# **DUROSTICK ZX**



#### Antifrost tile adhesive



#### **PROPERTIES**

High performance cementitious white or gray adhesive for ceramic tiles, with zero vertical slip, fortified with resins. Provides high bonding power, it is resistant to both moisture and frost, and it develops its mechanical strengths rapidly. Classified C1T per EN 12004 (MIRTEC/Cert. No. 3352).

#### **APPLICATIONS**

ZX is suitable for tile installation on walls and floors, both indoors and out. Its thixotropic properties allow for wall tile installation top down. The addition of DUROSTICK ACRYLIC EMULSION in the mixing water, at a ratio of 1:1, improves its technical characteristics, to meet the requirements of C2T class (improved cementitious adhesive), per EN 12004, and S1 class (deformable adhesive) per EN 12002. The improved adhesive then becomes suitable for low absorbency tile installations, and also suitable for substrates subjected to wide temperature variations.

# **USE Surface preparation:**

The application surface has to be sound, clean, free of loose materials, dust, paint, grease and oils. The surface has to be soaked before the application. It is necessary to prime all absorbent substrates and aircrete, using DUROSTICK ACRYLIC EMULSION or D-20, at a mixing ratio of 1:1 with water. It is necessary to prime all gypsum boards using the DUROSTICK micromolar stabilizer, AQUAFIX or SOLVENT BASED PRI-MER. Lightweight or else, unstable cement screeds, must necessarily be primed with DU-ROSTICK ACRYLIC EMULSION or D-20 at a ratio of 1-part additive to 2 parts water or 1-part DUROMAX to 5 parts water. Follow all balcony and terrace applications by coating the substrate with HYDROSTOP FLOOR, at 2-3 successive, crosswise layers to ensure the waterproofing of the substrate.

#### **Application:**

Empty the adhesive into a clean container with cool water at a ratio of 2 parts water to 5.5 parts mortar (6.0-6.5lt water to 25kg mortar) and mix

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with a low-rpm drill until a lump free, homogeneous mass is created. Allow the mixture to mature for 5-10 minutes. During use mix periodically, without adding extra water. Apply the adhesive using a notched trowel and spread on the substrate. Then, coat as much surface as is required to work for the next 10-20 minutes (depending on weather conditions), thus avoiding skin formation. Finally, install the tiles in the selected position by tapping softly with a rubber mallet.

#### **NOTE**

On exterior surfaces, it is highly recommended to create expansion joints every 16-20m². Prime the expansion joints with PRIMER-PU, to improve grip, fill them with the backer rod of DUROSTICK, DS-265, and seal them with the polyurethane sealant, DUROFLEX-PU. Similarly, seal all the joints (5-8mm) at the junction of the tiles and vertical surfaces throughout the perimeter. Alternatively, the application of DS POLYMER sealant, available in 32 colors (same ones with the grout colors of DUROSTICK), ensures sealing without cracking at the junction of the tiles with the skirting and above it as well.

#### **CONSUMPTION**

3-5kg/m², depending on the size of the notch of the trowel, the smoothness of the substrate and the dimensions of the tiles.

#### **CLEANING**

Clean all tools with water, immediately after use.

#### **STORAGE**

Store in the factory sealed packages, in dry and shaded places, for at least 12 months from production date.

### **SAFETY DIRECTIONS**

The product contains Portland cement. Before use, refer to the cautions on the product's package or the Material Safety Data Sheet.

#### **PACKAGING**

Paper bag of 25kg on 1,500kg pallet

Toxic No  Bulk density of dry mortar 1.35±0.05kg/lt  Slip per EN 1308 < 0.5mm  Water requirement: 6.0lt water per 25kg mortar  Application temperature From +5°C to +35°C  Temperature resistance From -20°C to +65°C  Pot life 4 hours  Application thickness Up to 10mm  Open time per EN 1346 20 minutes  Time for minor adjustments: 15 minutes  Grouting After 4-8 hours on wall, after 24 hours on floor  Foot traffic After 24 hours  Delivery to use After 10-14 days  PRODUCT PERFORMANCES  Adhesion strength, per EN 1348, after:  - 28 days 1.20 N/mm²  - Thermal ageing at +70°C 1.05 N/mm²  - Water immersion for 21 days 0.95 N/mm²  - 25 freeze - thaw cycles 0.95 N/mm²	<b>TECHNICAL SPECIFICATIONS</b> (Measurement conditions 23°C and 50% R.H.)	
Bulk density of dry mortar  1.35±0.05kg/lt  1.35*C  1.35*C  1.35*C  1.35*C  1.35*C  1.30*C  1.	Form - Color	*
Slip per EN 1308 < 0.5mm  Water requirement: 6.0lt water per 25kg mortar  Application temperature From +5°C to +35°C  Temperature resistance From -20°C to +65°C  Pot life 4 hours  Application thickness Up to 10mm  Open time per EN 1346 20 minutes  Time for minor adjustments: 15 minutes  Grouting After 4-8 hours on wall, after 24 hours on floor  Foot traffic After 24 hours  Delivery to use After 10-14 days  PRODUCT PERFORMANCES  Adhesion strength, per EN 1348, after:  - 28 days 1.20 N/mm²  - Thermal ageing at +70°C 1.05 N/mm²  - Water immersion for 21 days 0.95 N/mm²	Toxic	No
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• Water immersion for 21 days 0.95 N/mm²	• 28 days	1.20 N/mm²
	Thermal ageing at +70°C	1.05 N/mm²
• 25 freeze - thaw cycles 0.95 N/mm²	Water immersion for 21 days	0.95 N/mm²
	• 25 freeze - thaw cycles	0.95 N/mm²

The experimental measurements were performed per EN 12004, in the Chemical Laboratory of DUROSTICK and were confirmed by the measurements of initial type from MIRTEC (Cert. No. 3352). NOTE: The product exceeds the statutory requirements for C2 adhesive.

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#### **DUROSTICK S.A.**

ASPROPYRGOS ATHENS PC:193 00

**GREECE** 

07

DoP No.: 002

EN 12004:2007+ A1:2012

### **DUROSTICK ZX**

Normal setting cementitious adhesive with reduced slip Interior- exterior use

Euroclass A1 - Reaction to fire: see MSDS - Release of dangerous substances:

Bond Strength as:

- Tensile adhesion strength:

0.50 N/mm<sup>2</sup>

Durability for:

- Tensile adhesion strength after heat ageing:

0.50 N/mm<sup>2</sup>

- Tensile adhesion strength after water immersion:

0.50 N/mm<sup>2</sup>

Tensile adhesion strength after freeze-thaw cycles: 0.50 N/mm<sup>2</sup>

#### **DUROSTICK S.A.**

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