

## Data Sheet

### Concral

**Concral** is a very high performance ready-mixed concrete

#### **Definition**

**Concral** is a very high performance ready-mixed integral color micro concrete for high quality molding and GRC manufacturing.

#### **Field of application**

This very high resistant material based on white cement can be used for projects where there are very demanding mechanical or environmental conditions and/or high aesthetical standards.

In fact, Concral can be used for outside furniture, flagstones, and balustrades, swimming pool edges, statues... as well as for public and private spaces (hotels, restaurants, boutiques...) or for specific events.

For interior and exterior.

#### **Advantages**

The fluidity of the material also allows for exact reproduction of the micro structure and the texture of the mold.

The material is also specially formulated to avoid air bubbles forming on the surface.

Its easiness of installation gives it many different possible applications.

#### **Aspect and range**

Many different textures and tints can be obtained by varying pigments and by eventually adding various aggregates.

#### **Preparatory conditions on site**

The final support must be able to support the weight of the pieces including services loads.

#### **Conception datas**

*Compressive strength (28 days)* : 120 MPa

*Flexural strength (28 days)* : 12 MPa

*Modulus of elasticity* : 50,000 Mpa

*Shrinkage* : from 0.5 to 1 mm/m

*Density* : 2.2

## ***Work-shop manufacturing***

The cast and molds must elastomer ones.

**Because of the pH of Concral, it is imperative to wear gloves and protective glasses.**

*Concral* should not be applied in very cold temperatures (not below 5 °C), or on a frozen or thawing cast, nor above 35 °C or under direct sun.

*Concral* is mixed with an adapted mixer to the satisfying consistency. For classical version (without pigment or aggregates), the water ratio goes from 12 to 14 % of water, by weight. Accordingly the pouring time varies from 1 hour. This product can also be mixed in ordinary or industrial concrete mixers.

Fiber can be used for reinforcement.

It is self-compacting and does not require vibration.

Demolding can be done after only 24 hours.

Then for esthetical reasons, the pieces can optionnally be :

- *sablé* : that is sand blasted at low pressure
- or *poncé* : : that is polished with diamond device
- or let untouched.

## ***Installation on location***

The on site fixing must be mechanical, taking into account the service charges (as person supporting during putting on or maintenance operations).

## ***Consumption***

22 kg/m<sup>2</sup> by cm of thickness

## ***Preservation and conditionning***

6 months, away from humidity in a dry and clean storage room (in the original lined paper bags, on pallets with streamers).