

# AIRAH

## Impulse Fans and QFES Building Approvals



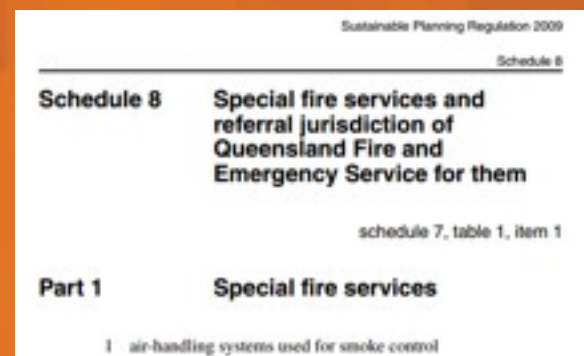
# BACKGROUND

- QFES has a role in Building Approvals;
- Advice role / Referral agency;
- QFES Assessment and Inspection activities;
- Engagement with Certifiers, Fire Engineers, less so with Mechanical Services Designers;
- Car park ventilation systems has some impact for QFES Building Approvals work;
- Jet fans / Impulse fans – QFES does not object to these devices being installed– discussion.



# QFES Building Approvals

- DTS (prescriptive)– Special Fire Service;
- Car park ventilation systems– air handling systems for smoke control;
- Performance Solutions: QFES has wider jurisdiction;
- Impulse fans / Jet Fans were/are predominantly Alternative Solutions ( Performance Solutions).



# QFES ISSUES

- Potential delay on the activation of sprinkler system;
- The design should demonstrate that it does not induce a delay;
- Smoke spread in the compartment;
- Fire growth not controlled;
- Sprinkler skip;
- QFES observed extraction risers adjacent to fire stairs;
- How is the early shut down of fan achieved;
- Fire Detection system compatibility;
- Coordination of Fire Engineering & Mechanical Engineering;
- Demonstration of shutdown.



# CURRENT STATUS

- The Performance Solutions are in most cases, applicable for impulse fans in car parks;
- QFES has consistently called for coordination of the design (Fire & Mechanical);
- Manufacturers have further developed the impulse/jet fans;
- Australian Standards have been revised;
- FRNSW has developed a guideline and QFES has provided general agreement;
- And QFES still does not have an objection to impulse fans.

