

## CONSULTANTS SPECIFICATION

### CAR PARK IMPULSE SYSTEM

The car park ventilation system shall control and remove pollutants, such as Carbon Monoxide, on a day to day basis, whilst ensuring that smoke is removed quickly and efficiently in an emergency.

The car park Impulse Ventilation System shall consist of a number of strategically positioned acoustically treated Impulse fans distributed throughout the car park, the positions shall be in accordance with the specialists design & layout drawings.

Carbon Monoxide & smoke detectors shall be strategically placed in accordance with the specialists design and shall control the operation of the impulse fans in individual areas appropriately. By controlling the fans in this way the units will contain pollutants and smoke within a defined and predetermined corridor and channel its flow to the extract point where it can be evacuated safely to atmosphere by the main exhaust fan units. The control system ensures that only the fans that can directly effect the ventilation requirement are in operation. Fan specification.

The Nuair SVTC unit comprising centrifugal impeller, motor and all assembled components shall be certified for high temperature operation at 300°C for 2 hours, the range shall have been type tested to EN12101-3. The Axus Main exhaust units and ancillaries shall have been type tested and certified for high temperature operation of 300°C for 2 hours to EN12101-3.

The units shall be either 2 speed or inverter driven providing, low speed for day to day environmental extract and one off operation for emergency extract.

The Nuair SVTC unit shall have inlet guards for safety purposes and to prevent debris being sucked through the fan. It also has a specially designed airflow deflector to direct the jet stream from the fan at the required angle sufficient to overcome the natural buoyancy effect of the smoke.

The car park impulse units shall be the SVTC type and the main Exhaust units shall be the high temperature AXUS type all as manufactured by Nuair.

### COMPLETE SOLUTION FOR CAR PARK VENTILATION

Nuair Smoke Design Partners have over twenty years experience in the smoke ventilation industry and their project managers were instrumental in establishing the first Car Park impulse system in the UK, designing, installing and commissioning the system.

Utilising the latest computer aided design, computational fluid dynamic technology and extensive testing, to master the physics and behaviour of fires within buildings. By understanding the movement of the fire and smoke and combining that with the knowledge and expertise of fire engineering, ventilation and containment principles, ensures the design of a bespoke smoke ventilation system to protect any building and its occupants whilst providing safe, healthy, clean and welcoming car parks.

#### Complete solutions for Car Park Ventilation

##### Services offered include:

- Conceptual design.
- Dedicated technical in-house support team.
- Regulatory compliance/co-ordination.
- UK's largest sales engineer network.
- Onsite liaison.
- Installation.
- Commissioning.
- Maintenance.
- Whole life support facility.

Contact Nuair to discuss your requirements or for a focused and highly relevant CPD seminar at a location to suit your team Tel: 029 (20) 858 200.

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### FAN SPECIFICATION

The Nuair SVT2 impulse unit comprises of a high temperature axial fan with specially designed inlet and outlet attenuators which, along with the fan unit, are encased in a Galvanised steel acoustic enclosure.

The Nuair SVT2 unit comprising fan/motor assembly, and inlet and outlet silencers shall be certified for high temperature operation at 300°C for 2 hours, the range shall have been type tested to EN12101-3. The Axus Main exhaust units and ancillaries shall have been type tested and certified for high temperature operation of 300°C for 2 hours to EN12101-3.

The units shall be either 2 speed or inverter driven providing, low speed for day to day environmental extract and one off operation for emergency extract. They shall also be suitable for reversible operation.

Fully reversible options (i.e similar duty in both airflow directions) are available, please contact Nuair for details.

The unit shall have a unique mounting bracket, which shall enable the bracket to be positioned as a "first fix" component with the unit being fitted as a "second fix" component, avoiding possible mechanical damage.

The Nuair SVT2 unit shall have inlet guards for safety purposes and to prevent debris being sucked through the fan. It shall also have a specially designed airflow deflector to direct the jet stream from the fan at the required angle sufficient to overcome the natural buoyancy effect of the smoke.

The car park impulse units shall be the SVT2 type and the main Exhaust units shall be the high temperature AXUS type all as manufactured by Nuair.

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