

CBOARD UHPC

Cement based, ultra-high-performance concrete precast facade panel



PRODUCT INFORMATION

Betonex CBOARD UHPC is a cement based, ultra-high-performance precast facade panel 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.
- Ultra-high strength and durability.
- Fire resistant and non-combustible.
- Low permeability.
- Highly resistant against cracking.
- Unique characteristic.
- Suitable for interior and exterior applications.
- Carbonation and sulphate resistance.
- Can be used as rainscreen or curtain wall as well.

CBOARD UHPC has been carefully engineered by experts to reach a special structure which attains exceptional tensile and compressive strength with an impermeable form thanks to low water/binder ratios, small grains and fiber reinforcement.

TECHNICAL PROPERTIES

Technical Properties	UHPC
Compressive Strength	> 100 MPa
Bending Strength	> 17 MPa
Impermeability	1 mm
Elasticity Modulus	45000 mpA
Density	2,3 g/cm ³
Fire Resistance	A1
Shrinkage Value	1 mm/m
Water Absorption	< % 7

SPECIAL STRUCTURE

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

INSTALLATION DETAILS

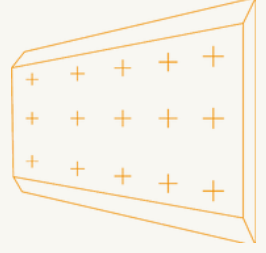
- The wall surface should be cleansed of all kinds of dust, debris and foreign materials.
- Using a suitable wall plug, L brackets are installed.
- Vertical T or box profiles are fixed to the L brackets. If specified on the Project or the Specification, heat insulation is placed on the wall, between the profiles.
- Horizontal undercut or hidden channel profiles are fixed to the vertical profiles.
- Undercut profile or hidden channel profile fixed CBOARD UHPC is installed onto the profiles on the wall and the installation is completed.

FASTENING OPTIONS

Betonex CBOARD UHPC can be installed on either a steel or aluminum substructure using undercut or hidden channel system.

DIMENSIONS & WEIGHT

- 600x1200mm or 600x1500mm panels.
- Between 15-20mm thickness.
- Approximate weight can be considered as 35,5kg/m² where the thickness is 15mm.



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.

CLEANING & MAINTENANCE

Depending on the location of the cladding and dirt, CBOARD UHPC may be cleaned at an interval of 3-5 years. The cleaning should be made without any chemicals or high-pressure cleaners.