

Powerflex Project Professional Thinset Mortar

UZIN CX 20

Professional polymer-modified 4-in-1 mortar

DESCRIPTION:

UZIN CX 20 is a special cement based, polymer modified non-sag mortar for the installation of most large format porcelain, ceramic, quarry, glass, mosaic, and natural stone in interior, exterior, freeze/ thaw and submerged conditions. UZIN CX 20 exceeds ANSI A118.4 for polymer modified mortar performance, ANSI A118.11 EGP modified dry-set mortar, ANSI A118.15 TE for improved modified dry-set mortar, and ISO 13007-2 C2T.

SUITABLE FOR:

- ▶ Large Format 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 3/4" (19 mm)



FEATURES AND BENEFITS:

- ▶ Extremely fine aggregates – smooth application feel, handling and workability
- ▶ Advanced portland cement technology – excellent drying characteristics over uncoupling systems
- ▶ Variable water ratio – can be mixed to desired consistency within specifications
- ▶ Superior sag/slip resistance – great on vertical and horizontal applications

TECHNICAL DATA:

Packaging	40 lb. (18 kg) paper bag
Storage	Minimum 12 months
Mixing ratio	4.7 – 5.3 quarts (4.4 – 5 L)
Color	available in gray & white
Coverage	Per 40lb (18 kg) 1/4" x 1/4" x 1/4" (6 mm x 6 mm x 6 mm) = 80 – 85 sq. ft (7.5 – 8 m²) 1/4" x 3/8" x 1/4" (6 mm x 10 mm x 6 mm) = 60 – 65 sq. ft (5.5 – 6 m²) 1/2" x 1/2" x 1/2" (12 mm x 12 mm x 12 mm) = 40 – 45 sq. ft (3.5 – 4 m²)
VOC	0 g/L
Application temperature	40 – 95 °F (5 – 30 °C)
Working time	2 - 3 hours pot life; 30 minutes open time
Ready for foot traffic	walls: 8 hours / floors: 16 hours*

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



PRODUCT PROPERTIES:

UZIN CX 20 is an extremely fine, Portland-cement based tile bonding mortar with latex dry polymer additive included. UZIN CX 20 has outstanding handling, feel, performance, non-sag and extended working properties. UZIN CX 20 exceeds ANSI A118.4 ANSI ET A118.15 ET for polymer modified mortar performance, ANSI A118.11 for Exterior Glue Plywood underlayment performance and compatibility, and ISO 13007-2 C2T

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 tile must be primed with UZIN PE 280 prior to application. Alternatively, mechanically roughen the existing surface and apply a scratch coat of UZIN CX 20 and allow the scratch coat to harden and dry completely before proceeding with the tile installation.

APPLICATION:

1. Pour 4.7 – 5.3 quarts (4.4 – 5 L) of cold, clean water into a clean container. Do not overwater. Pour water in the mixing container first and then add the UZIN CX 20 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. 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 Requirement	CX 20 Performance
ANSI A118.15 Shear Strength Impervious porcelain mosaics	1 day: 100 psi (.68 MPa)	>150 psi (1.03 MPa)
	7 day: 300 psi (2.06 MPa)	>420 psi (2.89 MPa)
	7d water immersion: 200 psi (1.38 MPa)	>320 psi (2.2 MPa)
	28 day: 250 psi (1.72 MPa)	>400 psi (2.7 MPa)
	28 day freeze/thaw: 250 psi (1.72 MPa)	>250 psi (1.72 MPa)
ANSI A118.11 Shear Strength Exterior Glue Plywood	7 day quarry to wood: 100 psi (0.69 MPa)	140-180 psi (0.97-1.24 MPa)
	28 day quarry to wood: 150 psi (1.03 MPa)	170-200 psi (1.17-1.38 MPa)
	84 day quarry to wood: 150 psi (1.03 MPa)	170-200 psi (1.17-1.38 MPa)

IMPORTANT NOTES:

- ▶ Shelf Life: Minimum 12 months in original packaging when stored in dry conditions. Tightly re-seal 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, TCNA (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 respected.
- ▶ Use a notch trowel to achieve a minimum backing transfer of 80% 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 20 is not recommended for moisture sensitive natural stone or synthetic tile. In these cases use UZIN TR 400 2-component urethane adhesive.
- ▶ UZIN CX 20 is available in white for setting light colored tile and translucent natural stones.
- ▶ UZIN CX 20 is recommended for thin-bed to medium-bed build capacity up to 3/4" (19 mm) trowel application.

- ▶ Clean hands, tools and tile while mortar is still fresh
- ▶ Protect tilework from foot traffic for 16 hours and heavy traffic for 7 days. Protect from frost and rain for 21 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 7 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.

COMPOSITION:

Special cements, mineral aggregates, redispersible polymers and additives.

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.

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.

DISPOSAL:

Dispose of the material in accordance with applicable laws and regulations. Avoid product to get in contact with soil, waterways, drains, or sewers. Empty containers or liners may retain product residues.

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/m³ or less TVOC emission.