

Premium Pro - Advanced Rapid Setting S1 Thinset Mortar

# UZIN CX 33 BiTurbo

High performance polymer-modified rapid 4-in-1 mortar

**DESCRIPTION:**

UZIN CX 33 BiTurbo is an advanced-professional quality, special cement-based, polymer modified non-sag rapid mortar for the installation of most porcelain, ceramic, quarry, glass, mosaic and natural stone in interior, exterior, freeze/thaw and immersion conditions. UZIN CX 33 BiTurbo can also be used for applications involving uncoupling membranes and UZIN waterproof membranes. For more details regarding membrane applications consult UZIN's technical service.

**SUITABLE FOR:**

- ▶ Porcelain, Ceramic, Quarry, Saltillo, Glass, and most types of stable natural stone
- ▶ Over properly prepared concrete, masonry, cement mortar beds and leveling coats
- ▶ Over tile industry recommended backerboards
- ▶ Over gypsum wallboard (interior)
- ▶ Over industry standard plywood (interior, dry conditions)
- ▶ Over radiant heated substrates
- ▶ Over properly prepared, stable and well bonded ceramic tile, vinyl floorcoverings, cutback adhesive (interior, dry conditions)
- ▶ Over UZIN brand surface preparation products and membranes where applicable
- ▶ For the installation of tile and uncoupling systems in interior dry conditions only. For exterior applications, see UZIN Balkuslim system.
- ▶ For interior and exterior, residential and commercial applications, exceptional freeze-thaw properties
- ▶ For use as a skimming or patching mortar for preparing substrate voids and depressions up to 3/8" (10 mm)



**FEATURES AND BENEFITS:**

- ▶ Fine textured raw materials - Smooth handling. Passes through small notch trowels when required. Superior mechanical adhesion
- ▶ 1 component - Water additive only, no latex additive required
- ▶ BiTurbo Technology - Efficient use of water allowing for reliable set times even at cooler temperatures
- ▶ Improved workability - Easy remixing and application. Working times favorable for many climatic and jobsite conditions
- ▶ Variable water range - Control viscosity to preferred workability
- ▶ Industry leading coverage - Smaller bag, less to transport
- ▶ Outstanding sag resistance - Excellent vertical hold properties. Outstanding horizontal positioning and adjustability

**TECHNICAL DATA:**

Packaging	27.5 lb. (12.5 kg) paper bag
Storage	Minimum 12 months in warm, dry conditions
Color	Available in gray & white
Coverage	Per 27.5lb (12.5 kg) 1/4" x 1/4" x 1/4" (6 mm x 6 mm x 6 mm) = 57 – 63 sq. ft (5.4 – 5.9m <sup>2</sup> ) 1/4" x 3/8" x 1/4" (6 mm x 10 mm x 6 mm) = 33 – 39 sq. ft (3.1 – 3.6 m <sup>2</sup> ) 1/2" x 1/2" x 1/2" (12 mm x 12 mm x 12 mm) = 28 – 33 sq. ft (2.6 – 3.0 m <sup>2</sup> )
VOC	0 g/L
Application temperature	40 – 95 °F (5 – 30 °C)
Working time	Up to 45 minutes - 20 minutes open time
Ready for foot traffic	approximately 2.5 hours

\* At 70 °F (21 °C) and 65 % relative humidity. Temperature, conditions and surface porosity will affect dry time



LEED® contributing product

## PRODUCT PROPERTIES:

UZIN CX 33 BiTurbo is an extremely fine, special cement based tile bonding mortar with latex dry polymer additive included. UZIN CX 33 BiTurbo has outstanding handling and stability properties and is ISO C2FT-S1 classified for improved performance, non-sag and extended working properties. UZIN CX 33 BiTurbo exceeds ANSI A118.4 for polymer modified mortar performance and ANSI A118.11 / ISO P1 for plywood underlayment performance and compatibility. VOC is 0 calculated. Meets EMICODE EC1 R PLUS - Very low emission for indoor air quality.

**VOC is 0 Calculated**

## SUBSTRATE PREPARATION:

- ▶ All substrates should be structurally sound, stable, dry, clean and free of any substance or condition that may reduce or prevent adhesion. See UZIN's Surface Preparation Requirements document for tile and stone installation systems.
- ▶ Today's large format tile and stone demand flatter floors than ever before. Look to UZIN's industry leading range of self-levelling and patching systems to prepare the surface to meet today's installation tolerances.
- ▶ For waterproofing, see UZIN's HYDROSTOP family of waterproofing membranes.
- ▶ For challenging jobsite conditions over gypsum, weak surfaces, smooth surfaces, cracks, coatings, wood and existing floorcoverings, UZIN has some unique primers and reinforcing systems that solve problems and save time.
- ▶ Suitable gypsum and highly absorbent substrates such as lightweight concrete must be primed with UZIN PE 260 (diluted 1 : 3) or PE 360 prior to application of UZIN thinset mortar.
- ▶ Non-porous substrates, such as existing tiles must be primed with UZIN PE 280 prior to application. Alternatively, mechanically roughen the existing surface and apply a scratch coat of UZIN CX 33 BiTurbo and allow the scratch coat to harden and dry completely before proceeding with the tile installation.

## APPLICATION:

1. Pour required amount of cold, clean water into a clean container (refer to product packaging for water ratio). Do not overwater. Pour water in the mixing container first and then add the UZIN CX 33 BiTurbo powder and mix for approximately 1–2 minutes to blend to an even, lump-free consistency.
2. For best mixing results, mechanically mix with a mixing paddle and mechanical 1/2" (12 mm) drill with approximately 600 RPM. If mixing by hand, use a margin trowel and mix vigorously.
3. Allow to stand (slake) for approximately 2–3 minutes and then remix 30 seconds-1 minute. This is an important stage to allow chemicals to activate.
4. Using a recommended notch trowel appropriate for achieving the correct backing transfer, apply the mortar to the substrate with the flat side of the trowel first (key coat). Then comb with the notched side to achieve uniform distribution of mortar in 1 direction. Avoid trowelling in random "swirl" patterns.
5. Place tile into the mortar and push tiles back and forth in a perpendicular direction to the trowel ridges. This allows for superior transfer and reduces voids behind the tile.
6. Respect open time of mortar and place tile into mortar while mortar is fresh. Do not allow mortar to "skin" over before placing tile. If skinning occurs, remove and replace with fresh mortar. When working in conditions that are hot, dry, windy and or in direct sunlight, expect mortar open time to be significantly reduced.
7. Check mortar transfer periodically to ensure minimum transfer rates are achieved.
8. Provide for expansion and control joints as per TCNA Detail EJ171 (USA) or TTMAC Detail 301MJ (Canada).

## ANSI Specification – when mixed with water:

Test Method	ANSI Specification	Performance
ANSI A118.4 – shear strength, impervious ceramic (porcelain) mosaics	> 200 psi (1,38 MPa / 14 kg/cm <sup>2</sup> )	> 200 psi (1,38 MPa / 14 kg/cm <sup>2</sup> )
ANSI A118.4 – shear strength, glazed wall tile	> 300 psi (2,07 MPa / 21 kg/cm <sup>2</sup> )	> 300 psi (2,07 MPa / 21 kg/cm <sup>2</sup> )
ANSI A118.1 – shear strength, quarry tile to quarry tile	> 150 psi (1,03 MPa / 10,6 kg/cm <sup>2</sup> )	> 150 psi (1,03 MPa / 10,6 kg/cm <sup>2</sup> )

## IMPORTANT NOTES:

- ▶ Shelf Life: 12 months in original packaging when stored in dry conditions. Tightly reseal opened packaging and use the contents as quickly as possible.
- ▶ Optimum application conditions are 60–77 °F (16–25 °C) and relative humidity below 65%. Low temperatures, high humidity and greater material thicknesses will delay drying. High temperatures and low humidity will accelerate the setting.
- ▶ In summer, store in cool conditions and use cold water.
- ▶ All tile shall be installed in strict accordance with ANSI A108.5, NTCA (USA) and TTMAC (Canada) standards. If you are not familiar with industry recommendations, please contact these organizations. Tile failures occur and manufacturer's warranties are void when industry standards are not followed.
- ▶ Use a notch trowel to achieve a minimum backing transfer of 85% for interior dry conditions and greater than 95% for exterior. Back-buttering tile and periodically checking transfer are recommended best practices by UZIN and the industry.
- ▶ UZIN CX 33 BiTurbo is not recommended for moisture sensitive natural stone or synthetic tile. In these cases use UZIN TR 400 2-component urethane adhesive.
- ▶ UZIN CX 33 BiTurbo is available in white setting light colored tile and translucent natural stones.
- ▶ UZIN CX 33 BiTurbo is recommended for thin-bed to medium-bed build capacity up to 3/4" (19 mm) thickness.
- ▶ Clean hands, tools and tile while mortar is still fresh.

- ▶ Protect tilework from foot traffic for 2.5 hours and heavy traffic for 2 days. Protect from frost and rain for 7 days after installation. For radiant heated applications, run and test system in advance to ensure it is working properly. Then turn off prior to installation and leave off for 3 days after grouting.
- ▶ For technical assistance that pertains to this product and the jobsite conditions, please contact UZIN's technical service department at 1-866-505-4810. We are here to help you achieve the best work possible.

## PROTECTION OF THE WORKPLACE AND THE ENVIRONMENT:

Read and follow all safety and environmental precautions and instructions on the packaging label and the Safety Data Sheet (SDS). The SDS is available at [www.uzin.us](http://www.uzin.us).

**WARNING:** This product can expose you to chemicals including crystalline silica, which is known to the State of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## DISPOSAL:

For disposal and recycling, follow the applicable laws and regulations. When possible, avoid or minimize waste generation. Do not allow the material to get into sewers, waterways or unlined ground surfaces. Empty packaging can be recycled.

## INDOOR AIR QUALITY INFORMATION

Certification: SCS Indoor Advantage™ Gold

VOC content: 0 g/L, Compliant with SCAQMD 1168

VOC emission: Conforms to the CDPH Standard Method (CA 01350) V1.2-2017; 0.5 mg/m<sup>3</sup> or less TVOC emission.