



Factsheet

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Project: Outer façade of the Priolo power station

Client: ENEL Power

Location: Priolo, Italy

Market segment: Construction

Product: Makrolon® multi UV 3X/25-25

Architects: Michele De Lucchi von AMDL in Milan

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Concentrated power hidden by transparency and weightlessness: the power station at Priolo

Fine feathers make fine birds. Which is why the power station in Priolo, Sicily, was given a new façade after a technical reconstruction process, allowing it to shine again with new brilliance. The weightlessness and transparency of the Makrolon® Multi UV sheets, which are nevertheless extremely robust, emphasise the aesthetic design of the architect Michele De Lucchi of AMDL in Milan.

Makrolon® makes it possible

Only a translucent building material was suitable for translating the architects design into reality. A material which needs to be weather-proof and shatter-resistant, despite low weight and can withstand wind loads of 270 kg/m² at a height of 50 m, without difficulty, was required. After exhaustive tests of the physical suitability and adherence to fire protection and safety standards, a decision was taken in favour of the high-quality polycarbonate Makrolon® multi UV sheets.



High weather-resistance is guaranteed

Sheets of 3X/25-25 with an optimised weight of 4.5 kg/m² were adapted to the requirements for utilisation in the façade of the power station, exceeding the required resistance to wind loads by 20%.

Makrolon® sheets have a special UV coating which is fused permanently with the sheets in a special co-extrusion process. This guarantees long-lasting, high weather-resistance, including hailstones and the hot rays of the Sicilian sun. Another advantage of our sheets is their impact and shatter resistance even under extreme physical conditions. The fire performance of the sheets complies with the regulations and for safety standards for materials used in overhead constructions.

An impression of weightlessness

The outer façade of the Priolo power station encompasses an area of 7,200 m². More than 32 tonnes of polycarbonate sheets were used in the substructure sections. The high elasticity of Makrolon® multi UV was a great advantage because the sheets, 6 metres long and 1 metre wide, could easily be bent into a concave shape and adapted to the profiles of the substructure during prefabrication and sheet pre-forming. The completed construction transmits an impression of weightlessness and openness, a delicate façade for the concentrated force of a power station.