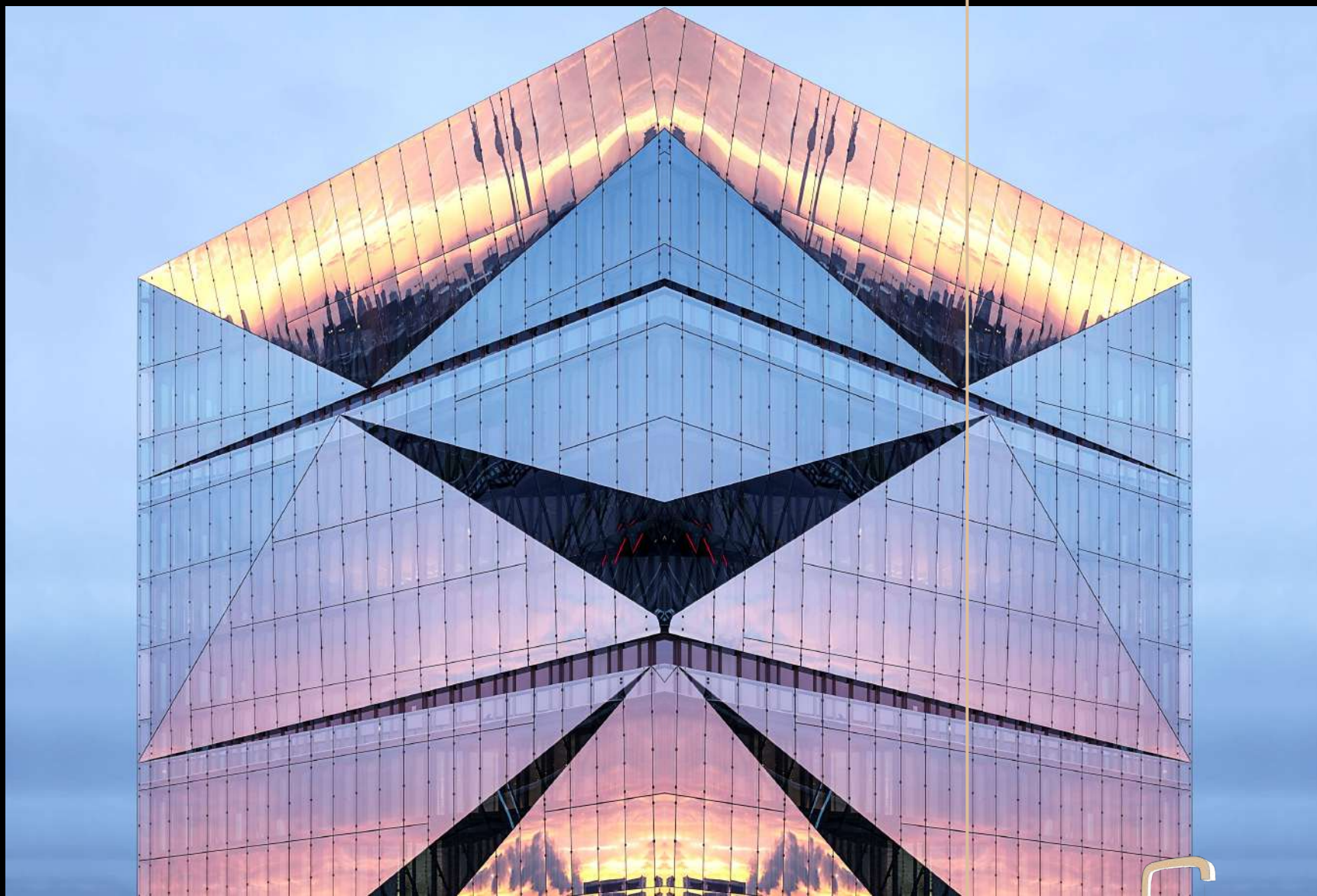


BIPV ITALY
Building Integrated PhotoVoltaic



by **CHIRENTI**



BIPV ENERGY FACADES FOR SUSTAINABLE ARCHITECTURE



BUILDING INTEGRATED PHOTOVOLTAICS



ENERGY WASTE

The amount of sunlight that reaches Earth in one hour provides more energy than what the planet consumes in a year.

In Europe, the economic loss due to failure to solar energy capture on unused building facades unused, is estimated at millions of euros per day.



SOLAR FACADES & ENERGY-EFFICIENT OUTFITS

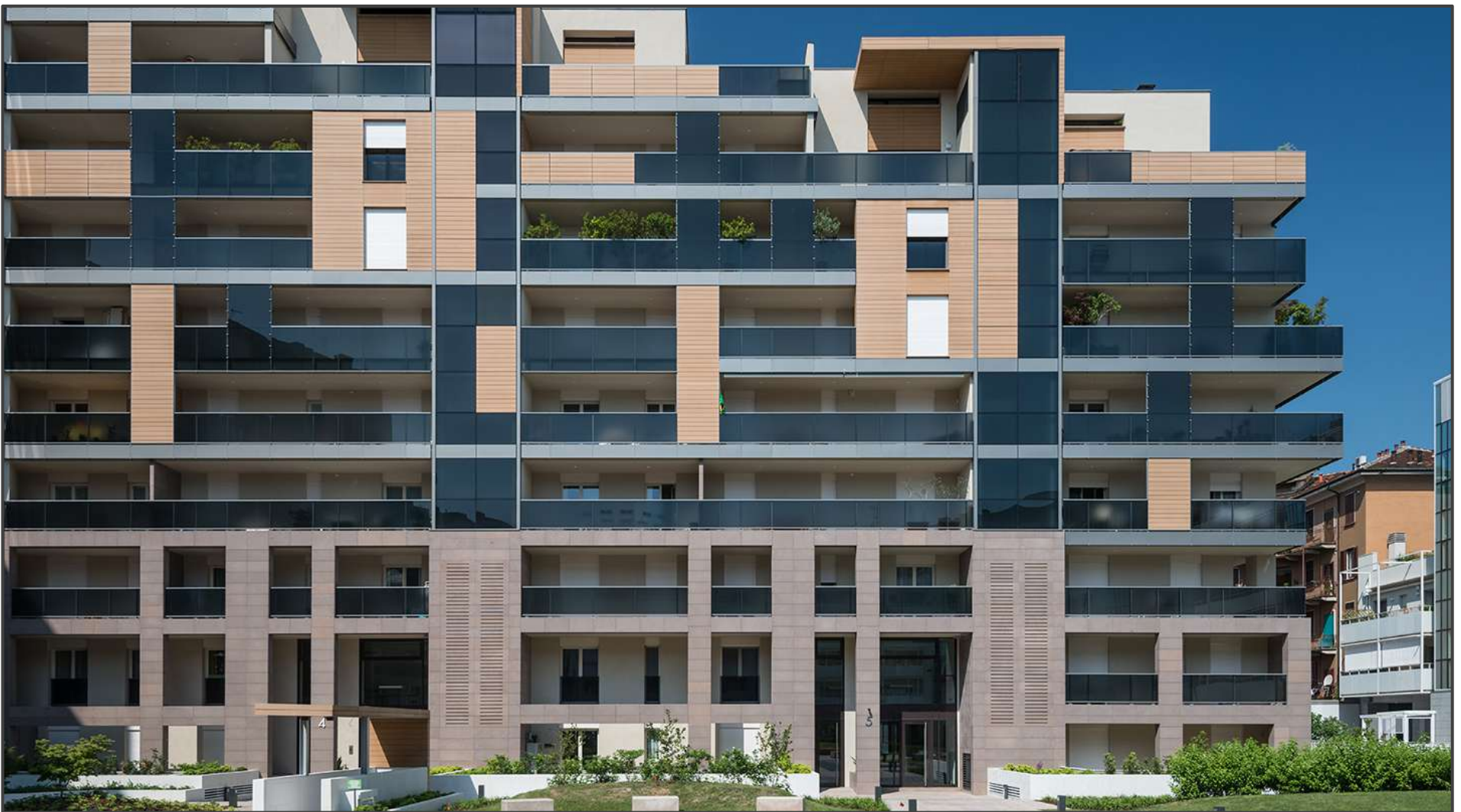
Today, thanks to BIPV (*Building Integrated PhotoVoltaics*) outfits and claddings of buildings transform the sun's rays into clean, unlimited and safe energy.





Buildings in the Future

BIPV stands for *Building Integrated PhotoVoltaics*. Photovoltaic panels and systems of the latest generation, of any color, texture, shape and size. They can take on the appearance of a variety of materials, such as marble, granite, brick, wood, steel, chromatic glass, etc.



BIPV offers enormous possibilities and solutions for designing the building of the future that restores dignity architectural aesthetics with great added energy value. Facades that produce sustainable solar energy that respects human health and the environment.

ADVANTAGES & BENEFITS



CASE STUDY



BIPVITALY
Building Integrated PhotoVoltaic



BIPV Applications

Residential Building (12 apartments)

A) **VENTILATED FACADE**
Colored Glaze Elements, Grey
1200*600*6 mm - 100 Wp

B) **APPLIED ENERGY COATING**
Colored Glaze Elements, White
138 Wp/sqm

C) **GLASS to GLASS** (for Balcony)
6 mm Laminated Tempered glasses
Trasparency 20% / 250 Wp/sqm

CASE STUDY

A) 400 sqm = Power 40 kW

B) 150 sqm = Power 20 kW

C) 60 sqm = Power 15 kW

Overall energy efficiency 75 kW*

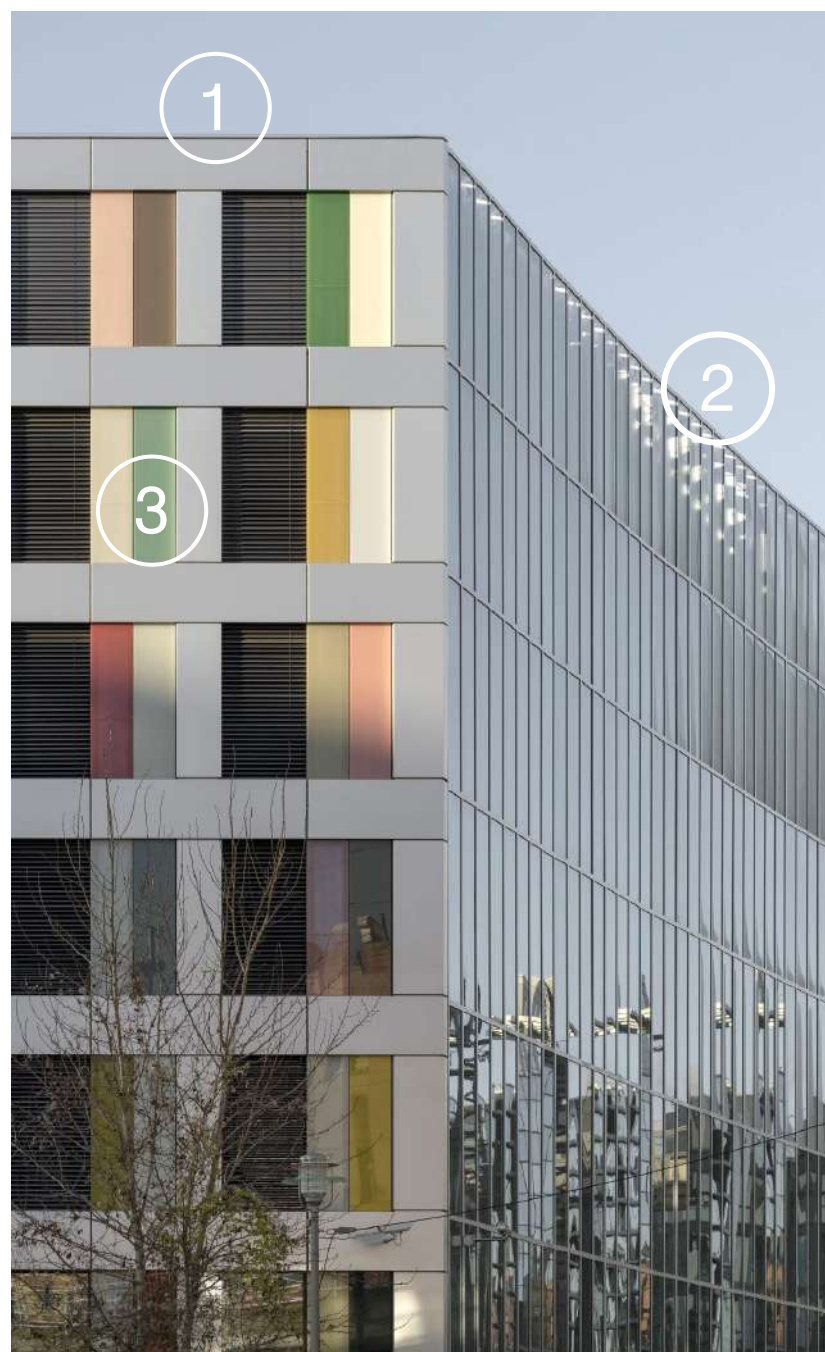
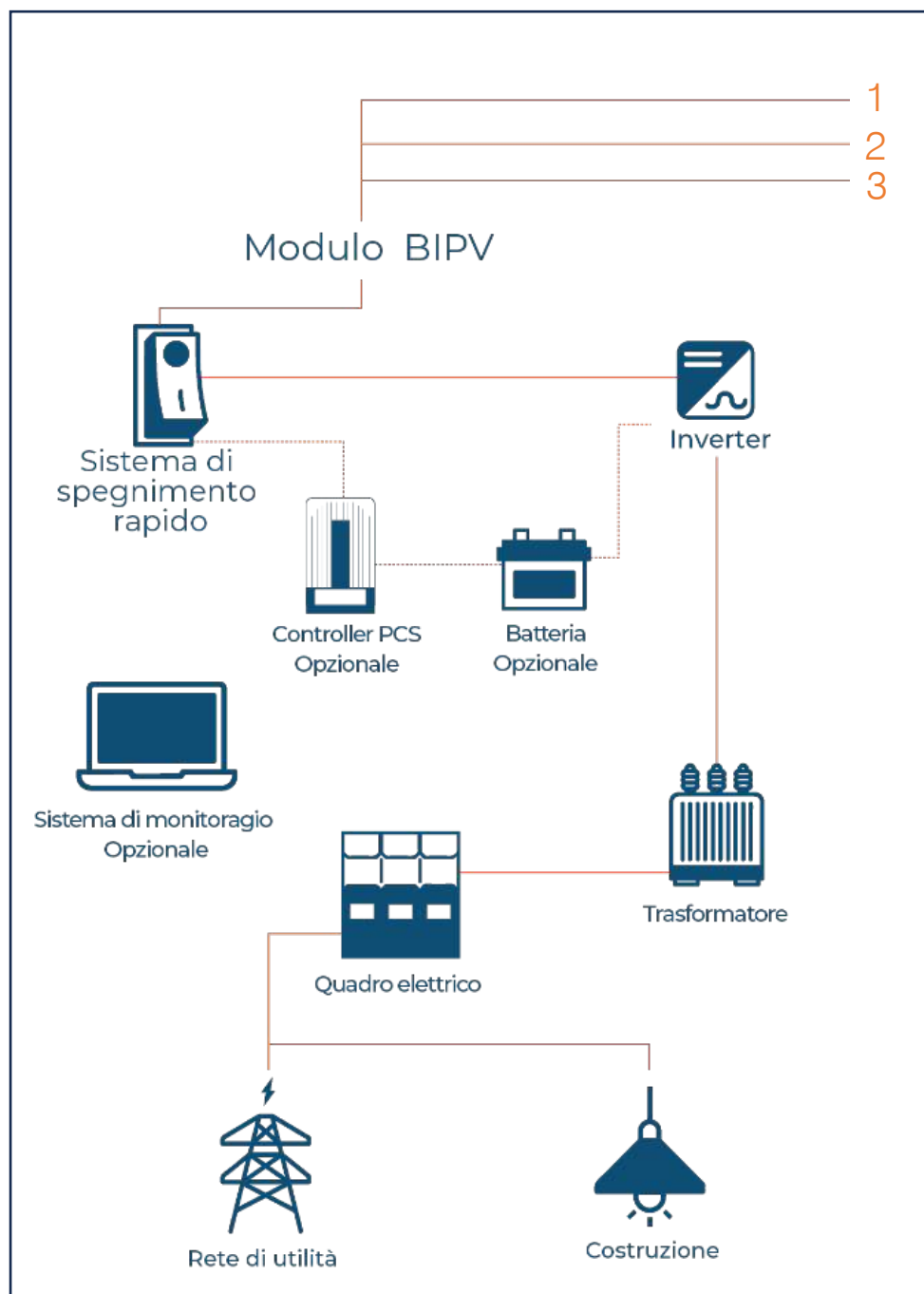
Power output per apartment approx 6 kW*

*more or less

HOW IT WORKS



BIPV ITALY
Building Integrated PhotoVoltaic



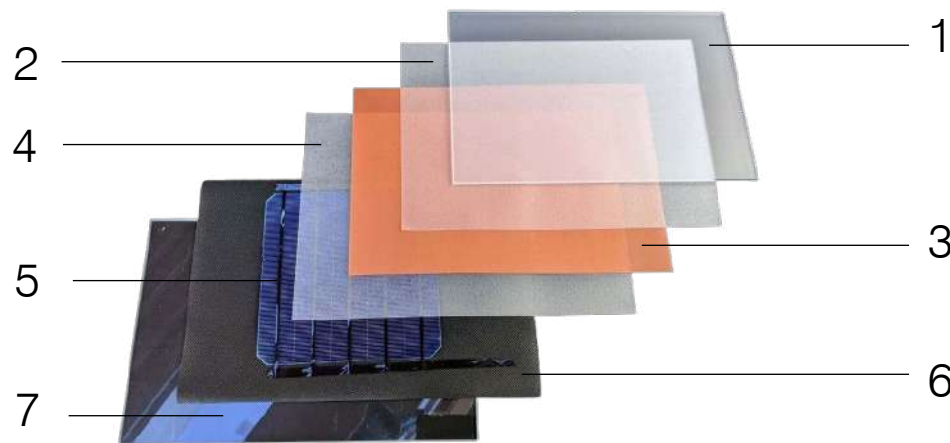
COLORS
TEXTURE
PATTERN
APPLICATIONS





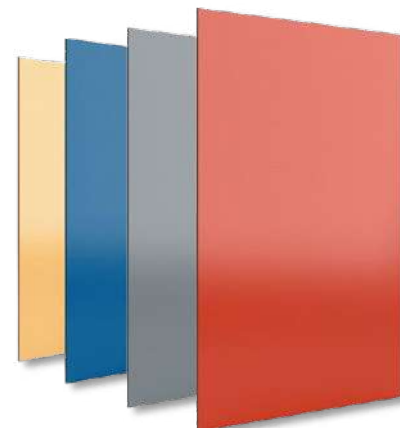
HOW DOES IT WORK?

The conversion of sunlight into electrical energy occurs through an electrochemical process in a photovoltaic cell.



1. Special tempered glass
2. Ethylene-Vinyl Acetate
3. Chromatic encapsulant
4. Ethylene-Vinyl Acetate
5. Solar Cell
6. Back sheet
7. Special tempered glass

COLORFUL (matt / bright)





COLORFUL (matt / bright)



Granite



GNT 1



GNT 2



GNT 3



GNT 4

Ceramic



CRM 1



CRM 2



CRM 3

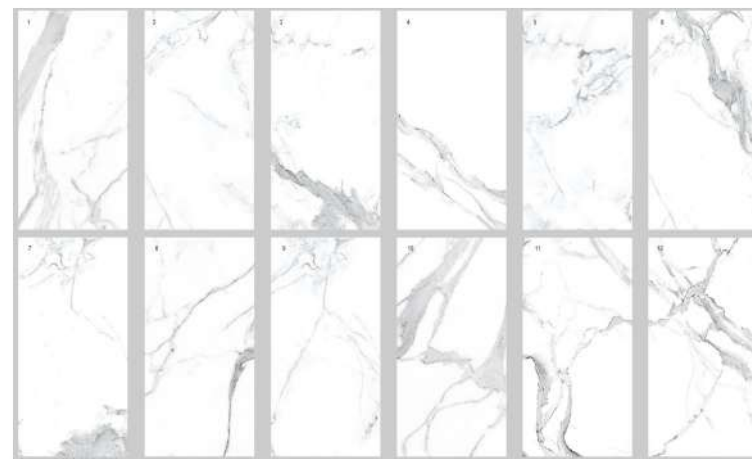
Marble



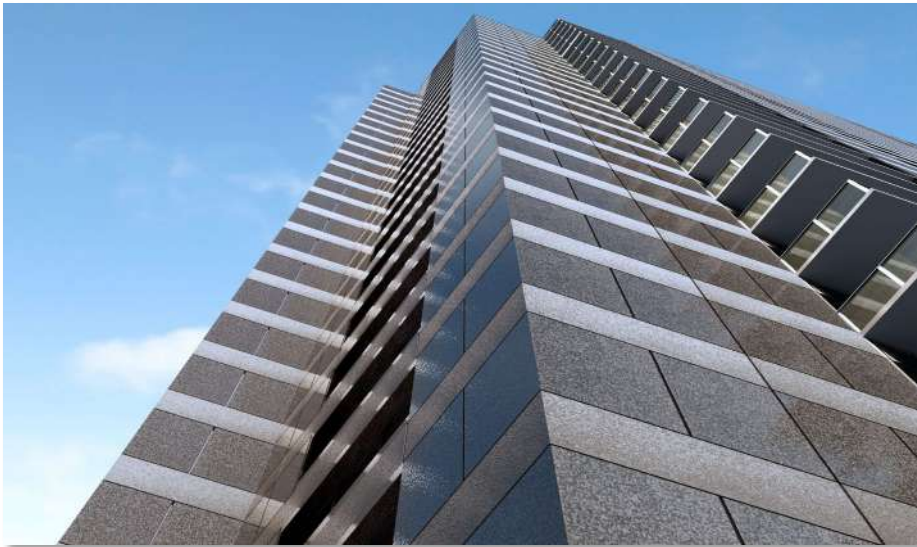
MRM 1



MRM 2



Granite Ceramic Marble





CUSTOMIZATION

We can make any type of decoration with exclusive textures and decorations.



CUSTOMIZATION



Granite Ceramic Marble



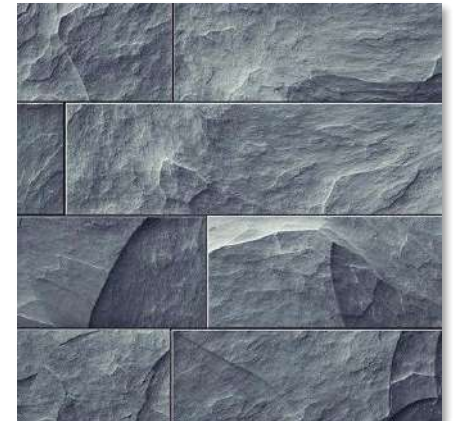
Stones



PTR 1



PTR 2



PTR 3

Bricks



MTN 1



MTN 2

Slate



RDS 1



RDS 2

Stones Bricks Slate





Sheet metal



LMR 1



LMR 2



LMR 3



LMR 4

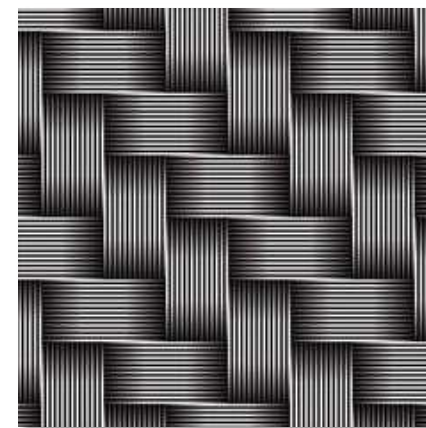
Geometric



GMT 1



GMT 2



GMT 3

Fabrics



TST 1

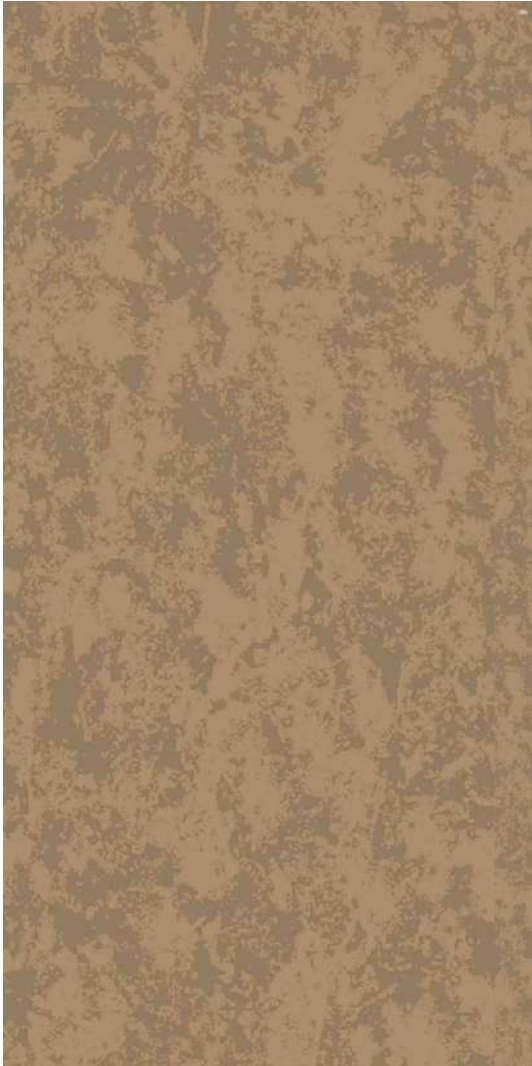


TST 2

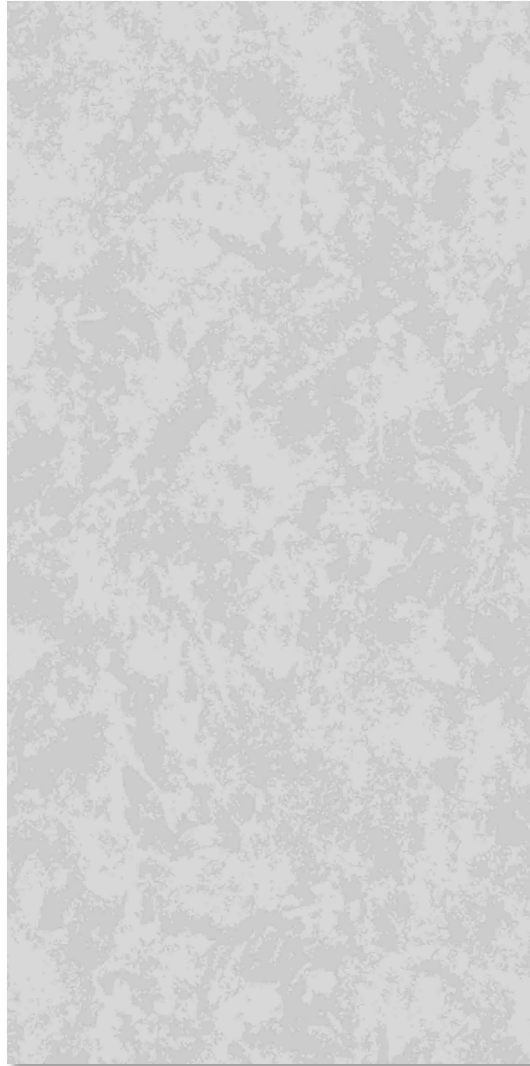


CUSTOMIZATION

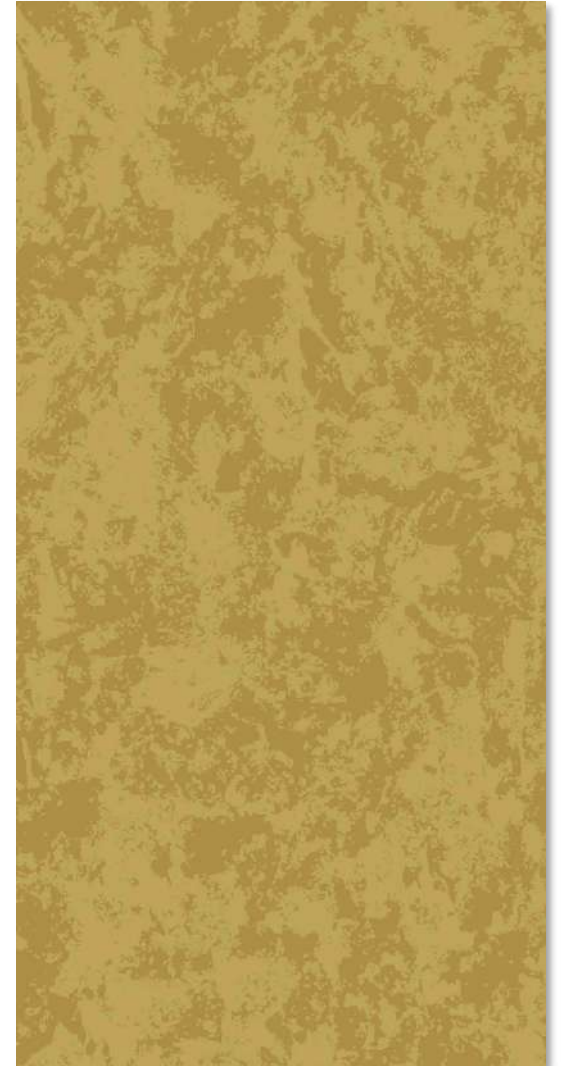
CD1



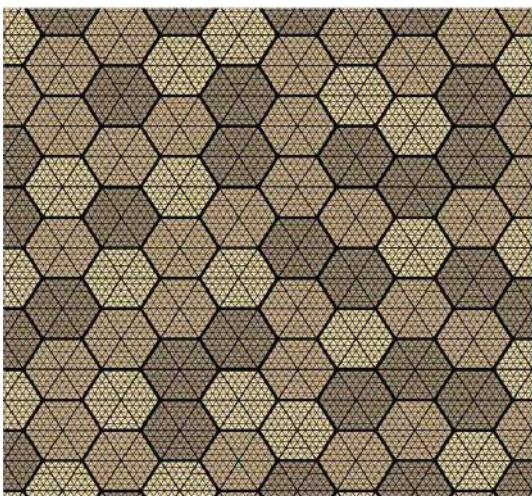
CD2



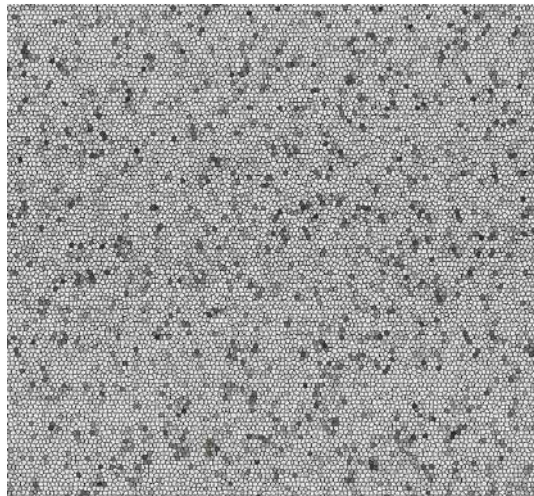
CD3



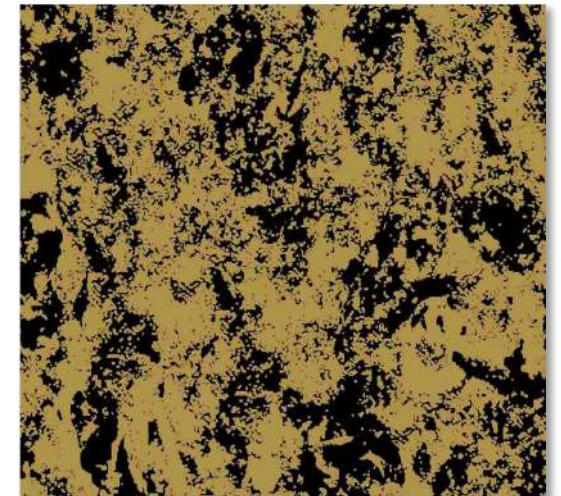
CD4



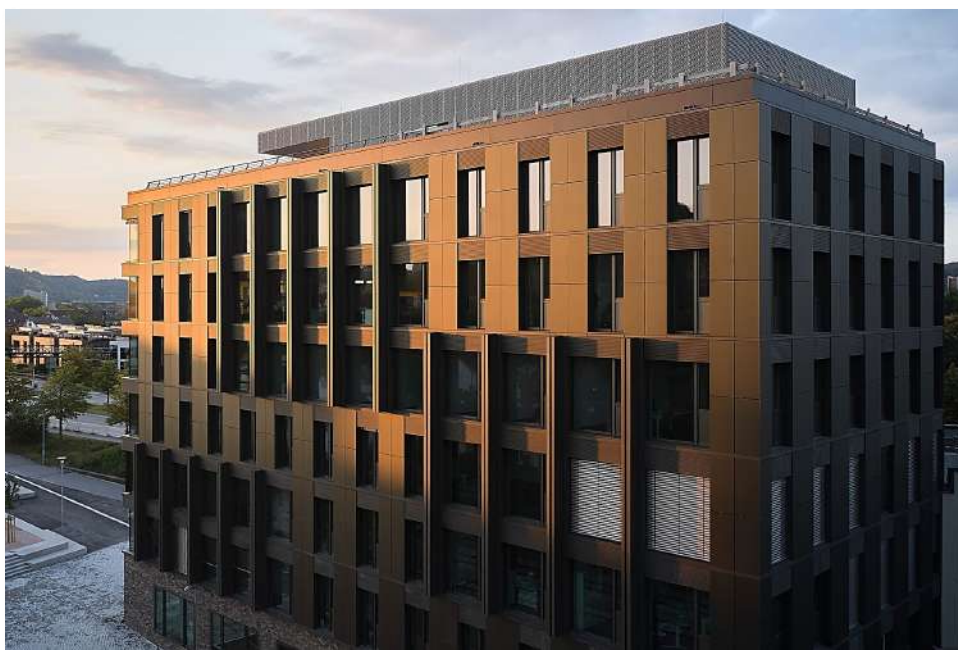
CD5



CD6



Sheet metal Geometric Fabrics



CUSTOMIZATION





Woods



LGN 1



LGN 2



LGN 3



LGN 4

Staves



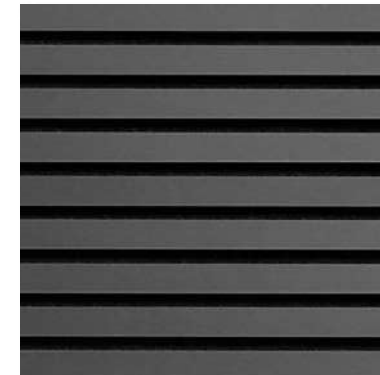
DGH 1



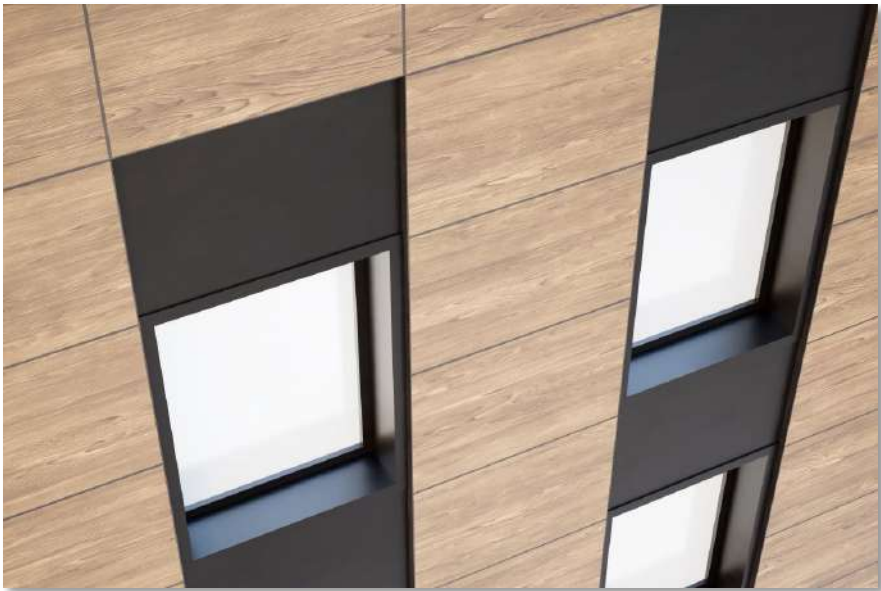
DGH 2



DGH 3

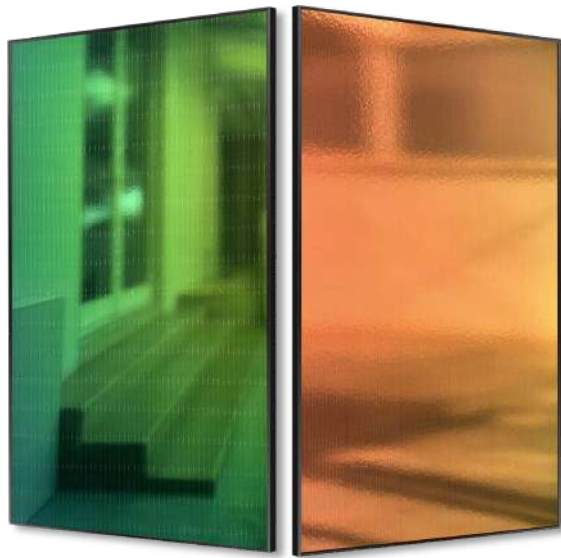


DGH 4

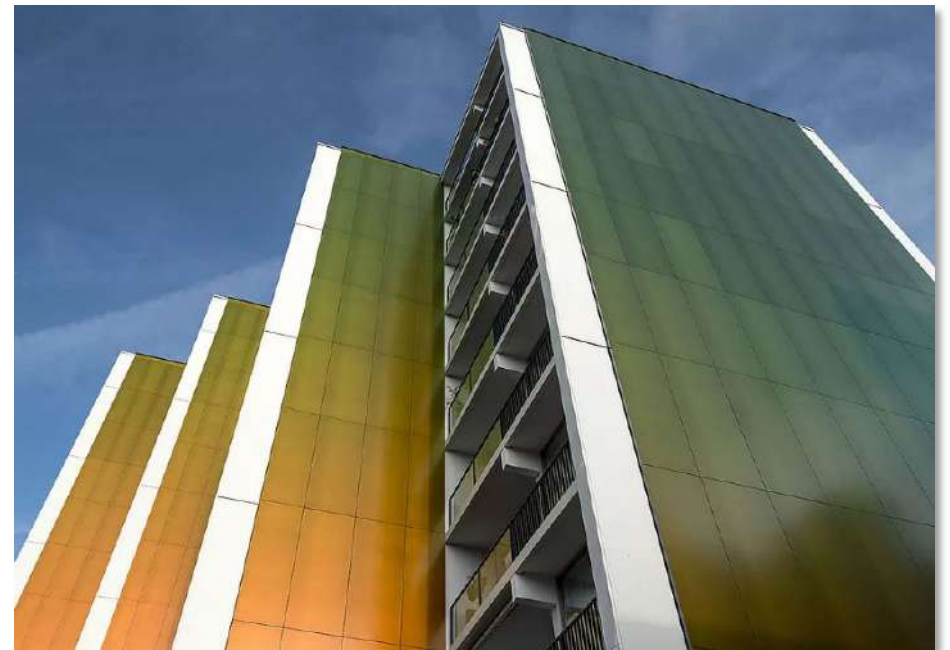
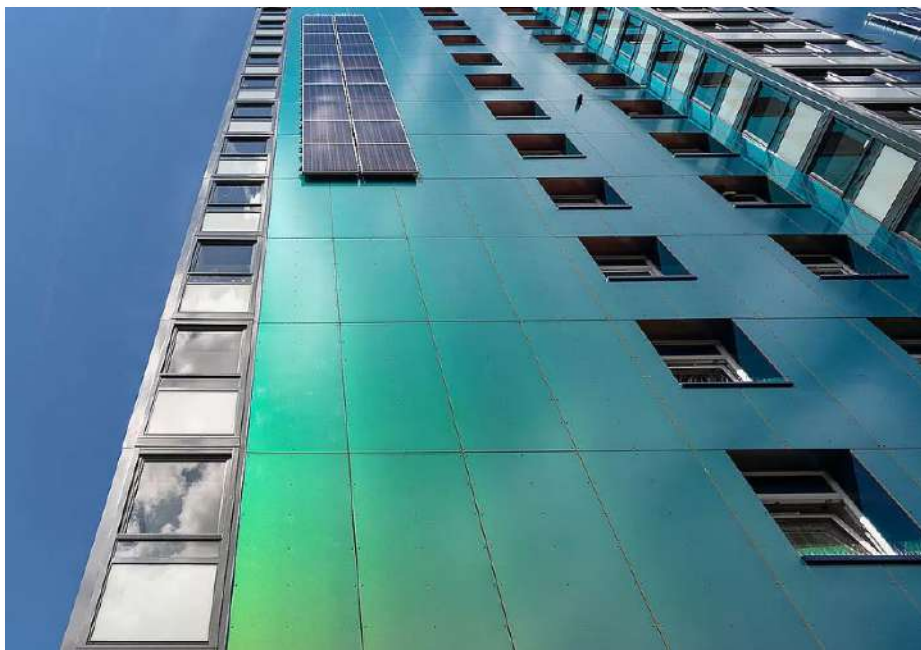
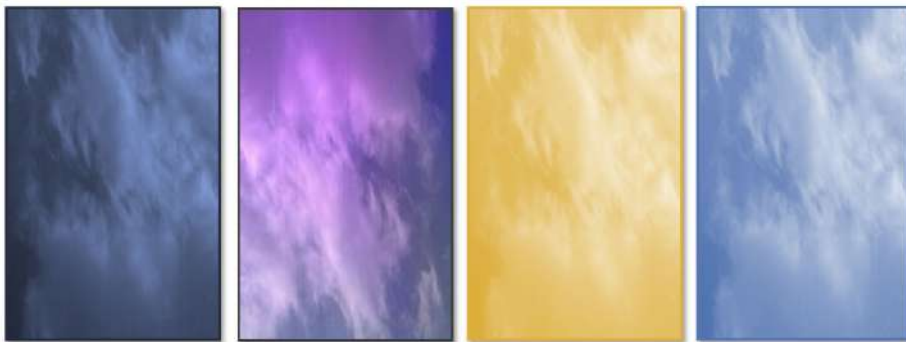




REFLEX - Reflective metallic PV



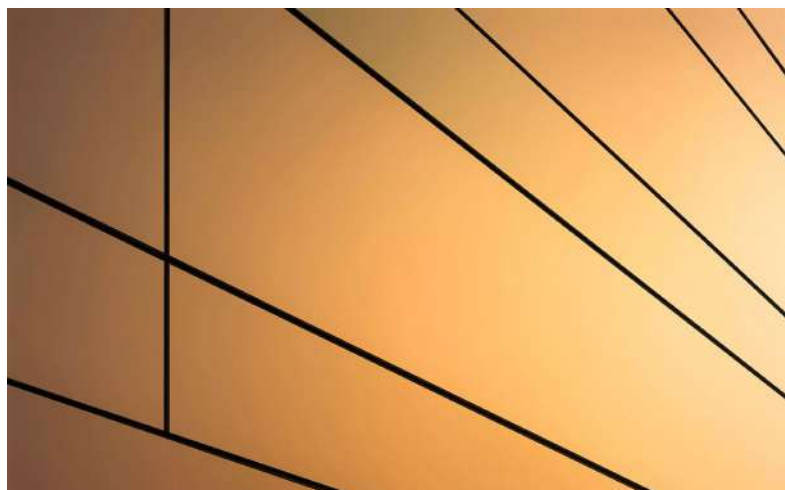
The reflective and iridescent BIPV allows the cladding of buildings, to take on various hues and shades of color. The same building changes color depending on the light and from the point of view from which it is viewed.



REFLEX - Reflective metallic PV

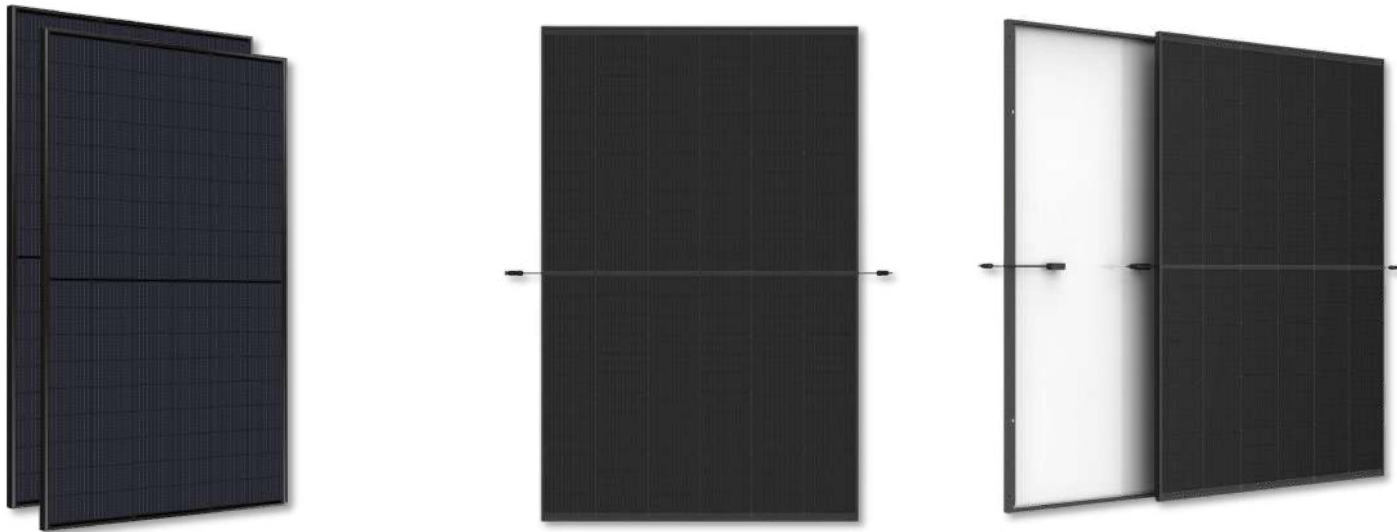


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ALL BLACK - PV modules



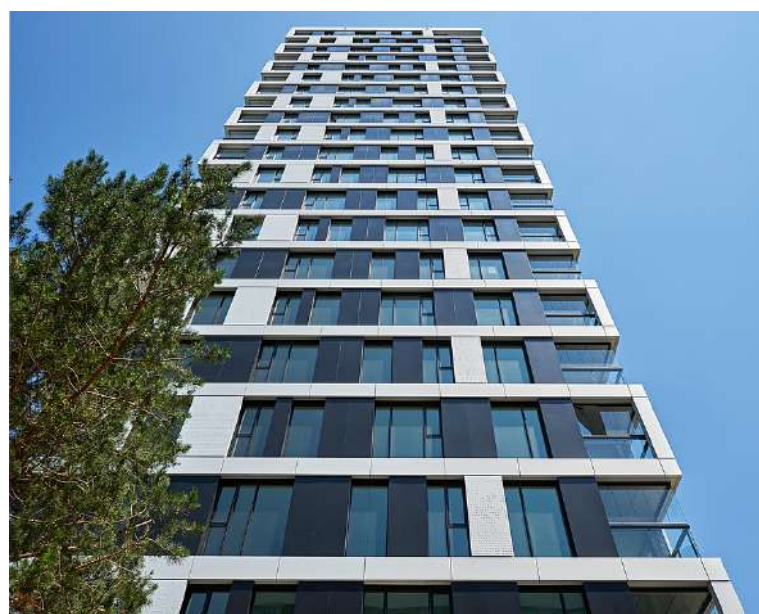
BCK 1



ALL BLACK - PV modules



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CURTAIN FACADES



BIPVITALY
Building Integrated PhotoVoltaic





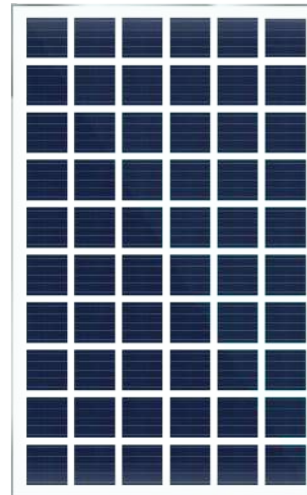
G2G - Glass to Glass



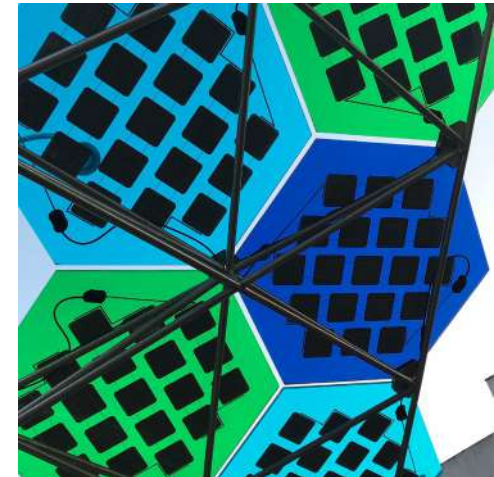
GTG 1



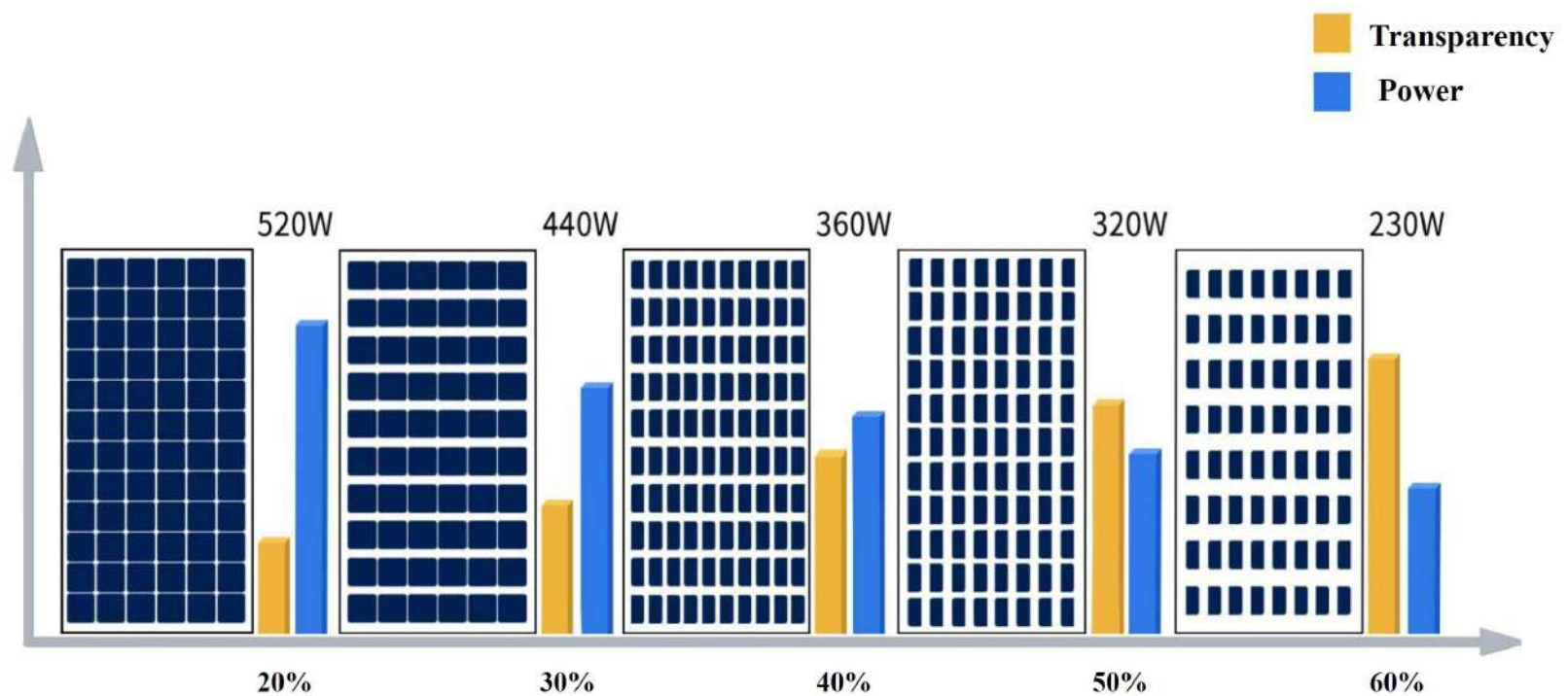
GTG 2



GTG 3



GTG-C



G2G - Glass to Glass



BIPV ITALY
Building Integrated PhotoVoltaic



THE
ONE & ONLY
BIPV
CUSTOM MADE



ENERGY COVERING FOR BUILDING AND ARCHITECTURAL FACADES

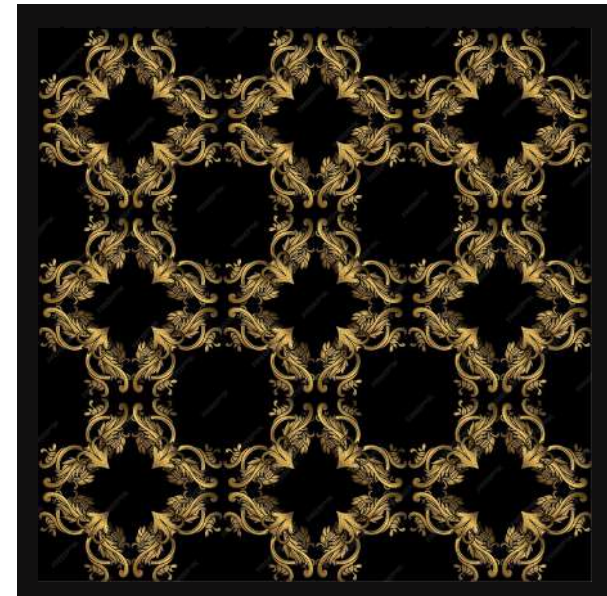
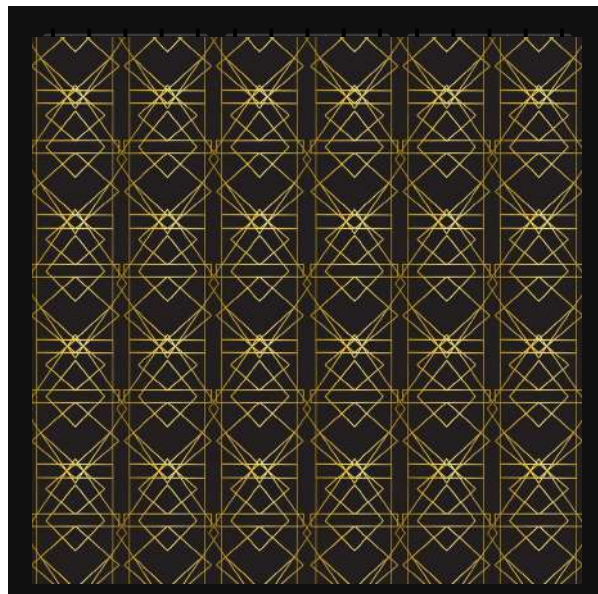
“MADE IN ITALY” AND TAILOR MADE

ARTISTICS



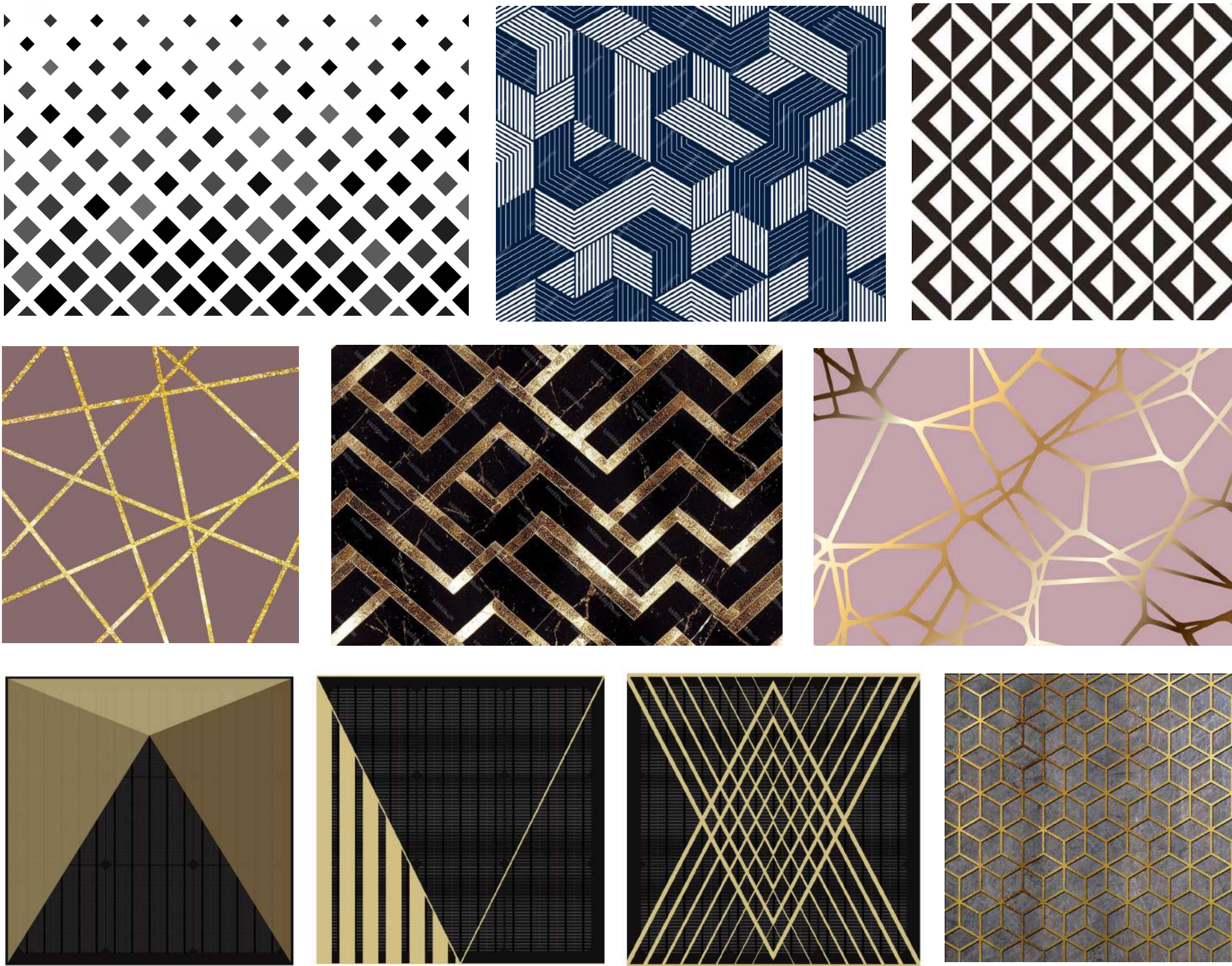
BIPV ITALY
Building Integrated PhotoVoltaic

Upon request, can be made exclusive “tailor made” creations of BIPV

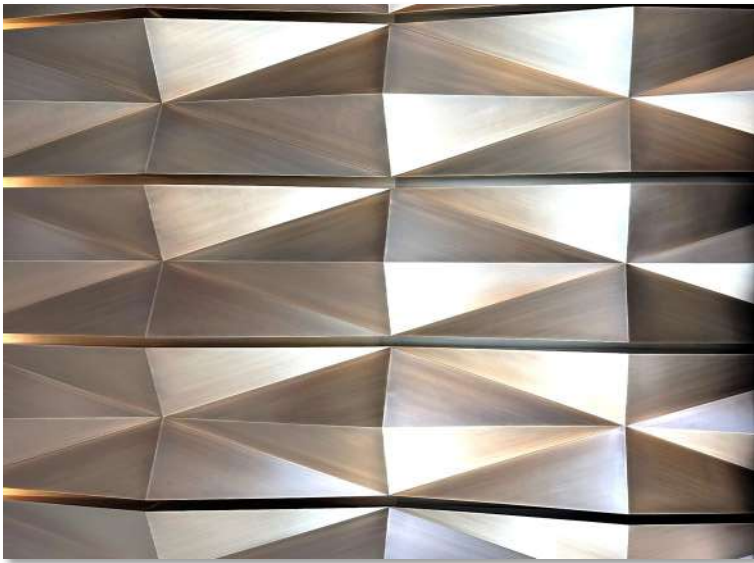


GRAPHIC

Geometrics pattern



CUSTOMIZATION



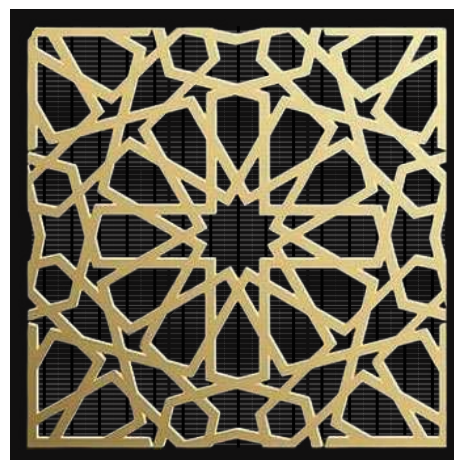
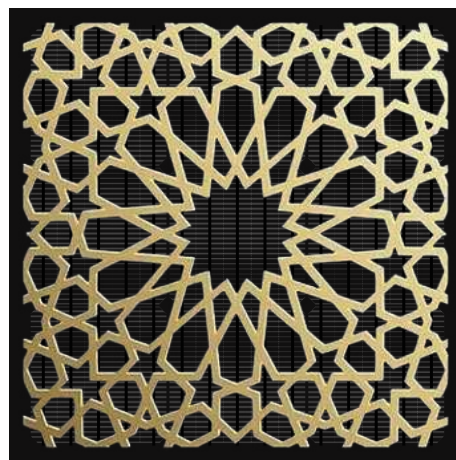
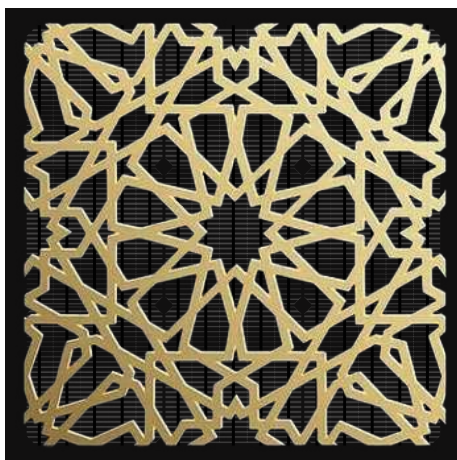
Energetic Ethnic Characters and Symbols



Mashrabiyya



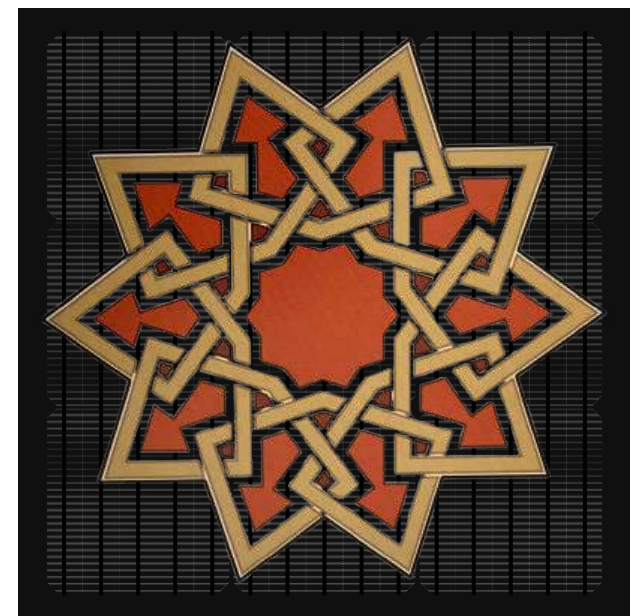
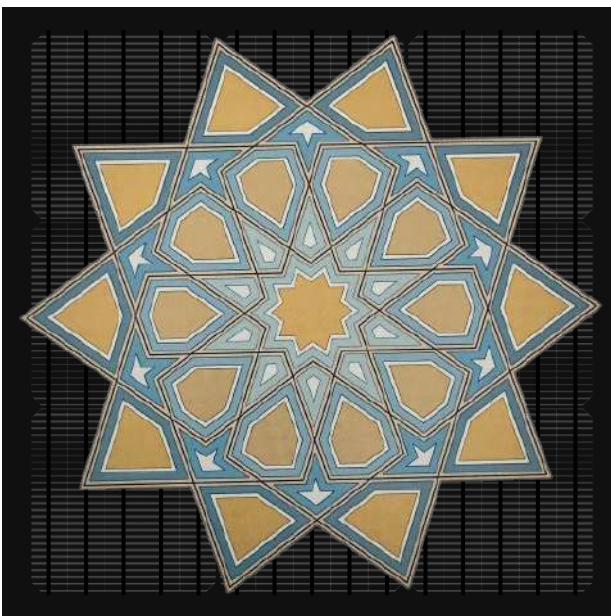
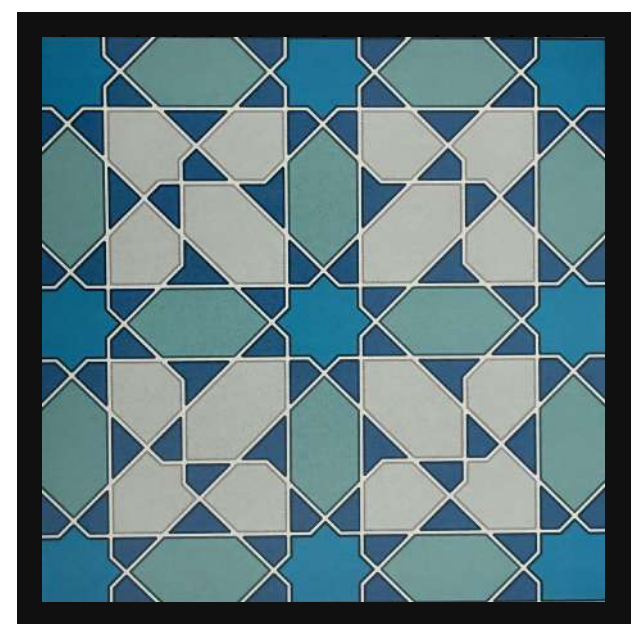
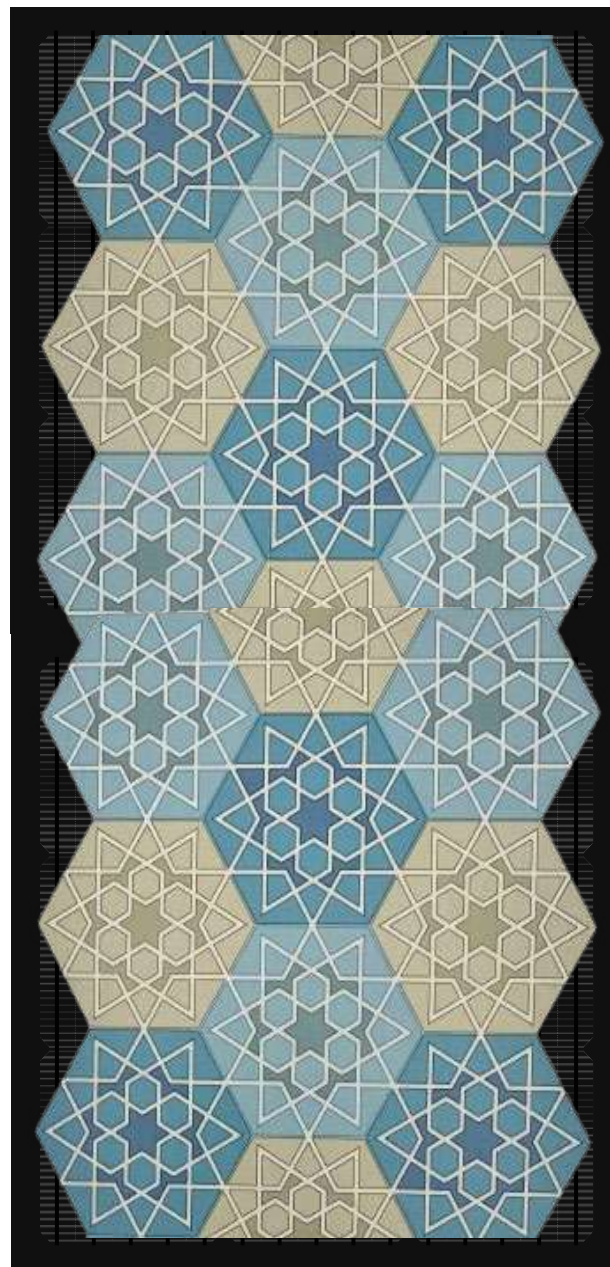
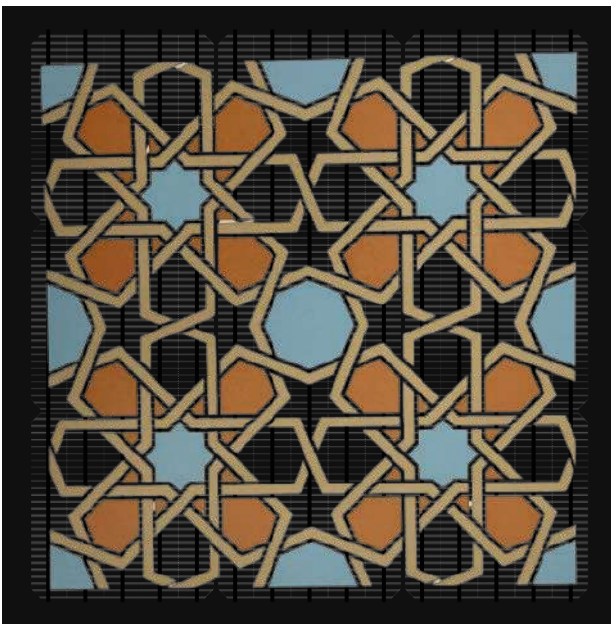
Ethnic BIPV reproduces characters and symbols of various cultures and traditions. It is used to decorate facades of historical, religious or government buildings. It can be used in communication for commercial purposes and can act as an energy support for signs, logos and brands.





Energetic Ethnic Characters and Symbols

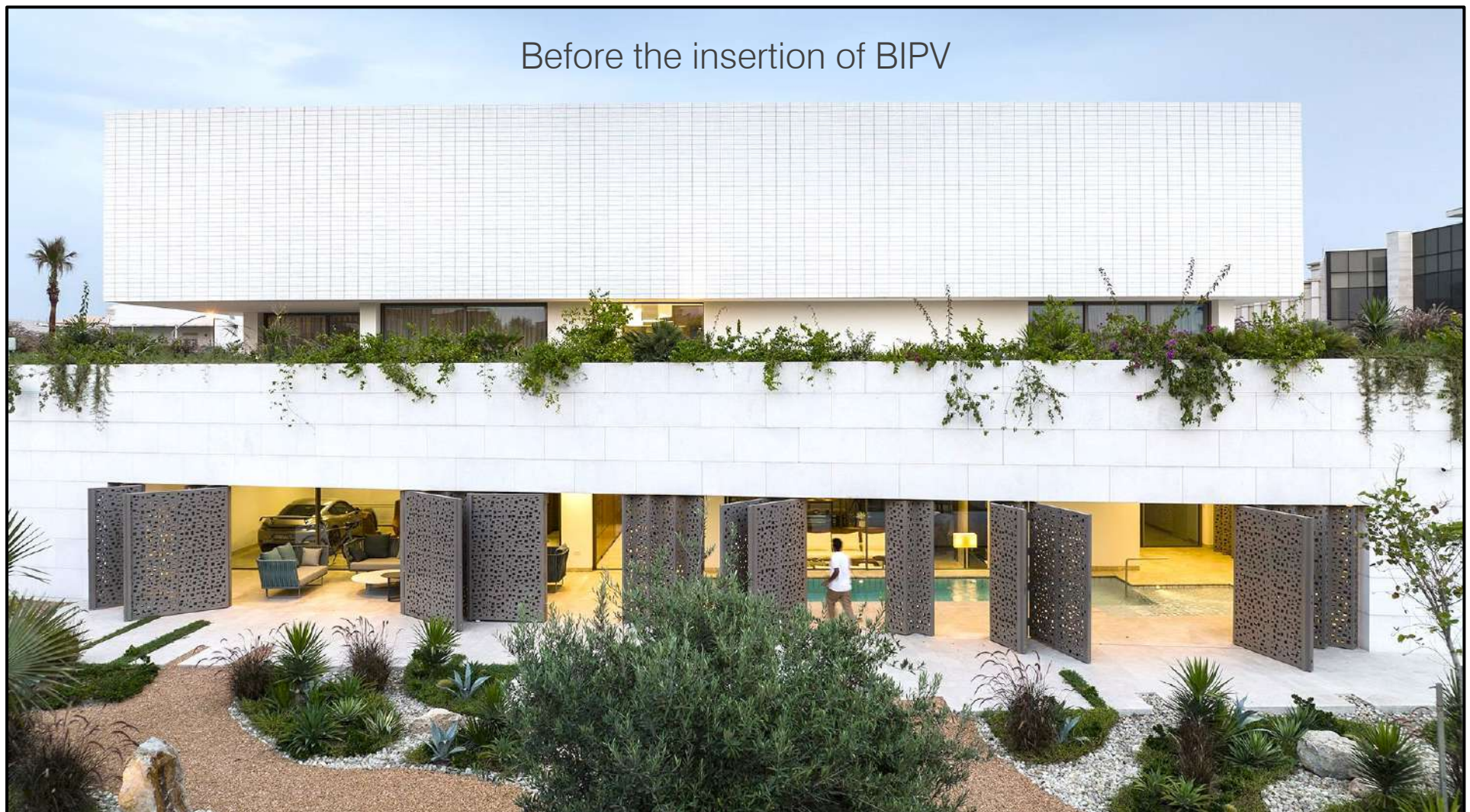
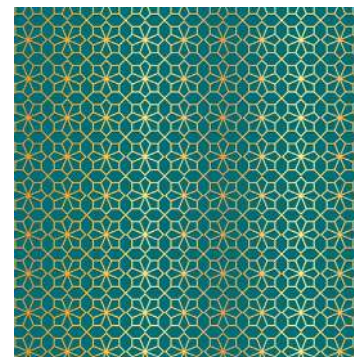
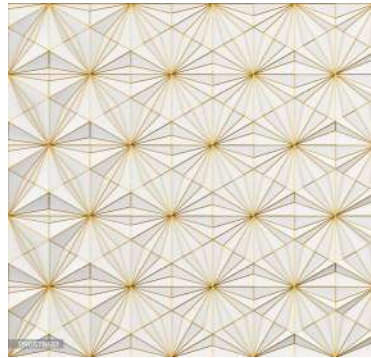
Upon request, BIPV can be “tailored made” in any size, shape, color and texture.





CUSTOMIZATION

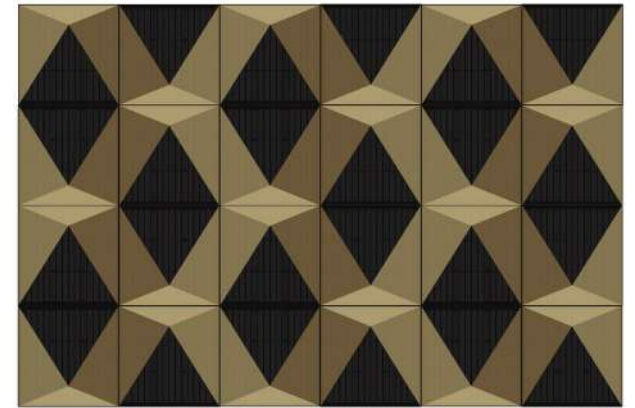
Upon request, BIPV can be “tailor made” in any size, shape, color and texture.



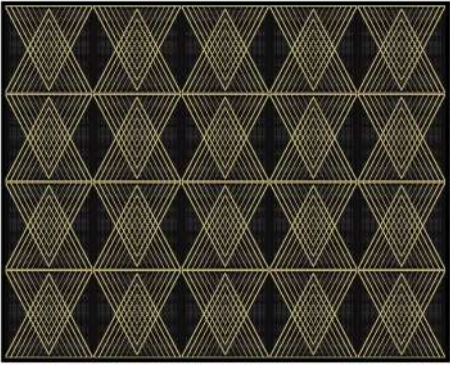


CUSTOMIZATION

After the insertion of BIPV customized with decors that blend into the elevation and characterize the territorial distinctiveness.



CUSTOMIZATION



BIPV IN THE WORLD





BIPV IN THE WORLD

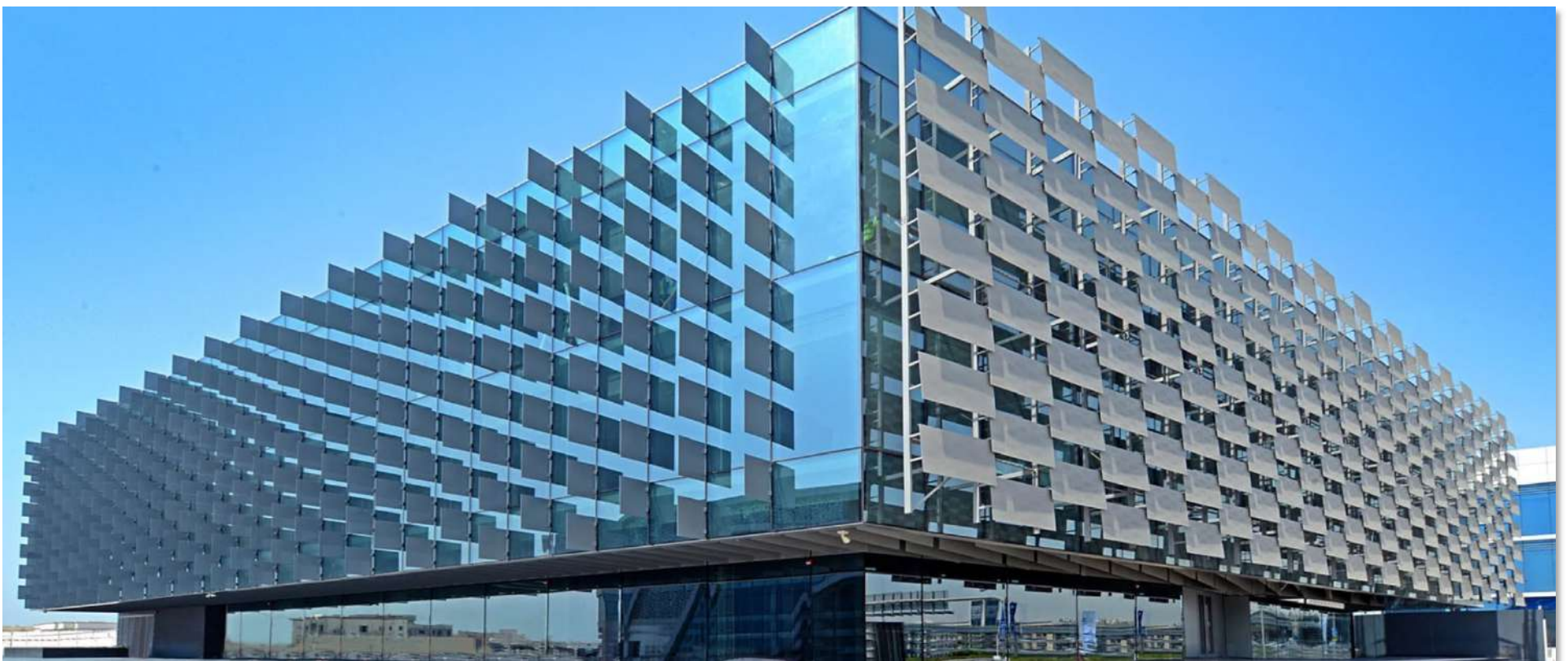
For some years, BIPV has been used by renowned architectural firms to create “iconic” and energy-efficient buildings, as well as in other international architectural projects.



BIPV IN THE WORLD



BIPV ITALY
Building Integrated PhotoVoltaic



BIPV IN THE WORLD



BIPV ITALY
Building Integrated PhotoVoltaic



BIPV IN THE WORLD



BIPV ITALY
Building Integrated PhotoVoltaic



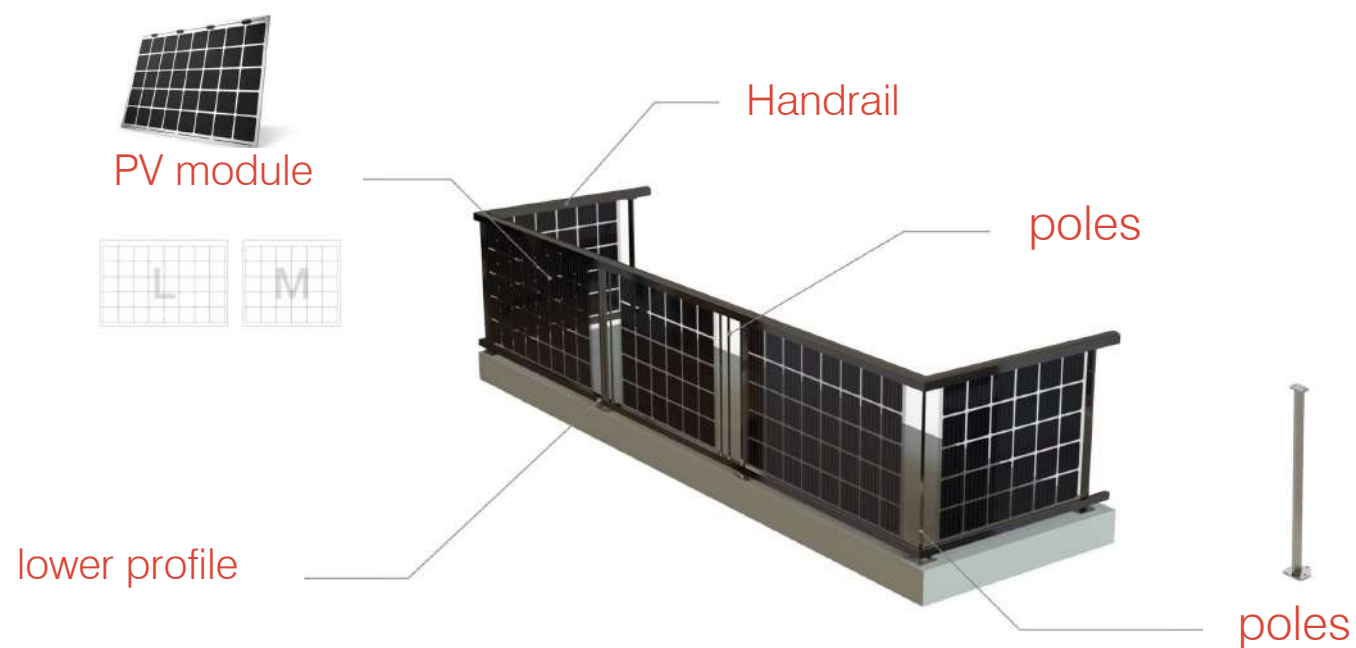
OTHER
BIPV
APPLICATIONS IN
OUTDOOR
SETTINGS



BALUSTRADES AND OTHER



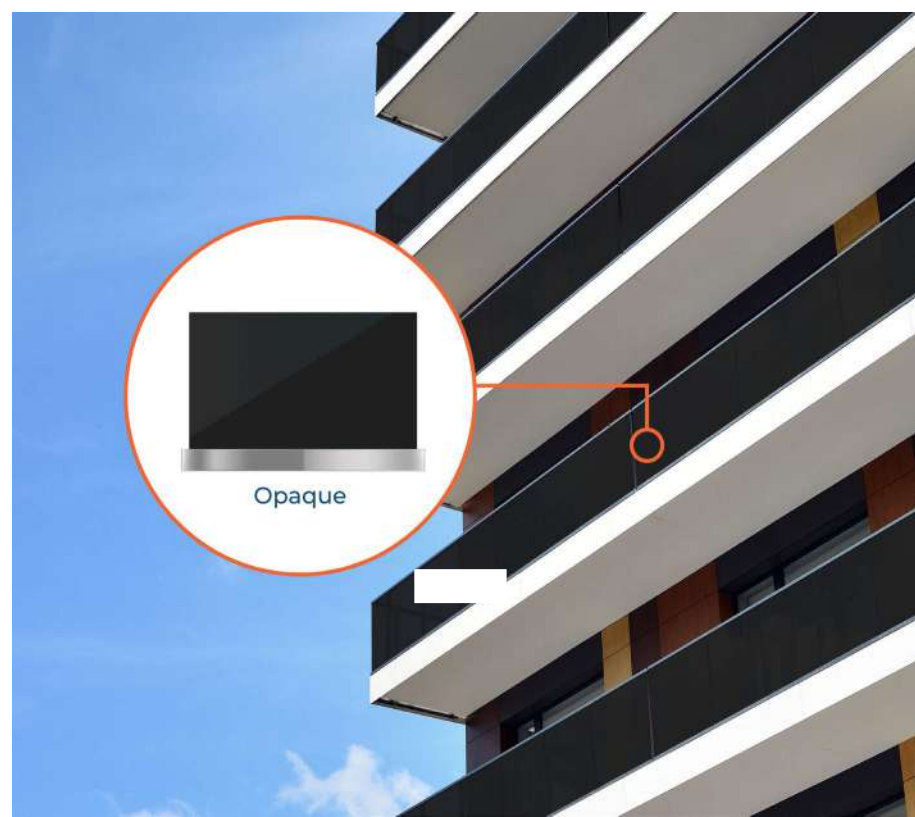
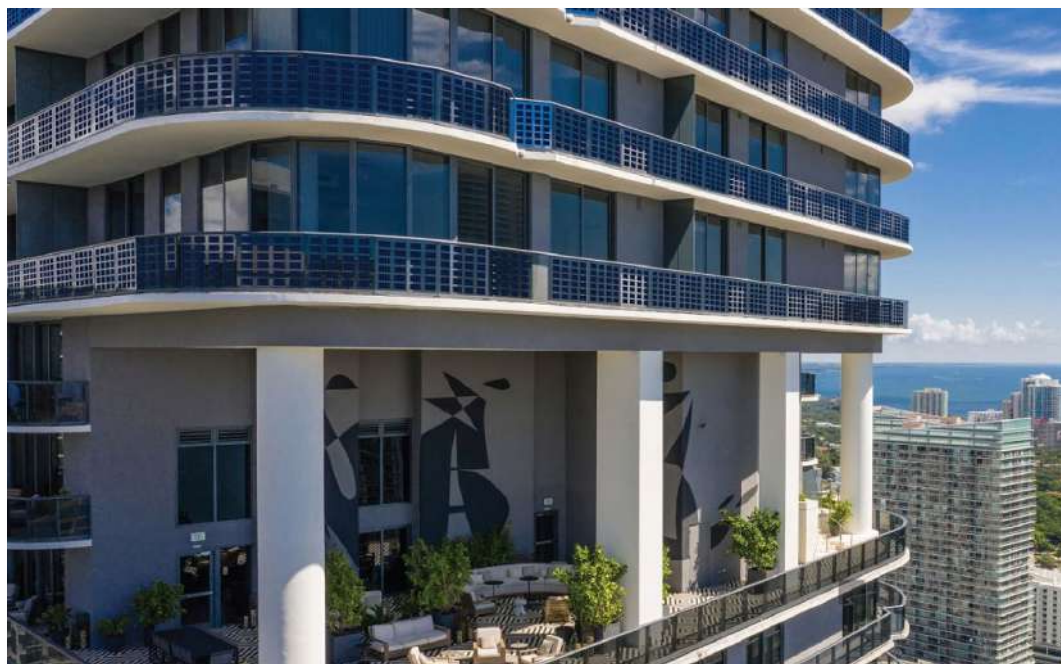
BIPV ITALY
Building Integrated PhotoVoltaic



BALUSTRADES



BIPV ITALY
Building Integrated PhotoVoltaic



WINTERGARDEN



ENERGETIC FLOOR



BIPV ITALY
Building Integrated PhotoVoltaic





FENCES - NOISE BARRIERS



SHELTERS / CARPORT



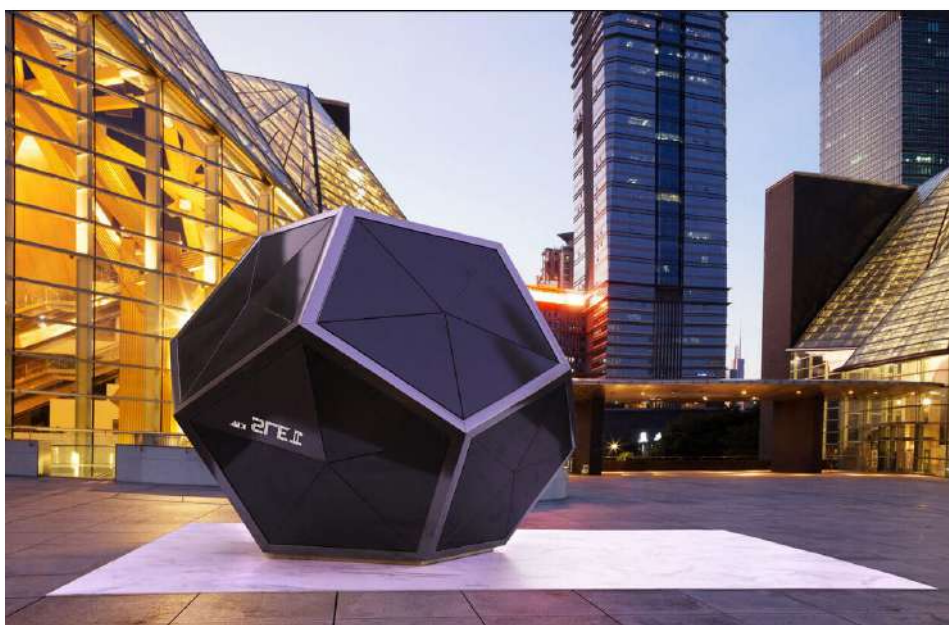
BIPV ITALY
Building Integrated PhotoVoltaic



CAPTIVATING 3D ELEMENTS



BIPVITALY
Building Integrated PhotoVoltaic

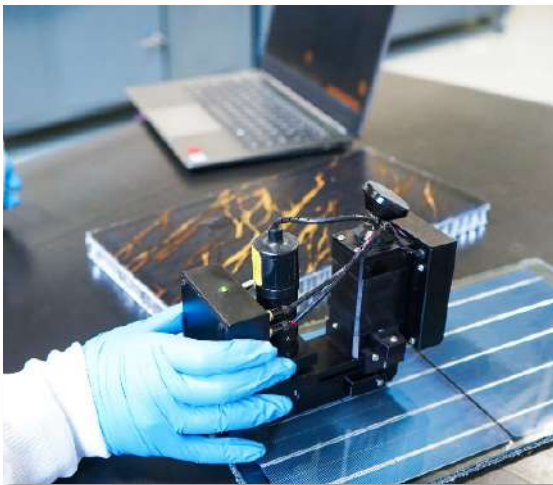


PRODUCTION EQUIPMENT AND PROCESSES





PRODUCTION EQUIPMENT AND PROCESSES





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