



Meldstone (UHPC)

Ultra High Performance Concrete

Overview

Also known as UHPC, this highly engineered type of concrete can achieve high compressive strength, flexibility, ductility, thinness and durability.

Mixture Recipes

Aggregates, cement, pozzolans, reinforcing fibres, high-efficiency plasticizers and other elements are all used to create the specific type of UHPC desired.

Mechanical Properties

Compressive strengths up to 29,000 psi can be achieved. Flexural strengths up to 5,800 psi are obtainable with the addition of organic, mineral or metallic fibres.

Water and Chemical Resistance

Due to the extremely compact matrix density at the micro-scale of UHPC, it is highly resistant to water, de-icing chemicals and abrasion. This feature makes UHPC highly stable in harsh freeze-thaw cycles that would destroy normal concrete. Cleaning off graffiti is also made easier since the minute porousness of UHPC greatly impedes the absorption of paint solvents. UHPC is ideal for marine, pool and other corrosive environments.

In every area where normal concrete is vulnerable, UHPC demonstrates superior performance.

Design Flexibility

The "Ultra High Performance" features in UHPC allow designers to achieve geometrical shapes that simply could not be explored with normal concrete. These features just to name a few are:

- *High resistance to impact and abrasion*
- *Achieve very thin and flexible cross sections*
- *Light weight and slender designs*
- *Curvaceous geometry*

Meldstone Colours



Natural White



Natural Ecu



Natural Black



Natural Grey