

SMOKE CONTROL SYSTEMS



PRASHANT PATEL
BUILDING & ENGINEERING

DIFFERENT TYPES OF SMOKE CONTROL SYSTEM

- MECHANICAL SMOKE CONTROL
- NATURAL SMOKE CONTROL
- STAIRWELL / ESCAPE ROUTE PRESSURIZATION SYSTEM
- FIRE/SMOKE DAMPERS

MECHANICAL SMOKE CONTROL SYSTEM

- Specified System 13.1
- AS 1851
- Interfaced with emergency warning system(s)
- Smoke to be removed or controlled by mechanical means
- Doesn't apply – Air handling system operation as smoke clearance mode when emergency warning system activates
- Annual inspection and maintenance



NATURAL SMOKE CONTROL SYSTEM

- Specified System 13.2
- AS 1851
- Interfaced with emergency warning system(s)
- Smoke to be removed or controlled by natural means
- High level louvers / openings in atrium / garage door opening creating a draft to apex
- Annual inspection and maintenance



STAIRWELL / ESCAPE ROUTE PRESSURIZATION SYSTEM

- Specified System 5
- AS 1851
- Interfaced with emergency warning system(s)
- Pressurizing / protecting the egress path
- Fan on top / each lever of the stairwell
- Annual inspection and maintenance



FIRE/SMOKE DAMPERS

- Specified System 9
- AS 1851
- Can be Interfaced with emergency warning system(s)
- Fire / Smoke barrier – controls the spread
- Activation by internal detector / interface – Heat 71° C
- Annual inspection of 20% per year, full if 10% of that fails (50%)
- Must have access panel installed



QUESTIONS

THANK YOU

PRASHANT PATEL – 09 391 2929 | 021 029 29290 | PRASHANT@BUILDENG.NZ

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