

COLLACEM

LATEX-BASED ADHESIVES FOR GROUTS AND MORTARS FOR COLD JOINTS



COLLACEM is a latex adhesive based on micronized acrylic resins in aqueous solution for the pre-treatment of concrete surfaces prior to placement of fresh concrete over old one. **COLLACEM** increases flexibility and bonding properties of grouts, thus ensuring monolithic continuity of mortars and screeds in case of cold joints and thick lifts of the "wet on dry" type. **COLLACEM** is suitable for admixturing mortars for levelling and smoothing substrates, rendering mortars for the application of a new plaster layer, and for filling cavities and patching damaged areas, where **it increases flexibility, impermeability, bonding capacity and durability**. **COLLACEM** is also suitable for increasing the bonding properties of all types of mortar and cement conglomerates.

BENEFITS

COLLACEM is an eco-friendly latex adhesive for cold joints and for admixturing mortars at large featured by:

- ✓ **ECO-FRIENDLY FORMULA:** **COLLACEM** has a solvent-free special formula in water dispersion respecting the environment and health of operators.
- ✓ **HIGH BOND STRENGTH:** **COLLACEM** provides high bond strength to any kind of substrate.
- ✓ **ENHANCING BONDING:** cementitious pastes and mortars prepared with **COLLACEM** provide better adhesion to any surface.
- ✓ **EXCELLENT HOMOGENISATION WITH THE MATRIX OF THE MIX:** the special formulation of **COLLACEM** ensures great blending during mixing and increases the mix compactness.
- ✓ **ENHANCING FLEXIBILITY:** the cementitious pastes prepared with **COLLACEM** provide better flexibility and strength to abrasion.
- ✓ **ENHANCING WATER RESISTANCE:** the cementitious pastes and mortars prepared with **COLLACEM** provide better resistance to water, freeze-thaw cycles and chemical aggression.

IDEAL FOR

COLLACEM is used:

- ✓ as pre-treatment of concrete surfaces for the placement of fresh concrete over old one
- ✓ for the placement of fresh concrete over old one and bonded overlays
- ✓ for low-thickness bonded screeds and high resistance screeds
- ✓ for the preparation of high-resistance and high bond strength plaster
- ✓ to enhance the bond strength of mortars and cementitious grouts for indoor and outdoor applications (roughcast for plaster bonding, cementitious overlays, smoothing, preparation of adhesive mortars for laying tiles, porcelain stoneware etc.)
- ✓ for the preparation of adhesion grouts.



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HOW TO USE

PRE-TREATMENT OF CONCRETE SURFACES FOR THE PLACEMENT OF FRESH CONCRETE OVER OLD ONE

SUBSTRATE PREPARATION

- ▶ Use **COLLACEM** alone; shake the product before use.
- ▶ **COLLACEM** must be applied on dry and clean surfaces only. The substrate must be structurally sound and free of dirt or other matters which can inhibit bond. Remove any loose or poorly adherent particles. Any rust from rebars must be removed by blast-cleaning or brushing (after cleaning, protect the rebars with DRACOSTEEL – see related technical data sheet).

APPLICATION

- ▶ Apply using a brush or roller or sprayer until forming a thin, continuous film by removing any excess material. Consumption varies from 100 to 500 g/m² depending on substrate porosity. If needed due to special design purposes, it is possible to use up to 2 l/m².
- ▶ Do not apply:
 - on frozen substrates,
 - at temperatures below +5°C or if temperature may drop below this value in the following 4/5 hours.
- ▶ Clean tools with water immediately after use.
- ▶ Before placing the new concrete, allow **COLLACEM** to touch dry for 1-6 hours, depending on environmental conditions.

USE IN CEMENT MIXTURES AND GROUTS FOR PLACEMENT OF NEW CONCRETE OVER OLD CONCRETE

SUBSTRATE PREPARATION

- ▶ The substrate surfaces must be clean and structurally sound. Remove any residues of form-release agents.
- ▶ Always check the surface to restore and remove all loose and crumbling parts.
- ▶ If reinforcement bars are rusted, they must be cleaned by sandblasting or brushing (after cleaning, Dracosteel protective treatment is advisable - see technical data sheet).
- ▶ The surfaces must be saturated with water, in order to prevent them from absorbing mix water. Any excess water should be wiped off with a sponge as it could affect proper adhesion. In sunny or windy environments, the substrate must remain wet at all times

MIX PREPARATION

Prepare the dry cement-sand mix and separately pre-mix the required amount of **COLLACEM** with water. Mix thoroughly to prevent the formation of lumps.

- ▶ **Adhesive grout for cold joints** - mixing ratio **COLLACEM:Water:Cement = 1:1:3**
- ▶ **Cement Mortars** - mixing ratio **COLLACEM:Water:Cement:Sand = 1:2:4.5:11**

COLLACEM-enriched mortars can be finished and smoothed immediately after application.

- ▶ **Adhesive mortars for tiles** - Dry mix: one part with very fine sand (0.1 - 0.3 mm) and one part of cement in a container. Gradually add pure COLLACEM while continuing mixing to obtain a creamy and homogeneous consistency.

APPLICATION

Mortars and grouts prepared with **COLLACEM** must be applied with a brush, spatula or grout float depending on the type of application.

CURING

- ▶ During the cold season mortar application should be performed in the morning, thus reserving the hottest hours of the day to accelerate initial setting. Do not apply the mixtures at temperatures below +5°C. After 24 hours, wet the surface; this operation should equally be performed in the mid-morning only;
- ▶ During the hot season mortar application should be performed in the late afternoon or in shaded areas. Wet the surface frequently over the following days.

SUMMARY TABLE OF USES						
RECOMMENDED DOUGH RATIO IN VOLUME						
USAGE	COLLACEM	WATER	CEMENT	SAND	AGGREGATE Size (mm)	Consumption COLLACEM (g/m ²)
1. Pre-treatment of concrete surfaces for the placement of fresh concrete over old one	1	-	-	-	-	from 100 to 500
2. Adhesive grout for cold joints	1	1	3	-	-	approx. 250
3. Levelling mortar Thickness up to 1.5 mm	1	1	3	5	0,1-1	approx. 300
4. Cement mortar	1	2	4.5	11	0-3	approx. 570
5. Plaster rendering	1	1	3	3	max 3	approx. 900
6. Plasters	1	3	4,5	13	max 8	approx. 600

Please note that the ratio may vary depending on the type of sand available

PACKAGING AND STORAGE

COLLACEM is available in:

- 5-10-20 Kg can
- 220 kg drum
- 1000 kg IBC

If the product is stored properly in its original packaging, indoors in a dry location, it maintains its original features for one year.



PRODUCT FEATURES

APPEARANCE	Liquid, White
PYCNOMETER DENSITY - UNI EN ISO 2811-1	1,010 g/cm ³
DRY MATTER CONTENT - UNI EN 480-8	24,9 %
APPLICATION TEMPERATURE RANGE	da + 5°C a + 35°C
PACKAGING	5-10-20 Kg can
	220 kg drum
	Bulk
STORAGE	12 months

TECHNICAL SPECIFICATIONS

Pre-treatment of concrete surfaces for the placement of fresh concrete over old one: application of waterborne micronized adhesive latex resistant to alkaline hydrolysis, like COLLACEM by DRACO Italiana SpA, to enhance adhesion.

Adhesive grout: Application of the grout composed of cement, water and COLLACEM of DRACO Italiana SpA, a watery micronized latex adhesive resistant to alkaline saponification to ensure high flexibility, compactness and excellent adhesion to the substrate. Mixing ratio COLLACEM:Water:Cement = 1:1:3 The patching will be performed on the fresh grout.

Cement mortars: cement mortar added with COLLACEM of DRACO Italiana SpA, a watery micronized latex adhesive resistant to alkaline saponification to ensure high flexibility, compactness and excellent adhesion to the substrate.

Mixing ratio COLLACEM:Water:Cement:Sand = 1:2:4.5:11

Coarse grain grouts and concretes: coarse grain grouts and concretes added with COLLACEM of DRACO Italiana SpA, a watery micronized latex adhesive resistant to alkaline saponification in the amount of 10% of the weight of cement to ensure high flexibility, compactness and excellent adhesion to the substrate.

Adhesion promoter: application of waterborne micronized adhesive latex resistant to alkaline hydrolysis like COLLACEM by DRACO Italiana SpA to improve bond when placing fresh concrete onto existing.

Legal notice - SLCMP version dated 01.03.2017

In the technical specifications herein, Draco Italiana s.p.a. used the indicators therein specified, with the relevant standards.

Please check if this Sheet and the figures therein contained apply to the product batch you are interested in or if they have been overridden by any later release. If in doubt, check whether this Sheet matches the one applicable at the time of finalising the sales agreement, at www.draco-edilizia.it, and/or contact our Engineering Department.

No advice provided by our staff, either verbally or in writing at your request, about the potential applications of the Products shall be binding under the sales agreement or shall be considered an integral part of the agreement. Such advice is based on our experience and on the best available practical and/or scientific knowledge; as such, it shall not be binding or conditional on the buyer or user. Please try our products first to find out whether they are fit for your intended use or application; in any case, you shall be solely responsible for your choice.