# Materials and finishings chart

Water, aggregate and cement. With this basic recipe we manufacture the products, pushing the technological performance of concrete to the limit. We have different formulations: Selfcompacting Concrete, Recycled Concrete and Slimconcrete® UHPC.



# **Selfcompacting Concrete**

Traditional high-quality concrete with self-compacting consistency. This historic base material has been analysed and innovated on by *Escofet* to produce new formulations, colours and textures.

Concrete in its nature is a sustainable material composed of a selection of minerals, chemical additives free of contaminants, fully compatible with efficient recycling.

The high strength achieved with the proper dosage and curing concrete makes an ideal material for the production of urban elements.

The products subject to high tensile stresses solicitations are assembled with steel, galvanized steel or stainless steel.

**Etched** This finishing produces a surface that closely resembles natural material such as sandstone. The result is a smooth sand-textured surface in different degrees of roughness. Etching produces a "pre-weathered" surface and the pattern details remain consistent for a very long time.

**Polished** The polished finishing of flat outer surfaces of concrete products are machine polished after a double grinding-polishing process, resulting in a bright, non-porous finish that resembles the bright texture of granite or marble











**GR.** Etched Grey

**NG.** Etched Black

**BL.** Etched White







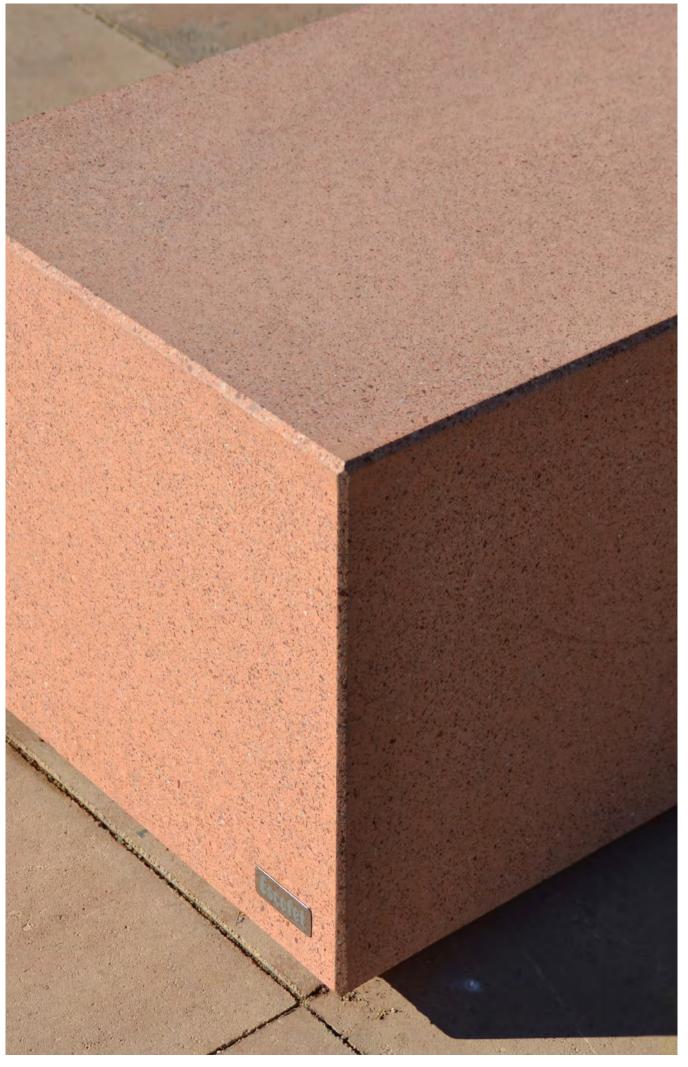
CA. Etched CA Grey

**BG.** Etched Beige

**RA.** Etched Red













**GR P.** Polished Grey

**NG P.** Polished Black

**BL P.** Polished White







**CA P.** Polished CA Grey

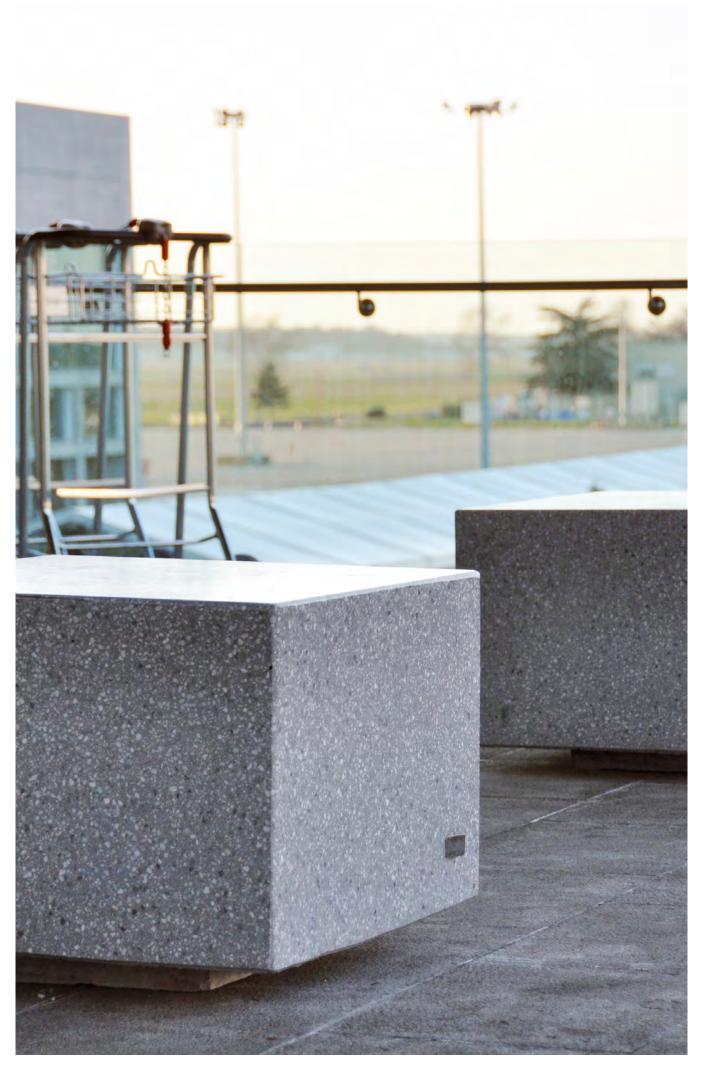
**BG P.** Polished Beige

RA P. Polished Red



**GB P.** Polished Grey-White





## **Recycled Concrete**

Formulated from recycled aggregates of demolition or steel slag, the new formulations offer more sustainable products with lower environmental impact.

The range of Recycled Concrete introduces in its formulation aggregates from industrial waste or construction after a process of stabilization and valorization. These aggregates are fully compatible for inclusion in the concrete mix as total or partial replacement of the aggregate coming from naturally occurring without loss of performance and quality of traditional concrete. Recycled Concrete is decreasing the environmental impact of furniture and consumption of natural resources and reducing valorized waste.

**Eco-Grey**<sup>®</sup> for grey concrete models produced with a moulded finish, in the case of seatings the horizontal surface is softly polished. With a shorter production process, free of the use of acids and lower water consumption, it uses 33% of aggregates from recycled demolition and construction waste obtained from concrete products and structures. After undergoing a recycling process, the aggregates (RCD) are converted into raw material of the finest quality, for use in precast concrete elements with the CE marking and TÜV recycled product certificate. This finish generates surface with the natural colour and texture of concrete without altering its surface, keeping the small imperfections.

Eco-Black® for concrete models produced in black concrete with an etched finish with the use of 66% of aggregate from the steel slag, which gives them coloration similar to rock of volcanic origin. After a process of stabilization and recovery, slag remains are converted into a more sustainable quality aggregate, with a higher specific weight and high performance of wear resistance and freeze-thaw cycles. This finish generates a rough and intense black surface with tiny rust specks.









EGR. Eco-Grey®

ENG. Eco-Black®







Slimconcrete<sup>®</sup> is *Escofet*'s proprietary UHPC concrete formula with a high density matrix and its structural strength, which open up a new range of slender products for previously impossible.

Slimconcrete® has great potential for the design of more resistant, slender and durable products for urban spaces and architectural applications.

This formulation, which incorporates inorganic glass fibers in mass, revolutionizes the concepts of slenderness, strength, durability and sustainability of concrete, allowing the production of very resistant and lightweight elements, until now incompatible with the heavy and monolithic nature of traditional concrete.

Slimconcrete®'s surface finish has an extraordinary aesthetic and creative potential thanks to its micrograde aggregate and much more sharply defined reproductions of microreliefs. The specially refined mixture has three times more compressive, flexural and impact strength than conventional concrete.

The extreme compactness of Slimconcrete® also provides, as added value, a high resistance to degradation in a saline atmosphere, as well as to freeze-thaw cycles, guaranteeing a negligible effect of the passage of time.

**Etched** This finishing produces a surface that closely resembles natural material such as sandstone. The result is a smooth sand-textured surface in different degrees of roughness. Etching produces a "pre-weathered" surface and the pattern details remain consistent for a very long time.

**Soft-polished** A finish that is applicable to the surfaces of Slimconcrete® UHPC elements. This is obtained after a single process of recess, resulting in a honed and pore-free finish, with bright and intense colours.











**UHPC GR.** Etched Grey

UHPC NG. Etched Black

**UHPC BL.** Etched White



**UHPC BG.** Etched Beige











**UHPC GR P.** Softpolished Grey

UHPC NG P. Softpolished Black

UHPC NG P. Softpolished White



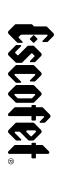
UHPC BG P. Softpolished Beige





### A. Concrete technical properties chart

	SCC Concrete	Recycled concrete	Slimconcrete® UHPC
O1. Compressive strength UNE-EN 12390 / 2001	35-45 MPA	<i>Black</i> 45-55 MPA	70-90 MPA
		<i>Grey</i> 30-40 MPA	
<b>02. Flexural resistance</b> UNE-EN 12390 / 2001	4-5 MPA	4-5 MPA	10-12 MPA
<b>03. Water absorption</b> UNE-EN 1339 / 2004	8%	8%	6.50%
Without water repellents			
<b>04. Frost resistance</b> UNE-EN 1339 / 2004	1,5 kg / m2	1,5 kg / m2	0 kg / m2
With deicing salts. UHPC 0 kg/m2 mass loss after 28 freeze-thaw cycles			
<b>05. Friction wear resistance</b> UNE-EN 1339 / 2004	21,5 mm	21,5 mm	18,3 mm
Average width of the track			
<b>06. Impact resistance</b> UNE-EN 127748-1/2006	>200 cm	>200 cm	>200 cm
Final breakage height using a 1 kg steel ball			
On-site tests. Ultimate height steel ball of 600 gr. Impact energy absorbed by the sample of UHPC is 3 times higher than traditional HAC (self-compactant concrete).	750 mm Ep = 4,5J (Nm)	750 mm Ep = 4,5J (Nm)	2250 mm Ep = 13,5J (Nm)
07. Minimum cement content	350-400 kg/m3	350-400 kg/m3	700 kg / m3



### B. Contents chart

#### 1. SCC Concrete

#### **Etched**

**Polished** 

















Black











2. Recycled Concrete

#### Eco-Grey®



Grey

#### Eco-Black®



Black

#### 3. Slimconcrete® UHPC

#### **Etched**









Grey

Black

White

Beige

#### Soft-polished









Grey

Black

White

Beige

The names, trademarks and industrial models of the products have been logged in the corresponding registers. The technical information provided by Escofet about its products can be modified without prior notice.

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