

**CE-158M**

**11/12 Supersedes 11/06**

### **THINSET<sup>®</sup> ADHESIVE**

#### **DESCRIPTION**

THINSET Adhesive is a high performance three-component epoxy based adhesive used to bond chemical resistant brick, pavers, and tiles. THINSET Adhesive is formulated with unique proprietary adhesion promoting additives, to maximize bond to new generation vitrified and semi-vitrified industrial tile units, insuring full bond and maximum adhesion to dense ceramic units, even in severe thermal shock conditions. THINSET Adhesive is formulated to have an easy handling buttery consistency to promote full bed joints of a nominal 1/8" (3 mm) thickness. It consists of THINSET Adhesive Resin (Part A), Hardener (Part B), and Powder (Part C). It provides a tough resilient, thermal shock and corrosion resistant adhesive. Its low absorption allows THINSET Adhesive, when installed as a full and continuous bed, to functionally serve as a semi-membrane in splash spill conditions as typically seen in process floor applications. THINSET Adhesive may also be employed to bed steel floor plate. Consult Corrosion Engineering specification [CES-309](#), or [CES-311](#) (TUFCEM<sup>®</sup> Tiling System) or [CES-333](#) (Steel Floor Plate) for complete installation details.

#### **AREAS OF USE**

Because of its high strength and resilience, THINSET Adhesive is ideal for bonding ceramic tile, pavers, acid-brick, and steel floor plates in areas where there is heavy wheeled or foot traffic, impact or abrasive wear, or thermal shock. Its chemical resistance makes it suitable in dairies, packing houses, breweries, food process and chemical process plants, or wherever corrosion resistant protection is required. THINSET Adhesive may be used with the tile setters or brick layers method of construction, and is ideally formulated for use with the unique pressure embedment installation method utilized with Henkel's TUFCEM<sup>®</sup> Tiling System.

#### **OUTSTANDING FEATURES**

- Forms strong tenacious and resilient bond.
- Economical. Narrowest practical joint depth may be used.
- Excellent corrosion resistance to moderate acids, alkalies, and solvents.
- Excellent handling. The workability of THINSET is preferred by tile setters and bricklayers. Formulated to be used with Henkel TTS pressure embedment system.
- Pre-portioned for easy on-the-job mixing.
- Good resistance to thermal shock.
- Good tolerance for damp surfaces.
- Low odor level - ideal for repairs to operating plants.

**TYPICAL PHYSICAL PROPERTIES**

PROPERTY	THINSET Adhesive
Working Life / Initial Set 21°C	60 minutes / 6 hours
Density	1.85
Tensile Strength (ASTM C-307)	20.7 MPa
Compressive Strength (ASTM C-306)	97.9 MPa
Flexural Strength (ASTM C-453)	31.0 MPa
Coefficient of Expansion (ASTM C-531)	50 x 10 <sup>-6</sup> 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	17-18.5 MPa
Maximum Service Temperature (at bond line)	88°C Continuous / 104°C Intermittent
Water Absorption (ASTM C-413)	0.1% max.
Color	Grey
Mix Ratio (Resin: Hardener: Filler) by weight	3.75: 1.0 : 12.5

**ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE**

COMPONENT	CODE	PACKAGE SIZE	COVERAGE*
THINSET Resin	50209	15 Kg pail	5.5 kg/m <sup>2</sup> @ 3.0 mm
THINSET Hardener	50210	4.0 Kg (2 x 2 Kg cans)	
THINSET Powder	50304	25 Kg bag	

\* Note: Consumption is theoretical and does not allow for surface irregularities, pail loss or normal wastage.

**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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