



CEM515

One-component Polymers Modified,
Cementitious Tile Adhesive

PRODUCT DESCRIPTION

CEM515 is a one component polymers modified, cementitious, ready-to-use dry set mortar composed of graded sand, cement and proprietary chemicals, which promotes good adhesion of non-absorptive tiles to suitable surfaces.

FIELDS OF APPLICATION

CEM515 is used to fix non-absorptive (vitreous or semi-vitreous) tile for interior or exterior applications, when mixed with water, it provides a suitable bond coat to adhere tile to plaster, concrete and masonry surfaces.

CEM515 is suitable for:

- Swimming pools.
- Fountains and lagoons
- Kitchens and industrial kitchens.
- Dining halls and catering facilities.
- Bathrooms, toilets and showers.
- Rest rooms, showrooms
- Laboratories and factories.
- Hospitals and waiting rooms.
- Power plants and sub-stations.

For added performance EB550 SBR may be mixed with CEM515. With the addition of EB550 SBR, the CEM515 may be applied over exterior grade plywood.

PRODUCT FEATURES

- Single component ready-to-use.
- For interior and exterior applications.
- Excellent adhesion to the substrates.
- Water-resistant.
- Long open time.
- Economical and easy-to-use.
- Wall and floor tile applications.

PACKAGING

Product	Packaging
CEM515	50 Lb (22.68 kg) Bag

TECHNICAL DATA

Standards: CEM515 conforms to
ANSI A118.1
ANSI A108.5
BS 5980

Physical Properties @ 25°C

Shear Strength 7 days, Psi (MPa)	355 (2.42)
Open time, hour	>3.5
Initial set, hour	4.0
Final set, hour	4.5
Adjustability, minute	55

Color: CEM515 is available in Grey or White

Mixed Density: 15.5 Lb/Gal (1.86 Kg/L)

Coverage: 50 Lb bag of CEM515 covers approximately 5 m² with 8 mm x 8 mm notch trowel or 4 m² for solid bed technique.

APPLICATION DATA

Limitations: CEM515 may not be used to adhere tile to asphalt, vinyl, particle or Luan board, plastic, glass, metal or other unsuitable surfaces, which impairs good adhesion.

Do not apply if temperatures are below 4°C.

Surface Preparation: all surfaces must be clean, dimensionally stable, sound and free from all traces of oil, grease, mould release agent and curing compounds. It should be ensured that tiles are dry and free of all contaminants that could impair bonding.

Concrete, screed, renders and block-work should be cured sufficiently that all shrinkage movement has occurred.

Mixing:

- EM515 may be mixed with clean potable water or with EB 550 SBR gauging liquid.
- One 50 Lb bag of CEM515 requires approximately 1.5 Gal (5.0 L) of water
- EB 550 SBR: Mix EB 550 SBR with clean potable water at 1:3 ratio by volume as a gauging liquid.
- Add CEM515 to water or EB 550 and mix at a low speed to avoid entraining excess air into the material. Mix until achieving a uniform lump free consistency and let the material slake for approx. 10 minutes @ 25°C. Remix the material once again prior to use.

Note: Do not add additional water to re-temper material.

Consumption: consumption varies depending on the trowel technique adopted for tile fixing. However, following guidelines may be taken for estimation purposes:

<input type="checkbox"/> Notched trowel	Approximately 3 kg/m ² , (8 mm x 8 mm)
<input type="checkbox"/> Solid bed technique	Approximately 5.6 kg/m ² , (3 mm thickness)

Application: scratch a small amount of material onto substrate to ensure proper bond, then apply additional material with a suitable trowel. Apply CEM515 to a uniform thickness to cover the studs or keys on the tile back; on a working area of not more than 1 m².

Solid bed fixing is recommended for all horizontal applications and for vitreous, semi-vitreous, quarry, mosaic terrazzo, and marble flooring tiles. Additional buttering on the back of the tiles with CEM515 is preferable to ensure full adhesive contact.

For all other vertical applications, the adhesive CEM515 bed should be combed horizontally with a notched trowel to remove excess.

Tiles: Tiles may be dry or damp and fixed by pressing into place with enough force to ensure 100% contact and twist tiles slightly. Do not adjust, move, or put pressure on the tile for at least 10 minutes after the tile is set.

Leave minimum of 2 mm gap around the tiles to receive the tile grout; use pre-prepared spacers to form correct joint widths. Use of rubber/plastic hammers or rubber trowels for leveling is preferred.

Remove excessive adhesive from the face of the tile and joints with a damp sponge or cloth before CEM515 sets. Under normal conditions, grouting may be performed after the dry sets mortar has cured for 24 hours. Avoid contact with water before the final set.

Movement Joints: All joints should be provided in accordance with normal practice using appropriate joint sealant.

CLEANING

CEM515 should be removed and cleaned from equipment and tools with water immediately after use.

STORAGE

Store out of direct sunlight. Store in cool, dry storage facilities. Shelf life up to 12 months when stored in original bags in cool, dry storage places.

HANDLING PRECAUTIONS

CEM515 is non-flammable and non-toxic in nature, avoid contact with eyes and skin as it may cause irritation due to its alkaline nature. Splashes of CEM515 should be washed off immediately with clean water. Wear necessary gloves and dust mask.

TECHNICAL ASSISTANCE

Please contact International Chem-Crete Corporation for Technical Personnel.

WARRANTY

LIMITED WARRANTY: International Chem-Crete Inc. warrants that, at the time and place we make shipment, our materials will be of good quality and will conform to our published specifications in force on the date of acceptance of the order.

DISCLAIMER: The information contained herein is included for illustrative purposes only and, to the best of our knowledge, is accurate and reliable. International Chem-Crete Inc. is not under any circumstances liable to connection with the use of information. As International Chem-Crete Inc. has no control over the use to which others may put its products, it is recommended that the products be tested to determine the suitability for specific applications and/or our information is valid in particular circumstances. Responsibility remains with the architect or engineer, contractor and owner of the design, application and proper installation of each product. Specifier and user shall determine the suitability of the product for specific application and assume all responsibility in connection therewith. AM25319.

Manufactured By:



International Chem-Crete Inc., 800 Security Row, Richardson, TX 75081, U.S.A

Tel: (972) 671-6477, Fax: (972) 238-0307

contactus@chem-crete.com

www.chem-crete.com