

## **BALUSTRADE**

*Cement based, precast GRC decorative balustrade*

### **Product Information**

Betonex CBOARD Balustrade is a cement based, alkali resistant glass fibre reinforced concrete (GRC) precast decorative balustrade specially developed for facade cladding systems.

Betonex CBOARD facade products have been developed as a result of long years of R&D activities within the framework of university industry cooperation abroad.

### **General Characteristics**

- Cement based.
- High-strength.
- Fire resistant and non-combustible.
- Durable and lightweight.
- Highly resistant against cracking.
- Suitable for interior and exterior applications.
- Can be painted to desired color.

### **Special Structure**

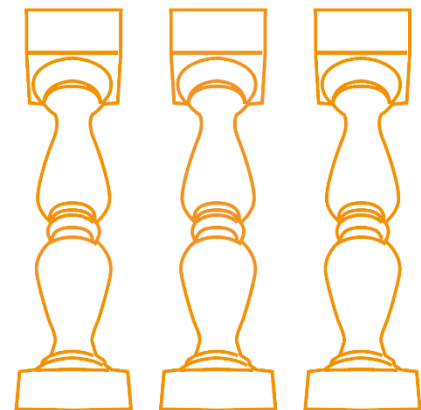
Betonex CBOARD Balustrade's special structure is created using natural materials which makes it eco-friendly while keeping it strong, stable, durable and lightweight.



### **Technical Properties**

Technical Properties	Balustrade
Compressive Strength	30-50 MPa*
Bending Strength	8-20 MPa*
Proportionality Ratio	8-17 MPa*
Minimum Expansion	0,58 %
Impact Strength	5-16 kj/m <sup>2</sup> *
Elasticity Modulus	12000 MPa
Density	1,4-1,9 g/cm <sup>3</sup> *
Thermal Expansion Coeff.	1,2x10 <sup>-5</sup> /°C
Thermal Conductivity	0,6-1,4 w/mK*
Fire Resistance	A1
Shrinkage Value	0,5-1,5 mm/m*
Swelling Value	0,5-1,5 mm/m*
Water Absorption	8-13 %*
Water Vapor Diffusion	60

\* Desired value in the range could be manufactured depending on the specification requirements.



**CBOARD®**

### Dimensions

- Custom sizing is available as per Project requirements.

### Fastening Options

Betonex CBOARD Balustrade can be installed on a steel substructure or a floor using hidden system.

### Installation Details

- The surface is cleansed of all kinds of dust, debris, and foreign materials.
- A hole is drilled on the surface suitable sized with the threaded rod left in CBOARD Balustrade during the manufacturing.
- CBOARD Balustrade is fixed to the cleaned hole using the threaded rod.
- CBOARD Balustrade is painted to the desired color and the installation is completed.

### Cleaning & Maintenance

Depending on the location of the cladding and dirt, CBOARD facade may be cleaned at an interval of 3-5 years. The cleaning should be made without any chemicals or high-pressure cleaners. Re-painting may be considered to achieve the first-day-look of the facade.

### Responsibility

Technical findings and the application suggestions are based on experimental data. Actual values can vary due to conditions out of control. Suggestions do not take on any other obligations. When the new version of this document is issued, old version becomes invalid.