

# ML W20 PHOTOVOLTAIC VENTILATED FAÇADE SYSTEM

The ventilated façade system is a substitute for outer aluminium shells, composite boards and stone lining. Aside from the unquestionably effective appearance, it generates electric power for the building's heating, ventilation and air conditioning systems or other loads as required.

This system is excellent for both new civil engineering projects and refurbished buildings. The applied engineering solutions help compensate for dimensional deviations in the building structure. The backrails (which the façade system is mounted on) are structurally bonded and subject to rigorous strength testing; hence we guarantee high workmanship quality and reliability. The completed back-rail mounted modules are then suspended on the finished support grating. The standard module gap is 20 mm wide. The gaps are concealed by a system of fascias to improve the overall aesthetic effect. The unique design solution and the ventilated façade substructure make it possible to hot swap any module without the need to remove any adjacent modules.

The façade system project can also accommodate different module sizes together for added architectural value and maximum consistency with the existing façade clad-

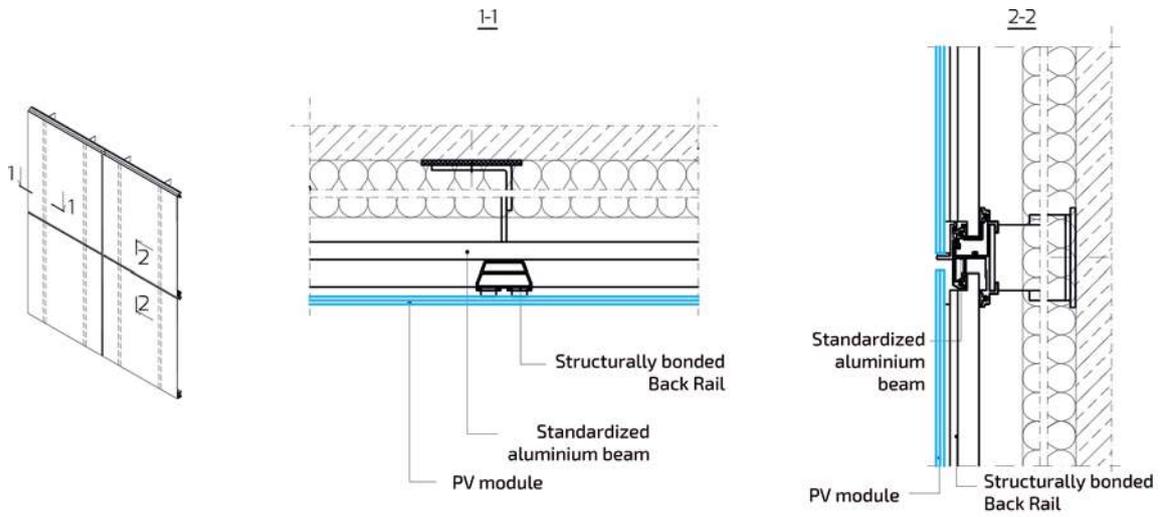
ding. The PV ventilated façade system can be combined with other types of curtain walls (e.g. an aluminium glazed front elevation can be used to install fixed or openable concealed windows), aluminium coffer panels, or can be integrated with LED lamp systems. The PV ventilated façade modules are made as no-frame glass-to-glass units, i.e. with the glass panes as the outer and inner shells between which the PV cells are installed. The solution is highly aesthetic, durable and very safe. The modules are available with opaque and transparent glass. The PV cells can be evenly spaced or in specific patterns for an additional visual effect. Colour film, tinted glass or coloured PV cells can also be applied. The number of possible visual effects is virtually unlimited.

PV cells on a building façade form an RES (renewable energy source) integrated with construction materials and a benefit to the users who can use the electrical power output to feed the connected loads at a lower consumption rate in summer and at a higher one in winter (applications include schools and university facilities). These installations are never at a risk of being covered with snow, and can produce more power from the sun in winter than roof-installed solar panels.

## System technical specifications

Unit power	max. 200 Wp/m <sup>2</sup>
PV cell efficiency	max. 22.5%
Max. operating voltage	1000 V DC
Module types	Monocrystalline, incl. back-contact
	Polycrystalline
	Thin layer
Optional	Transparent
	Printed

Substructure material	Aluminium AW 6063 / AW 6060 alloy
Module to module gap, V/H	20 mm
Maximum module size	3500 x 2020 mm
Structure colour	See RAL palette
Module thickness	3 to 22 mm



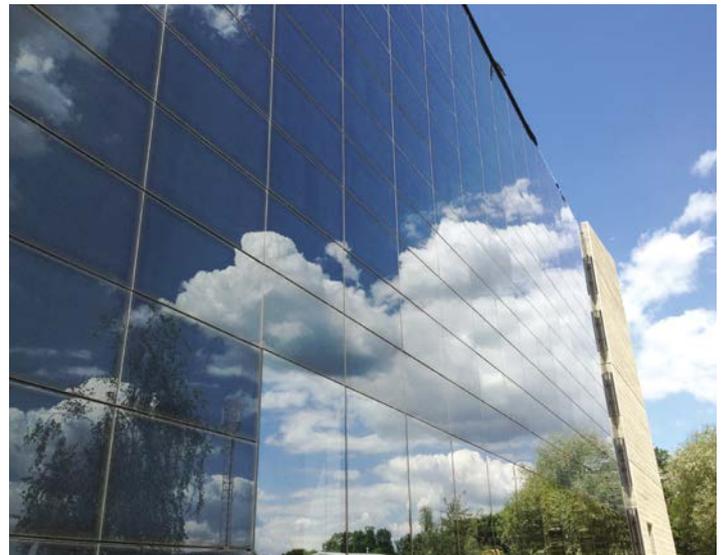
Niepotomice / Indoor swimming pool



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