



DEVELOPMENT RESINS ADMIXTURES CONCRETE

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BETONFLEX

CEMENT BASED POLIMER TWO-COMPONENT
CLADDING WITH HIGH FLEXIBILITY FOR STRUCTURAL
PROTECTION AND WATERPROOFING.

DESCRIPTION

BETONFLEX is a two-component product, based on selected, special hydraulic binders, polymers and admixtures designed on exclusive basis by *Draco Italiana S.p.A.* (component A) to be mixed with a synthetic rubber latex (component B).

BETONFLEX is of fast manual or spray application, is characterised by high flexibility, optimum resistance to traction and adhesion to the support.

BETONFLEX helps the realisation of coatings (1,5÷3mm) on surfaces concerned in the building industries, it also gives a structural waterproofing.

FIELDS OF APPLICATION

BETONFLEX has been designed to assure high adhesion of supports, further to not compatible application situations with normal cement based claddings.

Due to its high flexibility, it could be used on structures subject to microfessures or on structures already presenting microcrackles.

Typical uses are for:

- cladding and waterproofing of walls and structures, conducts, swimming pools, reservoirs etc.
- protection cladding for structures subject to fessures and deformations.
- bridges, viaducts etc.
- beams and covering elements.
- waterproofing treatment of straight or inclined surfaces.

A special designed product BETONFLEX A, certified by an official laboratory, is used for the amiant "incapsulation" on covering elements, plugging etc.

ADVANTAGES

BETONFLEX is a two-component product having the following characteristics:-

- practical application and optimum yield.
- high chemical resistance to aggressive agents, water pollution, deep-frost salts etc.
- high adhesion to any kind of support used in building and construction, further to a suitable resistance to traction.
- waterproofing and good permeability to vapour.
- applicable on humid supports (fresh pourings, rains, etc.).
- possibility of doing other successive coats of about 3 mm.
- Possibility of superficial finishing, in case of aesthetic needs, with ACRIFLEX (see technical sheet).

QUALITY GUARANTEE

The raw material used in the composition of BETONFLEX has been selected on the best international experiences acquired now a days.

The first selection was made on the choice of hydraulic binders and aggregates of the mix, this due to its mineral compounds and granulometric distribution, this confers to the product a maximum mechanical strength. The previous control of components, its correct proportion, uniformity of the mix due to modern production plant and standard checks effected by constant laboratory tests, grants a continous and constant quality of BETONFLEX.

It is not sufficient to produce a high quality material, as quality could expire in a short period of time, due to an un-correct packing process and a non adapted bag.

A product packed in simple paper bags, even if multi-layer, with valve zipper (type cement bags) does not grant the quality time wise of the product.

The production plant of *Draco Italiana S.p.A.*, in one of its packing phases, forecasts that, the premixed product is automatically air freed further to its special moisture proof bag, assures quality of stored product in covered premises on pallets for almost 1 year.

PREPARATION OF THE SUPPORTS

For a correct application of BETONFLEX following steps are needed :

- remove all incoherent parts, efflorescences, cement milk-crust and others from the subgrade to be repaired.
- eliminate oil stains, grease, releasing agents, dust etc.
- roughen the supporting surface in case same is presented to smooth.

PREPARATION OF THE MORTAR

Pour the component B (resin) in a container progressively adding the component A (powder).

Mix for 4÷5 minutes using a low speed drill, wait 5 minutes and mix once more until obtaining a homogeneous mix, clot free, with a dense grout consistancy manually applied either using a brush or by spraying.

The mixed product should be applied within one hour (at 20°C).

Should the product be dense during application, it is advisable to re-mix using a driller or trowel.

RECOMMENDATIONS

BETONFLEX is a product that could be applied even in temperature conditions, ventilations not compatible with



BETONFLEX

normal cement coating.

It is advisable to follow the standard application arrangements effected on site experiences hereunder illustrated:

Hot climates

- Conserve BETONFLEX in shady areas during and after mixing.
- Work should be done in the first morning hours, interrupting it during the hottest hours.
- In case of strong sun rays, work should begin in the late afternoon, after a continuous wetting of the structure for at least 1 hour.
- Assure an adequate protection of the topping for the first 24 hours, by application of wet mats on concerned surfaces.
- In case of high temperatures maintenance of workability in time is reduced, hence application of the product should be fast and with no interruption.

Cold climates

- Conserve BETONFLEX better in heated premises.
- Do not lay the product when temperatures are lower than 5°C.
- Begin the works in late morning.
- Be sure that the subgrade is not frozen
- Protect the applied product from freezing, using waterproof and insulating mats.

LAYING

BETONFLEX may be hand or spray applied, we suggest a thickness of 2 mm in 2/3 coats (max 1÷,5 mm per coat).

A synthetic or glass fiber net (4x4 mm abt) improves mechanical characteristics of the applied product and allows a better thickness control.

BETONFLEX reaches the final maturation conditions in 28 days (20°C), further to rain resistance after just few hours from application.

Be sure to wash with water immediately after application all tools and equipments used, in a way to avoid hardening of the product.

The hardened product could be removed, difficultly, only mechanically wise.

CONSUMPTION

The consumption of BETONFLEX is about 1,6 kg/m² for each 1 mm thick.

PACKAGING AND WAREHOUSING

component A = 20 Kg bags

component B = 10 kg buckets

colours Grey or White, shelf life 1 year in covered premises.

N.B. DO NOT USE CONTENTS OF DAMAGED OR BROKEN BAGS:

Protect component B from freezing.

TECHNICAL DATA

Components number	2
Colour	Grey - White
Specific weight (A+B)	1,6 Kg/Liter
Conservation	One year in original packing
Harmfulness sec. L. 88/379 CEE	No
Flammability	No
Application temperature	+5°C ÷ +40°C
Time of mix application (20°C)	1 hour
pH of mix	about 13.
Adhesion to support (concrete-cement-amiant)	≥3 MPa
Resistance to traction (28 days) - without net	0,8 MPa
Prolonging	6 %

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This edition cancels and replaces the former one