



Avantra Residences – Mascot, Sydney



Background

Incorporating two buildings and a courtyard garden into a sprawling 8762m² plan, the 328-apartment Avantra Residences in Mascot, Sydney is the newest development to showcase 'smart' technologies. Designed by local developer Longton Property Group and delivered by construction company Icon Co, the \$300 million complex incorporates a host of automated systems including electronic noticeboards, fingerprint locks, and integrated shopping and house cleaning management services.

Challenges

The design of the project required that apartments with internal windows opening into the light voids must be protected in the event of fire. Apartment windows had to shut on both local alarm (within the apartment) and on a general alarm; the sheer scale of the task was daunting, and required over 292 individual fire zones. On the roof of the buildings were large custom built glass roof hatches which had to open fully to 90 degrees and fit within the confines of the building structure whilst providing the necessary free air area for smoke relief.

Solution

EBSA met all aspects of this complex brief and successfully delivered one of the largest installations of window actuators, smoke control panels, and roof mounted smoke hatches in Australia. Avantra Residences is now fitted with 766 CDC0252 chain

actuators, 290 RZN and 20 CPS-M smoke control panels from D+H Mechatronic as well as 34 large operable glass roof hatches with 336 actuators, all of which are networked via a fire rated bus system. A general fire alarm in each building is primed to close all windows during a fire event whilst opening the roof hatches, while each apartment has its own smoke detector that ensures all windows in the apartment are closed in the event of a localised fire.

"In the event that a fire occurs, all awning windows close and cannot be reopened from within the apartment," explained EBSA Director, Chris Guy. "At the same time the smoke hatches will drive open to allow the smoke to escape." Both alarm systems are supplemented by a centrally located touch screen that allows the building manager to view and respond to fault and alarm statuses from every apartment with ease.

For the smoke hatches, EBSA partnered with German manufacturer Lamilux to launch the PR60 Glass Roof Hatch system in Australia. This system is certified to EN12101 and integrated perfectly into the existing solution due to the configurable Adcomnet Bus System. Guy described the partnership as "great news, as it adds to the quality solutions [EBSA] can offer".

Learn more about EBSA Pty Ltd and how they can assist you with your next project at www.ebsa.com.au or call 1300 327 200.



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