

## Case Study

# Department of Foreign Affairs, South Africa



**Name:** Department of Foreign Affairs,

**Location:** Pretoria, South Africa

**Architect:** TC Design Architects

**System:** Smoke and Natural Ventilation

**Products:**

- Actuators and accessories  
72No. TGLA 24V linear actuators:
- Control Systems  
36 No. OS2 Control Panels
- Sensors, switches and indication  
Bespoke remote indication repeater panel complete with manual / auto control switch as well as a Fireman's Override Switch. One (1) rain sensor. Set of High temperature silicone cabling reticulation installed in steel conduit and trunking.

## SE Controls systems creates a healthier and safer environment for the Department of Foreign Affairs.

SE Controls' smoke and natural ventilation systems were selected by Robertson Ventilation to be designed and installed into the new development of the DOFA building in South Africa. SE Controls systems provided a comprehensive product suite to meet the design requirements of the smoke and natural ventilation system being designed and installed into the project.

The dual purpose ventilation system had to be designed to meet the stringent requirements of the projects smoke control needs whilst allowing proportional opening and control of the windows in accordance with the air-conditioning systems full fresh air cycle and high level exhaust requirements.

The windows were designed, manufactured and installed by Pre Plan International. In order to ensure that the window actuators provide reliable operation for the life of the building the actuators and windows were cycle tested prior to installation.

The dual purpose system was designed so that on activation of a fire signal from the buildings smoke detection system all 36 of the windows would open automatically over-riding any of the day to day demands such as the rain sensor.

The proportional control for the day to day ventilation is provided by means of a 0-10V control signal from the buildings BMS system (Building Management System) and allows for the windows to be opened in 10% increments. A rain sensor ensured that during incremental weather that the windows close and re-open once rain has stopped.