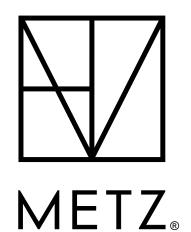
# **FACADE SYSTEMS**













World renowned architectural facade products under one umbrella

#### Presto

Ceramic Facade Systems

## Onyx Solar

Building Integrated Photovoltaics (BiPV)

#### BB fiberbeton

Glassfibre Reinforced Concrete (GRC)

#### $Al3x_{TM}$

Aluminium Systems



CERAMIC FACADE SYSTEMS

Ventilated facades
Finishes
Textures
Colours





**BB FIBERBETON** 

GLASSFIBRE REINFORCED CONCRETE (GRC)

Durable Lightweight Formable





## ONYX SOLAR

BUILDING INTEGRATED PHOTOVOLTAICS (BIPV)

Double skin
Curtain walls
Skylights
Louvres
Walkable floor panels

Global **EPD** 



Al3x<sub>TM</sub>

**ALUMINIUM SYSTEMS** 

Cladding Battens Woodgrain Special finishes



#### METZ FACADES DIVISION

World renowned architectural facade products under one umbrella

# PRESTO CERAMIC FACADE SYSTEMS





#### **DESIGN**

Presto Facades offer extruded ceramic panels that can provide variety in styles, shapes, profiles and colours.

Standard panel sizes are 400mm (wide) x 1200mm (long) x 17mm (thick) but formats up to 3m in lengths and 1m in heights are also possible.

#### **FIXING SYSTEMS**

Metz Presto panels incorporate fixing systems for both standard horizontal as well as vertical orientation that provide for secret fixing and individual panel removal.



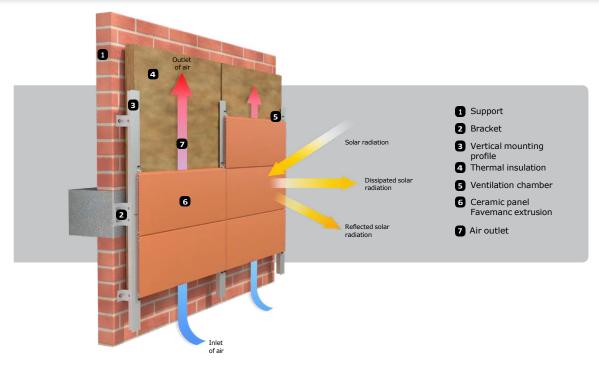




#### STRENGTH/ENGINEERING/SIMPLICITY

Metz Presto is a ventilated facade system comprising of ceramic panels. Presto panels are designed to be installed on horizontal profiles (G-Channel) via a feature groove formed on the back of the panel during the manufacturing (extrusion) process. Presto panels allow for easy installation embracing horizontal modulation with continuous linear fixings and vertical modulation with point fixings.

The system encompasses hidden fixing methods which are anchored to a substructure



## VENTILATED FACADES - THE CHIMNEY EFFECT

The gap between the facade layer and the building wall behind, is subject to an ongoing flow of air created by natural convection. This naturally occurring "free" airflow provides multiple benefits including:

- ► Thermal insulation realising savings on HVAC energy costs
- ▲ Acoustic insulation
- ► Reduction of water ingress (rainscreen)
- ▶ Drying effects of moving air prevents damage from being constantly wet
- Reduced variation of building temperatures – less stress from thermal movement





#### ANTIBACTERIAL (ISO 27447)

Active Plus Sun reacts under UV rays destroying microrganisms such as E-coli and Staphylococcus and preventing the creation of biofilm in which these organisms tend to grow.



#### SELF CLEANING (ISO 27448)

Another property of Active Plus Sun is the hydrophilicity. The breakdown of organic soils is increased by photocatalysis (sunlight). The degraded soiling is then washed away by rainwater.



#### **DECONTAMINATION**

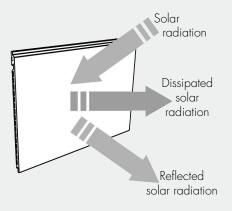
The photocatalytic effect contributes to reducing air pollution, mainly on nitrogen oxide (NOx) compounds, through two actions.

- ▶ By direct action: reduction of harmful gaseous substancces (nitrogen oxide (NOx) as benzene, toluene, etc).
- ▶ Degradation of the macromolecule (NOx) backed by laboratory test according to UNE EN 221971.
- For indirect action: by destroying pollutants such as ozone precursors (NOx), with the formation of ozone (O3).

## PERFORMANCE - PROTECTION FROM THE ELEMENTS

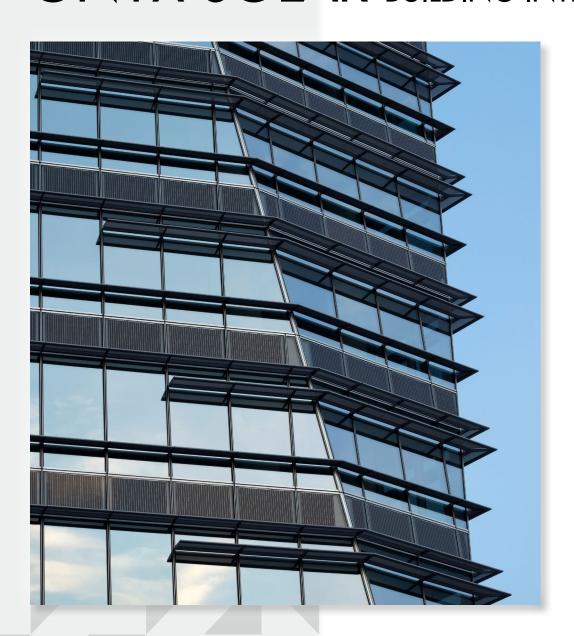
A Metz Presto facade protects your building in multilple ways:

- ► Reflecting light and heat
- ► Protection from water with overlapping panels
- Creating a chimney effect drying humidity, moisture and condensation



# ONYX SOLAR BUILDING INTEGRATED PHOTOVOLTAICS





#### PHOTOVOLTAIC GLASS FOR BUILDINGS

Onyx Solar is the world's leading manufacturer of transparent photovoltaic (PV) glass for buildings.

Onyx Solar uses photovoltaic glass as a material for buildings with the aim of capturing the sunlight and turning it into electricity. The panes are made of layers of heat-treated safety glass which can provide the same thermal and acoustic insulation as conventional architectural glass while letting natural light through. Thus, the photovoltaic glass+glass panes could be installed replacing conventional glass on building facades, curtain walls, atriums, canopies and terrace floors, among other architectural applications.

By providing the same thermal insulation as conventional glass, along with the capacity to generate free and clean electricity from the sun, it enables buildings to drastically improve their energy efficiency, decrease operation and maintenance costs, and reduce their carbon footprint.











PHOTOVOLTAIC

MULTIFUNCTIONAL

FINANCIAL BENEFITS

**AESTHETIC** 

EASY TO INSTALL













#### **AESTHETIC PHOTOVOLTAIC SOLUTIONS** FOR BUILDINGS THAT GENERATE THEIR **OWN POWER**

## Crystalline Silicon (c-Si) - Mono Crystalline

- Poly Crystalline
- Solid Colours for Cladding White, Corten Steel, Terracotta, Blue etc.
- Walkable floor panels
- Acid etch finishes

#### Amorphous Silicon (a-Si)

- Translucencies Dark, Low, Medium, High
- Skylights
- Facades
- Double glazing
- Colours

Endless possibilities...









#### MCDONALD'S WALT DISNEY ORLANDO

McDonald's chose Onyx Solar's photovoltaic glass to integrate into its new flagship restaurant located in Walt Disney.

The opening of this restaurant shows the company's firm commitment to sustainability and energy efficiency since it will become a Zero-Energy Building and McDonald's First Zero-Emission Restaurant in the U.S, thanks to the innovative building material of Onyx Solar among other sustainable initiatives.

McDonald's wanted to have an efficient restaurant, with 100% Green energy and no CO2 emissions to the atmosphere. McDonald's also wanted to educate all those who make use of it. Inside, users will be able to watch videos about the project as well as techniques and changes they can make in their lives to help in the fight against climate change.









#### **INFRASTRUCTURE**

Innovative solar technology for Transport for NSW.

A one-of-a-kind-project where photovoltaic glass was installed into a canopy structure at the Como Railway Station.

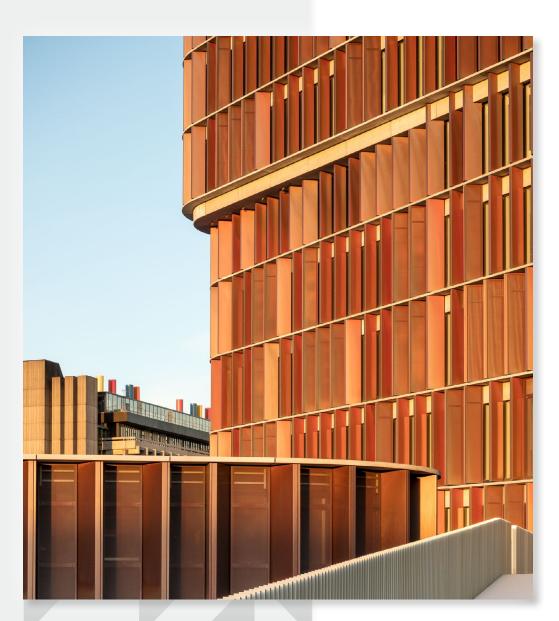
The station is now sustainably powered with solar energy during the day via the PV glass system that provides a reliable, clean source of power.

## WESTMEAD CHILDREN'S HOSPITAL STAGE 2

The 'Dragonfly' carpark at Westmead Children's Hospital combines a stunning use of colour with groundbreaking environmentally friendly design. The facade generates clean and free energy onsite. In a first for Australia, this project utilises Dichroic Photovoltaic Glass panels. This unique PV product appears to shift in colour depending on lighting conditions. The shift in colour is not only visible as the angle of the sun changes throughout the day, but as you walk around the building, making this a truly stunning 'live' facade.

# BB FIBERBETON GLASSFIBRE REINFORCED CONCRETE





#### UNIQUE DESIGN WITH ENDLESS POSSIBILITIES

Through design and manufacturing we help architects, entrepreneurs, and builders create unique, durable, and sustainable facades.

BB fiberbeton work with glassfibre reinforced concrete (GRC or GFRC) to produce durable, lightweight, and formable cladding. Design freedom when working with GRC offers versatility and endless possibilities.

GRC is a sustainable material with a durable lifespan of more than 100 years. Environmentally friendly production processes without toxic materials and a low consumption of energy is backed up by BBf's 2021 EPD (Environmental Product Declaration).

GRC is made up of white cement, fine aggregates and reinforced with glassfibres. GRC has a significantly higher flexural and tensile strength compared to traditional concrete. Elements are manufactured using a special spray-technique that allows for low water/cement-ratio, minimal thickness, and high strength properties. With long durability, lightweight, and great formability, GRC is suitable for both new constructions and renovation projects.

BB fiberbeton specializes in GRC and are one of the leading manufactures worldwide. BB fiberbeton is as a Full Member of the international GRC association GRCA and the status as a Full Member entails a third-party validation regarding resources, equipment, and labour to consistently design and manufacture high quality products.

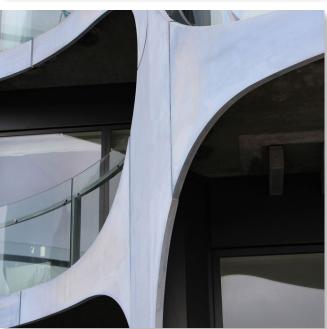












#### FORMABLE DESIGN

GRC is an immensely formable and shapeable material, providing the freedom to design beautiful and exciting geometries.

GRC offers greater versatility due to its superior compressive and tensile strengths and its flexural properties.

The formable and versatile properties of GRC makes it excellent for creating innovative and futuristic architectural designs while providing the possibility of recreating various style and designs needed for a restoration projects.









Architecture firm: Zaha Hadid Architects

Project: SkyPark, Slovakia









## SURFACES, TEXTURES & COLOURS

- Coloured GRC
- Exposed aggregates
- Surface patterns

If you can imagine it...

We have an endless array of colour, surface and textures to suit.

# Alax ALUMINIUM SYSTEMS







#### **ALUMINIUM 101**

6000 Series – Alloys are combined with both magnesium and silicon (forming magnesium silicide) and are extremely common alloys for general purpose uses in a huge variety of industries such as construction, architecture, automobile and more.

Aluminium is a versatile material that has been used in architecture for many years. It is strong, lightweight, and resistant to corrosion, making it ideal for use in a variety of applications. Aluminium can be formed into nearly any shape, which allows architects to create unique designs that are both functional and aesthetically pleasing. It is also endlessly recyclable, making it an environmentally friendly choice.

We offer locally extruded lower-carbon aluminium profiles ie. Cladding, battens, special sections and façade feature systems for architectural applications. "By choosing lower-carbon aluminium, your CO2e emissions can be significantly reduced, giving you a cleaner, greener choice of your aluminium."\*

Sourcing Capral's ASI-Certified aluminium produced in accordance with the ASI Performance Standard and ASI Chain of Custody Standard, demonstrates that the aluminium has been sourced and produced responsibly along the entire value chain.

Al $3x_{TM}$  Aluminium is tested to: AS1530.1, AS1530.3, AS4040.1, AS4040.2







# Aluminium is strong, lightweight and highly recyclable. But did you know that on average it takes 13.9 Kilograms CO2e to produce 1 Kilogram of primary aluminium?

By choosing lower-carbon aluminium, CO2e emissions can be significantly reduced, giving you a cleaner, greener choice for your aluminium.

LocAl® Aluminium is locally extruded, lower-carbon aluminium for your projects in construction, engineering, marine, transport, defence, renewable energy or general fabrication industries.

#### **Locally extruded**

Extruded in Australia by Capral Aluminium, Australia's largest aluminium extruder established in 1936.
Capral is committed to Net Zero by 2050 and working actively on reducing Scope 1 and Scope 2 emissions.



#### **Low Carbon**

Primary billet with certified CO2e content\* at or below:

- 8kg CO2e/1kg AL LocAL Green
- 4kg CO2e/1kg AL LocAL Super Green

#### **Aluminium**

Capral Aluminium has been certified against the ASI Performance Standard V3 and Chain of Custody (CoC) V2 for the extrusion, warehousing and distribution of aluminium products and services.





<sup>\*</sup> Kilograms emitted per kilogram of aluminium produced - Aluminium Smelting and Casting



When you choose LocAl® you are making a cleaner, greener choice for your project, potentially halving the carbon emissions of the aluminium used in your project.



**Certified CO2 Content** 8kg CO2e/1kg AL or below.

ASI CoC smelter and extruder.



**Certified CO2 Content** 4kg CO2e/1kg AL or below.

ASI CoC smelter and extruder.

#### **Global Average**

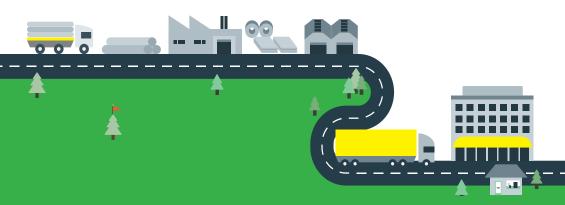
LocAl GREEN

8kg CO2e/1kg Al

13.9kg CO2e/1kg Al



4kg CO2e/1kg Al



## Why Choose LocAl?

The carbon footprint of LocAl® Green is meaningfully lower than the global average for primary aluminium production\*. LocAl® Super Green boasts one of the lowest carbon emissions for primary aluminium currently available.

Reducing carbon emissions from your products is important because it mitigates the effects of global climate change, improves public health, boosts the global economy, and maintains biodiversity.

When we cut carbon emissions, we help ensure cleaner air, water, and food for our generation and for generations yet to come.

Choosing to use LocAl® Aluminium as part of a responsible procurement strategy for your business will positively impact your organisation's environmental impact and our climate.

\* Kilograms emitted per kilogram of aluminium produced -Aluminium Smelting and Casting

Find out more about LocAl® and choosing lower-carbon aluminium for your project, visit: lowcarbonaluminium.com.au









On the path to a better tomorrow.

















#### **CLADDING & FACADE SYSTEMS**

- Al3x Clad 100 100mm wide cladding board
- Al3x Clad 150 150mm wide cladding board
- Accessories and Trims
- Customised profiles and project specific sections

#### **BATTEN SYSTEMS**

- 2-piece snap-on battens
- Easy installation
- Standard RHS, SHS, CHS etc.
- Elliptical Louvres
- Shading fins/elements
- Customised profiles and project specific sections



Project:

Urban Nest Student Residential Apartment

Builder: Buildcorp

Product(s) utilised:

Aluminium Casset System

Finishes/coatings: Custom Sublimation



Project:

Inner Sydney High School

Builder:

Hansen & Yuncken

Product(s) utilised:

Al3x 7525 2-part Aluminium Battens

Finishes/coatings:

Al3x Banksia



Project:

Woolworths Moorebank Distribution Centre

Builder:

Richard Crookes Constructions

Product(s) utilised:

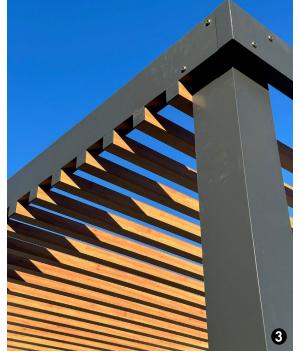
Al3x 5050 2-part Aluminium Battens

Finishes/coatings:

Al3x Correra















Project:

Storage King, Gregorys Hill

Builder: Mainbrace

Product(s) utilised: Al3x 5025 2-part Batten

Finishes/coatings:

Al3x Banksia



Project:

Storage King, Gregorys Hill

Builder: Mainbrace

Product(s) utilised: 100 x 100mm SHS Hollow Section

Finishes/coatings:

Powder Coating Yellow Gold









Metz facade products include:

Presto

Ceramic Facade Systems

Onyx Solar

Building Integrated Photovoltaics (BiPV)

BB fiberbeton

Glassfibre Reinforced Concrete (GRC)

Al3x

Aluminium Systems

# M METZ<sub>®</sub>

#### **CONTACT US**

**\§** 1300 730 062

metz.au

All sizes are nominal, please consult Metz for exact dimensions of available stock at time of ordering Minimum quantities may apply for other than the items shown Colour reproduction from printing is indicative only - please consult Metz for product samples

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