

## Environmental & Smoke Control In Enclosed & Basement Car Parks Using Impulse Ventilation

- Current Options for Car Park Ventilation
  - i) Natural ventilation
  - ii) Assisted natural ventilation
  - iii) Ducted systems
  - iv) Impulse dispersal systems
  - v) Impulse smoke control
- The Origins of Impulse Ventilation in Tunnel ventilation
- Adaptation of Impulse Ventilation for Underground Car Parks
  - i) fire detection
  - ii) CO & LPG monitoring
  - iii) Control system
- Principles of Operation
- Achieving Smoke Control
- Compliance With Building Regulations
- Fire Tests ~ Video footage
  - i) Cold smoke tests
  - ii) Tests with real car fires
- Results of Actual Car Park Fires
- Summary of Benefits of the Impulse Ventilation System