


# UHPC CLADDING PANEL **FCLAD**®



Collines de l'Arche - Paris - Architecte : Patrick Durand & Associés - BE : Groupe Alto





Exceptional construction material, Ultra High Performance Fiber Concrete (UHPC) possesses a unique combination of technical and aesthetic qualities for concrete: **ductility, exceptional strength, high resistance to abrasion and explosions, immunity to corrosion, aggressive environments, freezing/thawing cycles, and UV exposure.**

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# THE FCLAD<sup>®</sup> CLADDING SOLUTION WITH **ductal**

## THE MINERAL CLADDING OF YOUR FACADE IN ULTRA HIGH PERFORMANCE FIBER REINFORCED CONCRETE (UHPC)

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The FClad<sup>®</sup> cladding panel in Ultra High Performance Fiber Reinforced Concrete creates an envelope around the building (including the ground floor) while providing the following functions: aesthetic enhancement of the building, resistance to impacts and external aggressions, fire protection in accordance with environmental and user health considerations.

**For designers**, the FClad<sup>®</sup> cladding panel combines the safety advantages of customization, industrial quality of prefabrication, shortened timelines, optimized labor, and increased simplicity of installation, along with the countless architectural possibilities of Ductal<sup>®</sup> fiber-reinforced concrete.

**For users**, the exterior cladding provides the comfort of a ventilated curtain wall facade that is resilient and insulating, with or without integration into an External Thermal Insulation (ETI) system. FClad<sup>®</sup> protects against rain, noise, and disasters while effectively managing condensation (thermal and acoustic insulation is complemented by UV resistance and fire resistance up to +350°C).



With a thickness of 16mm, it can be installed vertically or horizontally and is available in multiple sizes, according to your needs:

### **FClad® Light**

Manuportable  
 (Standard pallet dimensions)  
 L.1.20m x W.0.60m  
 Subject to technical approval  
 Adjustable on site

### **FClad® Classic**

Custom-made  
 up to L.4.00m x W.1.80m  
 Subject to technical approval  
 With possible monolithic corner solution up to 30cm

### **FClad® Custom**

Custom-made  
 up to L.12.00m x W.3.80m  
 Corner elements (1 or 2 returns)  
 Variable thickness  
 Curved elements



# TECHNICAL CHARACTERISTICS

## **Extreme customization**

Size and thickness

Color and matrix

Raw, natural, or stained finish

## **A mineral and ecological facade**

Possibility of having a depolluting and self-cleaning facade

Derived from natural resources - 100% recyclable

## **Exceptional durability**

Rot-proof and resistant to UV, weathering, impacts, freeze/thaw cycles.

Seismic zone category 4, zones 1, 2, 3

Minimum lifespan of 80 years

## **Fire protection**

Extremely fire-resistant

Fire classification A1-A2 s1 d0

## **Simple and secure installation**

The system can be easily installed on timber frame, metal frame, concrete walls, or masonry, using an invisible rail fixing system, for both new construction and renovation projects.

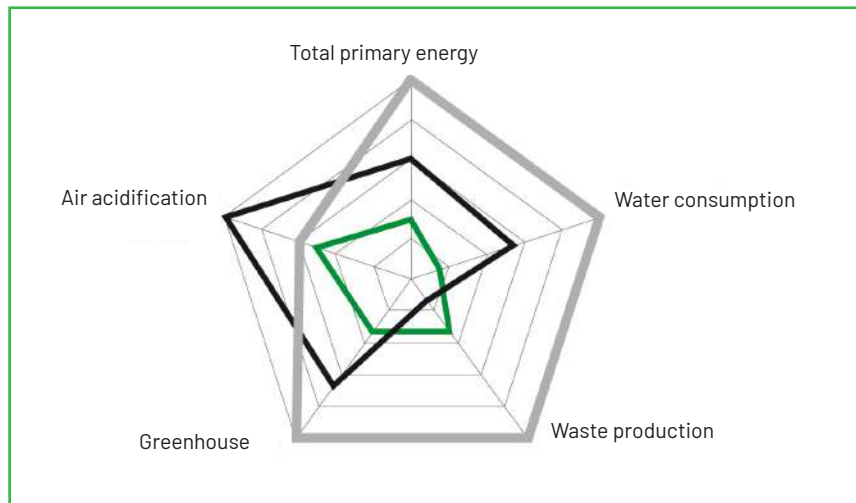


# CONCRETE, A LIVING NATURAL MATERIAL

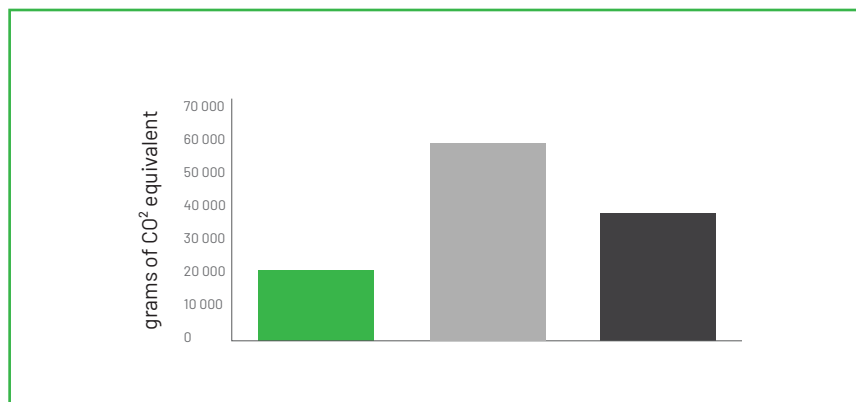


Composed of limestone, sand, gravel, and water.  
100% recyclable, it contributes to environmental conservation with a low carbon footprint.

## Life cycle analysis



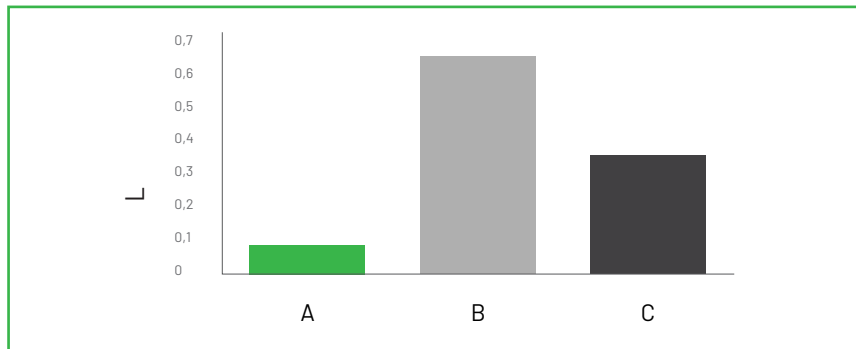
## Greenhouse gas emissions



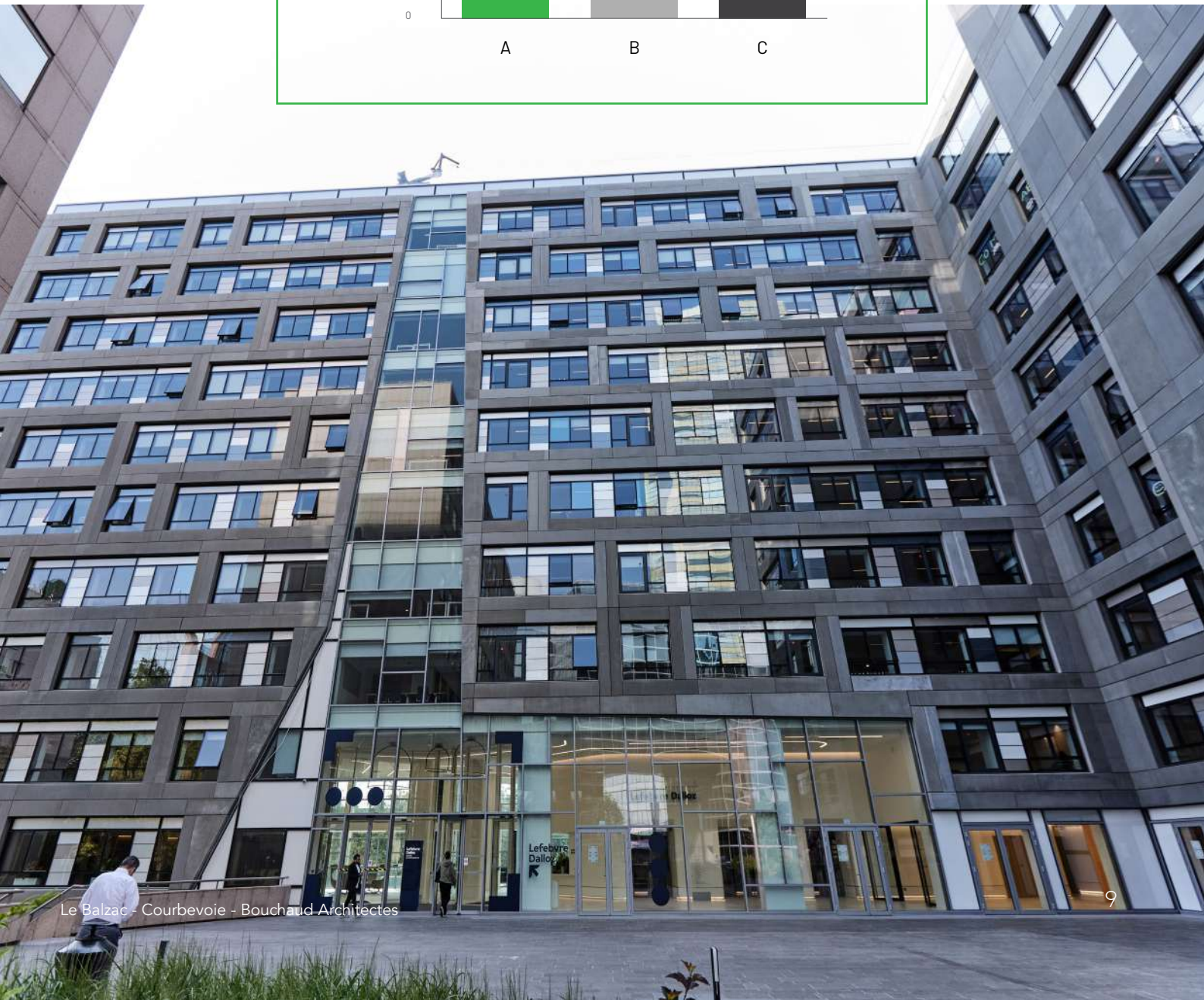
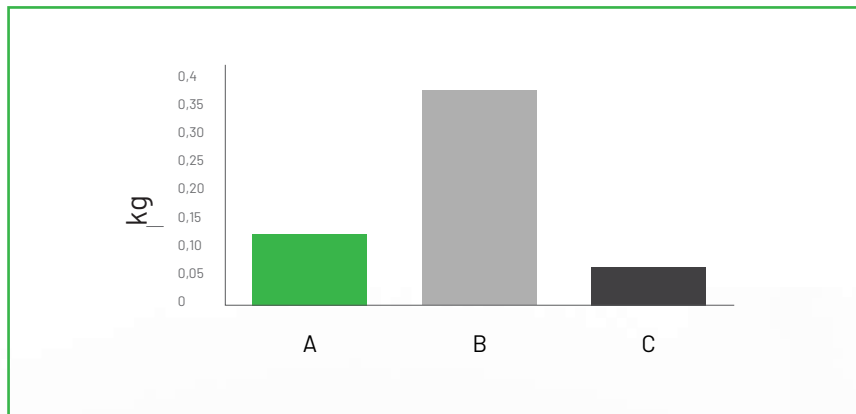
- FClad® cladding panel
- HPL cladding panel
- Aluminum cladding panel



## Water consumption



## Waste production





# A DIVERSE RANGE OF COLORS



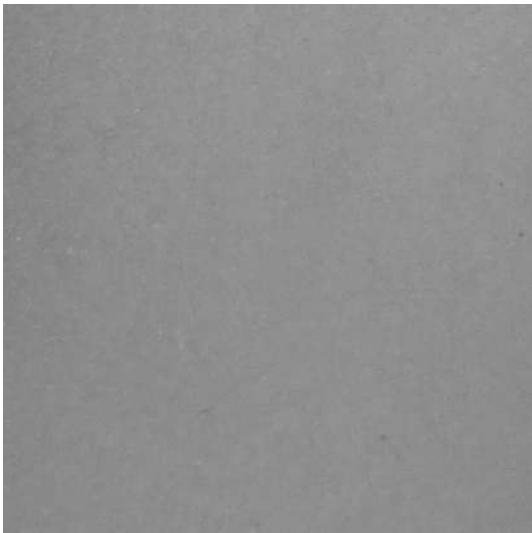
The color is achieved by incorporating pigments directly into the material. The colorfastness to UV and weathering is therefore guaranteed.

Each color can be further enhanced with a tinted stain (the stain color may not necessarily match the inherent color of the material).

# THE TEXTURES

The surface finish replicates that of the mold. The self-placing behavior of the material and the fine grain allow for an extremely faithful reproduction of the texture incorporated in the mold.

Smooth



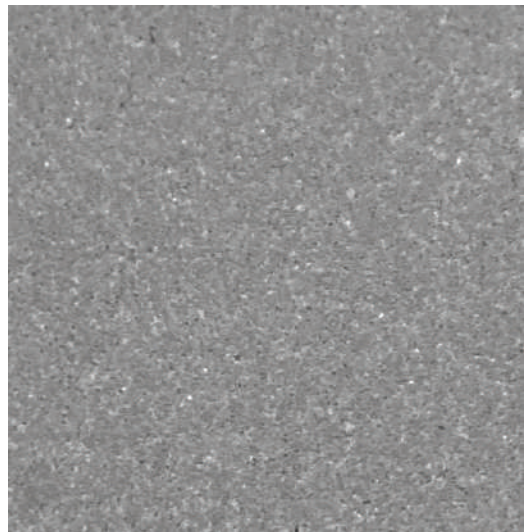
Brush hammered



Stone



Sand-Blasted





# SOME ACHIEVEMENTS

- > Collines de l'Arche - Paris - Patrick Durand
- > Le Balzac - Paris Courbevoie - Bouchaud Architectes
- > Emblem Tower - Paris Courbevoie - JLL
- > United Nations - Geneva (CH) - Skidmore, Owings & Merrill Inc.
- > American military base dental clinic - Spangdahlem (DE) - Peter Gross
- > Entrance of the Contemporary History Forum - Leipzig (DE) - Molitor GmbH
- > Foksal Gallery - Warsaw (PL) - Diener & Diener Architekt
- > Eaux Vives residences - Geneva (CH) - Olivier Vallat Architecte
- > Social housing - Paris - Philippon Kalt
- > Student residence - Paris - Jacques Ripault Architecture
- > Firmenich Tower renovation - Geneva (CH) - Baud & Früh
- > Housing - Arcueil Gentilly - AEC Architecture
- > Nursing home - Paris - Philippon Kalt

ENSCI Les Ateliers - Paris - DCAO





Renovation Tower Firmenich - Genève - François Baud & Thomas Früh



Private house - Recklinghausen - Architekturbüro Dietz von Guionneau



School complex - La Wantzenau - DRLW Architectes





School - Saint Martin d'Hères - Chabanne et Partenaires



Demathieu Bard Immobilier headquarters - Paris - Bouchaud

**db** DEMATHIEU  
BARD

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Housings - Paris - DLA Dumont Legrand



Housings Chaperon Vert - Arcueil Gentilly  
AEC Architecture



Le Balzac - Courbevoie - Bouchaud Architectes

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