

metalco

M o l e c u l a r C o n c r e t e

life

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HEADQUARTER

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The city is not a concrete jungle,
it is a human zoo.
Demond Morris



VEGA-PORT COLLECTION
design Alfredo Tasca - Raffaele Lazzari



AIR-PORT COLLECTION
design Alfredo Tasca



AIR COLLECTION
design Alfredo Tasca



Hoba
design Pio & Tito Toso



ISOMETRICA
design Giulio Iacchetti



VEGA-PORT COLLECTION
design Alfredo Tasca - Raffaele Lazzari



SELF
design Alfredo Tasca - Mattia Li Pomi



GAVITELLO
design Raffaele Lazzari



BOTTE
design Mattia Li Pomi



ULURU COLLECTION
design Andrea Morgante Shiro Studio



METEOR COLLECTION
design Samuli Naamanka



CUSTOM
design Alfredo Tasca - Raffaele Lazzari



SPRING P
design Raffaele Lazzari



DENEb P
design Alfredo Tasca

METALCO is proud to present the first UHPC concrete street furniture collection; take a look at it in the new catalogue “*Stile Molecular Concrete*”.

METALCO is the first street furniture company that can certify its UHPC concrete products; thanks to the exclusive partnership signed by METALCO, the products offered in the new catalogue “*Stile Molecular Concrete*”, are produced by the company **Il Cantiere**, using the cutting edge LAFARGE UHPC DUCTAL° concrete.

UHPC DUCTAL concrete allows our designers to design and produce innovative shapes, finishes and details for street furniture, as embodied by the new **ULURU** bench, designed by Andrea Morgante, Shiro Studio London.

THE MATERIAL
UHPC DUCTAL concrete is a unique and advanced material: the compression, flexure, abrasion, porosity and fire resistance characteristics are substantially higher than any other UHPC concrete; these characteristics have all been tested and certified, allowing DUCTAL to be used globally to manufacture products destined to major public works (bridges and viaducts), complex architectural projects (monumental stairways, facades, flooring and internal coating), design/furnishing projects (tables, indoor/outdoor lamps) and, now, METALCO street furniture products.
UHPC DUCTAL concrete allows to manufacture products up to **5 times less thick than traditional concrete products** METALCO **AIR bench** is only **2.5 cm thick**.

ECO-FRIENDLY
UHPC DUCTAL concrete comprises a mixture of fine-grained natural mineral components and non-metallic fibres, which **guarantee an exceptional resistance**; thus, the required quantity of UHPC concrete to be used is significantly lower than the one used to manufacture products with standard or HPC concrete. DUCTAL concrete has very low maintenance requirements, compared to standard concrete, and it can be recycled, after the product end-of-life.

MOLECULAR CONCRETE

TECHNICAL CHARACTERISTICS
Tensile and compressive strength: UHPC DUCTAL concrete has an exceptional strength of up to 150 Mpa, 8-10 times higher than standard concrete.
Lifetime: thanks to its density and compactness, UHPC DUCTAL concrete has an exceptional resistance to external weather agents, with a duration **up to 100 times higher than standard concrete**.
• the effects caused by frost-thaw cycles, in colder climates, are irrelevant;
• thermal shock is irrelevant;
• the abrasion resistance is higher than that of high-quality granite;
• its fire resistance rating falls within Class A2 (non-combustible) of the European Standard EN 13501-1, Class 0 (non-combustible) of the Italian Standard and Class M0 (non-combustible) of the French Standard;
• 10 times less porous than high-quality granite: water (even sea water) fine dust and pollution do not penetrate the structure matrix of the DUCTAL concrete;
• the effects of solar light are irrelevant;

CERTIFICATIONS
UHPC DUCTAL concrete is the result of a **10-year search conducted by LAFARGE and other partners, aimed at reducing the issues of standard concrete**. The test results are all certified, and this allows to use the DUCTAL UHPC concrete to obtain all product and project certifications set forth by the individual countries.



5
volte più sottile del cemento tradizionale
times thinner than traditional concrete
veces más fino que el cemento tradicional

10
volte meno poroso del granito di alta qualità
times less porous than high quality granite
veces menos porosos que el granito de alta calidad

facilità di posa
easy laying
facilidad de instalación

10
volte più resistente del cemento tradizionale
times harder than traditional concrete
veces más fuerte que el cemento tradicional

UHPC
DUCTAL®
10 anni di ricerca di LAFARGE
10 years of research by LAFARGE
10 años de investigación por LAFARGE

150 MPa
di resistenza a trazione e compressione
of tensile strength and compression
de resistencia a la tracción y la compresión

ECO-FRIENDLY
mix di finissimi componenti minerali naturali
mixture of fine-grained natural mineral components
mezcla de finísimos componentes minerales naturales