and resilience, THINSET Novolac Adhesive-Silica is ideal for bonding tile, pavers and steel floor plates in areas where there is heavy wheeled or foot traffic, impact or abrasive wear, or thermal shock. Its superior chemical resistance makes it applicable in dairies, packing houses, chemical processing areas and wherever protection from severely corrosive conditions is required. THINSET Novolac Adhesive-Silica may be used with either the tile setters or brick layers method of construction.

OUTSTANDING FEATURES

- Forms strong bond to concrete, brick, tile, and other chemical-resistant masonry.
- Outstanding adhesion to steel.
- Economical. Narrowest practical joint depth may be used.
- Superior resistance to strong acids, strong alkalis, and numerous solvents.
- Excellent handling. The workability of THINSET is preferred by tile setters and bricklayers.
- Negligible shrinkage during cure.
- Pre-portioned for easy on-the-job mixing.
- Excellent resistance to thermal shock.
- Good tolerance for damp surfaces.
- Extremely low water absorption.
- Low odor level - ideal for repairs to operating plants.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	THINSET Novolac Adhesive - Silica
Color	Grey
Density	110 lb cu ft (1760 kg/m ³)
Working Life / Initial Set @ 70°F (21°C)	30-40 minutes / 4-6 hours
Compressive Strength (ASTM C-306) @ 70°F (21°C) 24 hr/7 day/28 days	8,000/12,500/16,000 psi (55/86/110 MPa)
Tensile Strength (ASTM C-307) 7 days @ 70°F (21°C)	3,000 psi (21 MPa)
Flexural Strength (ASTM C-453) 7 days @ 70°F (21°C)	5,500 psi (38 MPa)
Coefficient of Expansion (ASTM C-531)	29.0 x 10 ⁻⁶ in/in/°F (52.2 x 10 ⁻⁶ cm/cm/°C)
Adhesion: To brick pavers To concrete	Greater than the strength of brick Greater than the strength of concrete
Tensile Bond Strength to Fully Vitrified Tile	2,500-2,700 psi (17-19 MPa)
Maximum Service Temperature (at bond line)	190°F (88°C) Continuous / 250°F (121°C) Intermittent
Linear shrinkage (ASTM C-531) @ 70°F (21°C)	<0.15%
Water Absorption (ASTM C-413)	<0.12%
Mix Ratio (Resin: Hardener: Filler) by weight	1.0 : 0.51: 3.1 (8:5 - Resin:Hardener by vol)

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

COMPONENT	CODE	PACKAGE SIZE	COVERAGE
6710 Resin-Gray	19591	4 x 7.8 lbs (0.80 gal) cans/case	A 143 lb unit consists of 1 case resin, 1 case hardener, and 2 x 48 lb bags powder. A 143 lb unit will cover 125 sq ft. @ 1/8" thickness.
6711 Hardener	19593	4 x 4.0 lbs. (0.50 gal) cans/case	
THINSET Filler	19697	48 lbs (21.8 kg) bag	

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.



Corrosion Engineering | 300 Stevens Drive, Suite 310, Lester, PA 19113
 +1-610-833-4001 Phone | +1-610-833-3040 Fax | corrosion-engineering.com