



Intelligent, connected pumping solutions helped a busy mall provide a great shopping and entertainment experience along with leading efficiencies for reduced costs and sustainable operation.

"This project uses the most modern equipment in Shopping Centre retail to provide our visitors with the best in thermal comfort."

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# **Shopping Patteo Olinda**

Armstrong Design Envelope 4300 Vertical In-Line pumps provide unmatched operating efficiency, plus built-in connected intelligence and performance tracking. The Vertical In-Line configuration saves floor space in the mechanical room and eliminates the need for concrete housekeeping pads.

# **Background**

The city of Olinda is an historic city in the Brazilian state of Pernambuco, located on the country's northeastern coast. Named a World Cultural Heritage Site by UNESCO and noted as one of the best-preserved colonial cities in Brazil, Olinda's 400,000 residents hold great esteem for the city's heritage.

Looking to capitalize on opportunities in tourism, local leaders planned to build a new shopping and entertainment complex along the Praia do Quartel (Quartel Beach). As developers and architects were designing the new complex, Shopping Patteo Olinda, they paid careful attention to efficiency and sustainability in order to properly respect the heritage of Olinda and the mall's pristine location.

Acknowledging the important role of HVAC in the overall visitor experience, design engineers at Meta Medeiros chose an energy-efficient chilled water system that included 21 Design Envelope 4300 Vertical In-Line (VIL) pumps from Armstrong Fluid Technology.

# **Benefits**

The highly efficient HVAC solution helps Patteo Olinda provide a comfortable environment for the thousands of people who visit the mall every day for shopping and entertainment. For sustainability leaders looking to minimize the environmental impact of development, the installed HVAC solution in Patteo Olinda serves as a model in sustainable infrastructure.

Recognizing the forward-looking approach of the developers and the energy saving design of the HVAC system, Patteo Olinda was named Project of the Year by the Sheet Metal Association of Brazil.

# Tech-info

### **Armstrong solutions**

• 21 Design Envelope Vertical In-Line pumps

#### Other Solutions installed

- Dedicated Outdoor System (DOAS) and energy recovery system
- 3 thermal accumulator tanks total capacity of 12,340 TR
- 18 heat recovery units with enthalpy wheels for improved control and recovery up to 530 TR
- 18 fan-coil type air conditioners for low temps in machine rooms and 37 air conditioners for high temperatures, distributed among the mall floors with linear diffusers
- Underground garage exhaust system
- Fully automated monitoring system with 1048 control points