

## 5.1 Products for installation, protection & decoration of stone and building surfaces

# DUROSTICK D-5 Cementitious acrylic adhesive for decorative bricks & stones



### TECHNICAL SPECIFICATIONS (Measurement conditions 23°C and 50% R.H.)

<b>Form - Color</b>	Cementitious mortar - White, gray
<b>Colors</b>	The white mortar can be colored in 48 colors by adding pigments in powder form, DUROCOLOR POWDER-C, yielding 96 distinct colors
<b>Toxic</b>	No
<b>Bulk density of dry mortar</b>	1.40±0.05 kg/lt
<b>Bulk density of fresh mortar</b>	1.90±0.05 kg/lt
<b>Maximum grain size</b>	1.0 mm
<b>Water requirement</b>	5.5lt water in 25 kg mortar
<b>Application temperature</b>	From +5 °C to +35 °C
<b>Temperature resistance</b>	From -35 °C to +90 °C
<b>Application thickness</b>	Up to 15 mm
<b>Vertical slip, per EN 1308</b>	<0.5 mm
<b>Pot life</b>	Up to 2 hours
<b>Open adhesion time, per EN 1346</b>	20 minutes
<b>Time for minor adjustments</b>	10 minutes

### MECHANICAL STRENGTHS

<b>Strength after 28 days, per EN 196-1, to:</b>	
• flexion	4.50±0.80 N/mm <sup>2</sup>
• compression	20.00±1.50 N/mm <sup>2</sup>
<b>Adhesive strength per EN 1348 after:</b>	
• 28 days	1.70 N/mm <sup>2</sup>
• Thermal ageing at +70 °C	1.20 N/mm <sup>2</sup>
• Water immersion for 21 days	1.30 N/mm <sup>2</sup>
• 25 freeze - thaw cycles	1.40 N/mm <sup>2</sup>

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: 3357) The following instrumentation was used:

- Flexion-compression: CONTROLS MCCC66 • Detachment: BRAIVE DYNATEST
- NOTE: The product exceeds on average the statutory requirements for C2 adhesive by 40%.

### 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 packaging or the Material Safety Data Sheet.

### PACKAGING

Paper bag of 25kg on 1,500kg pallet

### PROPERTIES

Coarse, cementitious acrylic adhesive, reinforced with resins. It is suitable for coat thicknesses of up to 15mm. It has strong adhesion, and high bonding strength. It is moisture resistant with zero vertical slip.

The adhesive is specially modified to allow for the use of its residues, during decorative brick installations, if they are used within 8-10 minutes to fill the grout joints of the lining.

Classified C2T per EN 12004. (MIRTEC/Cert. No. 3357).

### APPLICATIONS

DUROSTICK D-5 adhesive is suitable for linings with cement or ceramic bricks as well as with irregularly shaped slabs.

Use it to install both indoor decorative finishes and outdoor building facade linings. The product is also suitable for the installation of natural slabs, cement tiles, and natural stone on both walls and floors.

The addition of the acrylic emulsion D-20 or DUROSTOP of DUROSTICK, in the mixing water at a ratio of 1 part emulsion to 2 parts water, or DURO-MAX at a ratio of 1 part emulsion to 5 parts water.

This will increase the flexibility of the adhesive and its mechanical properties overall.

The increased flexibility will ensure its excellent performance in intense expansions/contractions in both natural and artificial vibrations.

### USE

#### 1. Surface preparation

The application surface must be clean, free of loose materials, dust and paints.

Soak the surface before application. Prime unsound surfaces using the micromolar stabilizer, AQUAFIX or the acrylic emulsion D-20 of DUROSTICK,

diluted with water at a ratio of 1 part D-20 to 2 parts water.

#### 2. Application

**a) Installation:** Empty 25kg of D-5 in a container with 5.5lt of clean, cool water. Mix with a low rpm electric mixer or use a clean cement mixer, until a lump free, homogeneous mass is created.

Allow for the mixture to mature for 5-10 minutes.

During use, mix periodically, without adding extra water.

The mixture remains workable for 1.5-2 hours. Depending on the application, apply the adhesive using a gauging trowel or a notched trowel.

The open time of the applied adhesive may be reduced to just a few minutes, when applied to very absorbent substrates.

**b) Grouting:** After the installation of decorative bricks or stones and within 8-10 minutes, smooth the grout joint from the residue of the adhesive by using a pointing tool or a thin rounded blade. Finish with a clean, damp soft sponge. Remove any residues with a clean, damp sponge, within 15 minutes of completion of the application.

### NOTES

- If the aesthetic need and the design calls for other colors than gray, use the white mortar D-5 and color it with DUROCOLOR POWDER-C pigments in powder form, and create 96 permanent colors respectively.
- After hardening, the product is harmless to health and the environment.

### CLEANING

Clean all tools with water, immediately after use.

### CONSUMPTION

5-10kg/m<sup>2</sup>, depending on the surface smoothness, as well as the width and the depth of the joint.

