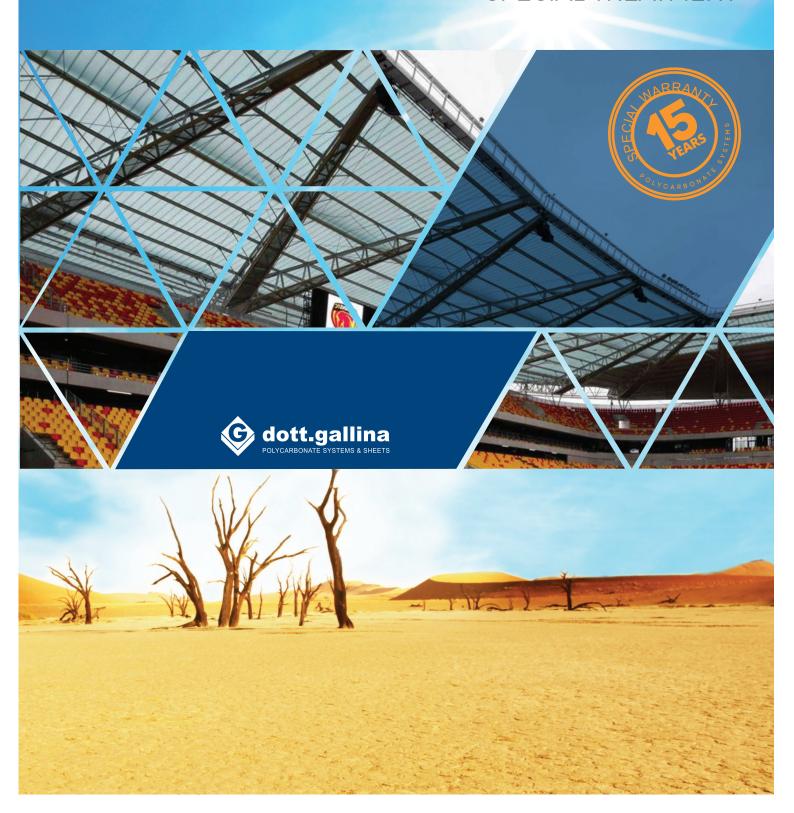


# LONG LASTING POLYCARBONATE SOLAR EXPOSURE APPLICATIONS

SPECIAL TREATMENT









#### **U.V. RAYS ABSORBERS**

Specific additives coextruded into the outer side of the panels cut off the the UV-B and UV-A sections of solar spectrum to prevent polymer damage.

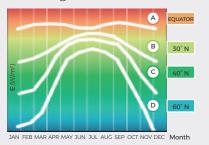
## Features and Benefits

Greater surface protection to ensure incredible weathering resistance performance and to create applications with a longer life-time.

- · Product stability over time
- · Color unchanged despite outdoor exposure
- Minimum increase in surface roughness
- Considerable reduction in the yellowing phenomenon even after a prolonged sun exposure.

### **SOLAR RADIATION**

Distribution of solar irradiation according to latitude and season





Yearly average solar irradiance [kLy]

## 20 40

20 40 60 80 100 120 140 160 180 200 220

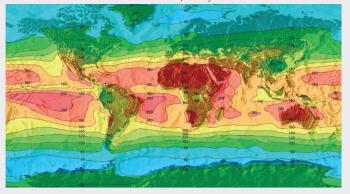
## Performance guaranteed over time

UV-tech provides a superior resistance to atmospheric agents than other polycarbonate products, at the same time it maintains excellent mechanical and aesthetic properties also after prolonged exposure to solar radiation. Minor surface degradation results in a low surface roughness that guarantees:

- · Durability of polycarbonate sheet's typical transparency
- · Opposition to dust sedimentation on sheet surface
- · Continuous cleaning process thanks to the natural action of the rain

Overall these improved characteristics allows for a longer lifetime (+50%), less maintenance costs and better waste management as a result of lower needs for replacing traditional building materials such as glass or PC paneling without UV treatment.

#### World irradiation MAP - developed by **BASF**



## **EMMAQUA Test**

With the aim of ensureing maximum treatment efficiency, several arcoPlus® samples have been analyzed through the renowned EMMAQUA accelerated aging test, which exposes the materials to natural solar radiation in the Arizona desert, considering the real degradation.

(The test results come from a monthly analysis, but they express a yearly equivalent proportional value)

