



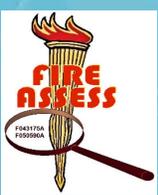
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NEW DIRECTIONS IN BUILDING SERVICES
NEW DIRECTIONS IN BUSINESS SAFETY
FIRE ASSESS CFSF
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Providers of:
Virtual Skills Training



4 Stages of Fire



INSTALLATION AND CERTIFICATION OF FIRE AND SMOKE DAMPERS

FOR

N.S.W. EP & A ACT (1979) AND REGULATIONS 2021 +
BUILDING DEVELOPMENT & CERTIFIERS ACT 2018

**Environmental Planning & Assessment (Development
Certification & Fire Safety) Regulation 2021 and
Building & Development Certifiers Amendment
(Miscellaneous) Regulation 2022**

Standards Revised 2015



A number of Standards affecting fire & smoke control were revised in 2015 (AS/NZS1668.1, AS1670.1, AS1682.1&2) and became dominant for any new developments reflecting NCC/BCA from May 2016

This has been followed through into NCC/BCA 2019 and NCC/BCA 2022 but remembering that AS1530.4 references the 2014 version and earlier fire test versions are deemed obsolete and such certificates shall no longer be valid from September 2022.

AS1682.1&2-2015

changes from 1990 version in the 2015 version

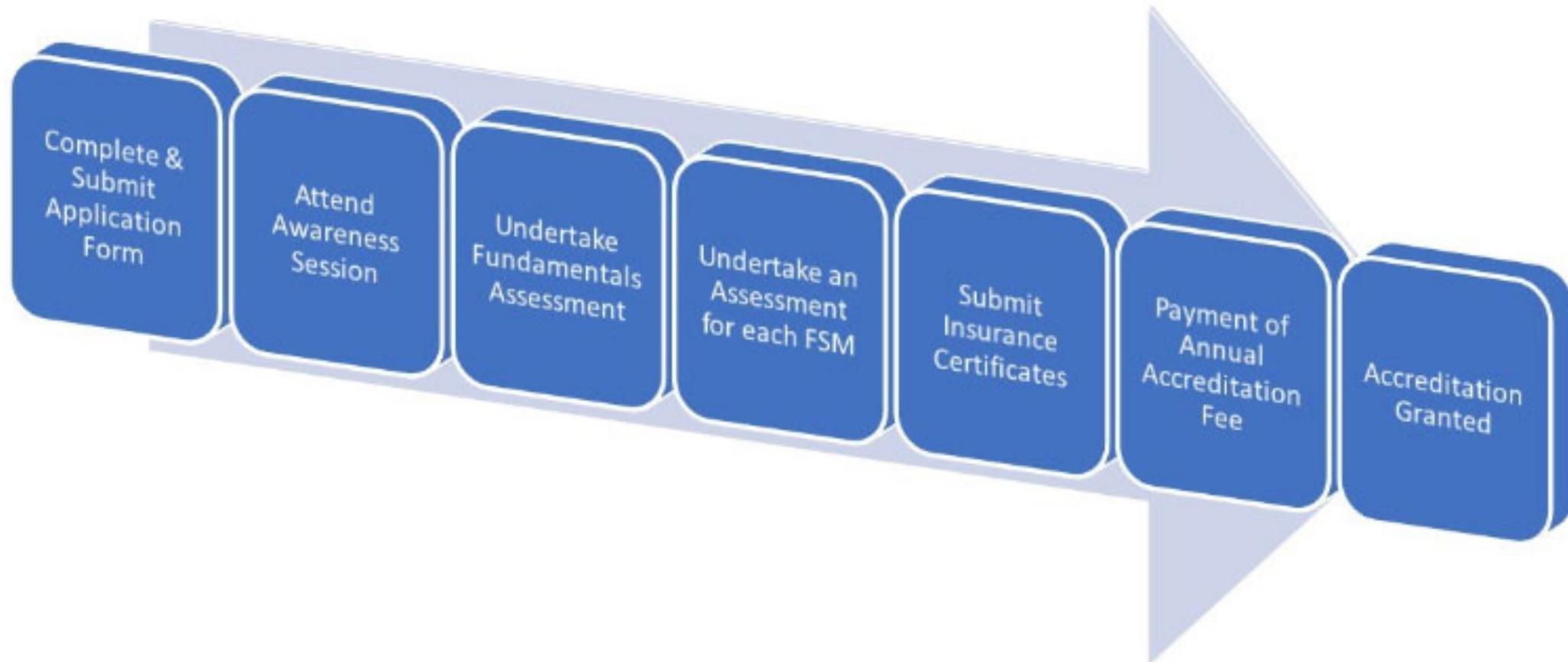
- 🔥 Smoke dampers and air dampers added to the standard
- 🔥 Performance based upon high temp leak tests rather than visual observation.
- 🔥 Performance of fire dampers and smoke dampers nominated
- 🔥 Sponsor of tests to provide installation detail and such installation details shall have precedence
- 🔥 Additional labelling requirements
- 🔥 Installation requirements for smoke dampers and air dampers provided
- 🔥 Breakaway jointing amended
- 🔥 Typical commissioning check sheet included
- 🔥 Baseline data introduced
- 🔥 Periodic inspection guide provided.

This Skills Course

- This Fire & Smoke Damper Workshop is recommended for all who wish to gain knowledge and understanding regarding the installation and performance requirements of such devices, the attendance of a presentation equivalent to that presented today, and by reference to the workshop notes (technical and legislative) – those attending shall be provided with a statement of attendance.
- As this workshop is without an examination to attest to the attendees proficiency, it in no way endorses that they possess competency and this competency shall need to be verified by on the job supervision and assessment of the attendees work.

- An **objective** of the “fire smoke & air damper workshop” upskilling, is to provide certifier confidence in what has been installed and serviced.
- A lot of the process detailed in the Lambert Report Recommendations involves the need for the defined role “Accredited Practitioner (Fire Safety) in both assessment and design (previously CFSP). Currently the accrediting authority for this is the Fire Protection Association of Australia under the FPAS criteria.
- From 1st July 2021, only Accredited Fire Safety Designers may specify and design any essential service where there is a Class 2 (apartments) portion and this is now being rolled out to cover all building classes.

Transitional Accreditation (FPAS)



Accreditation Process for Fire Safety Assessment

This is Required from all assessors from 1st July 2020, and all designers (for Class 2) from 1st July 2021.

This workshop does not provide you the designation: **Accredited Practitioner Fire Safety** for *assessment* of Fire & Smoke Damper Systems

(For this you need an APFS Assessor Number)

What the fire & smoke damper certifier course does do, is provide the accredited practitioner (fire safety), who has paid the required Professional Indemnity Premium and registration fee annually to be on that Accredited Assessor register, the review of the installation and servicing as well as presentation of evidence (commissioning, O&M Manual and service test result) and a walkthrough observation check, allows the APFS to form the view that the system performs as required.

Note that Fire & Smoke Dampers is one of the 36 categories for APFS assessment.

Note that:

the current accredited practitioner (fire safety) scheme is transitional, expiring on 1st July 2024, and Accredited Assessors shall need to meet additional Qualified Pathway requirements for the measures they wish to be accredited to continue as assessors

NCC-2022 numbering system

NCC-2022 will be adopting a changed clause reference system called:
Section-Part-Type-Clause (SPTC)

The first letter indicates which NCC section sits within, or if the letter “S” is used, that the clause is part of a “Specification”

The second letter indicates the clause Type and may be G, O, F, P, V, D or C with:
G=Governing requirement, O=Objective, F=Functional Statement,
P=Performance requirement, V=Verification method, D=Deemed to Satisfy
C=Clause in a specification.

Unnumbered clauses are informative and have no regulatory requirement



FIRE PROTECTION

PAPER No. 1

FIRE & SMOKE IN BUILDINGS





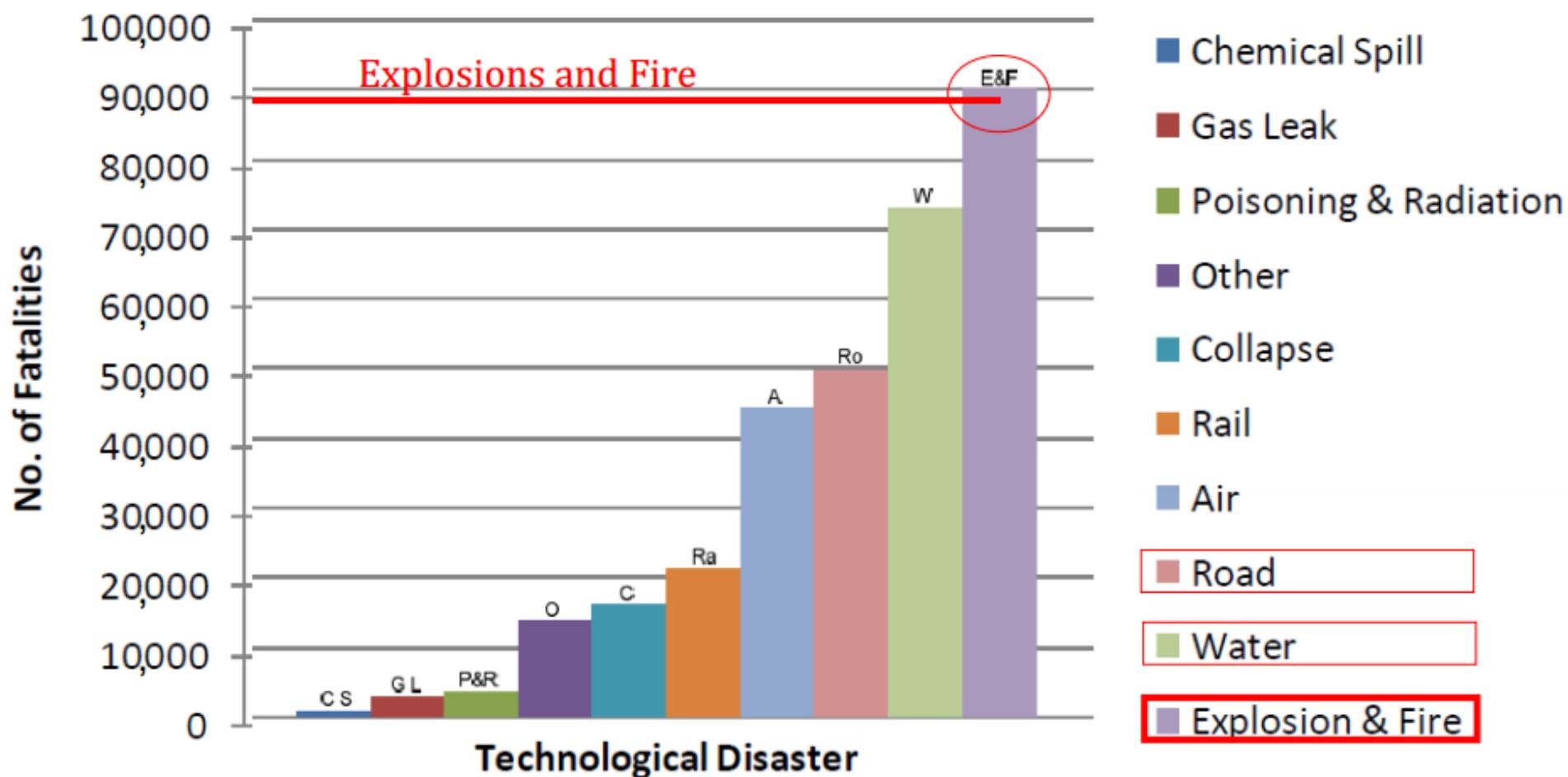
WARNING

Commercial contract terms for the mechanical works still have precedence over any controversial material presented in this workshop.

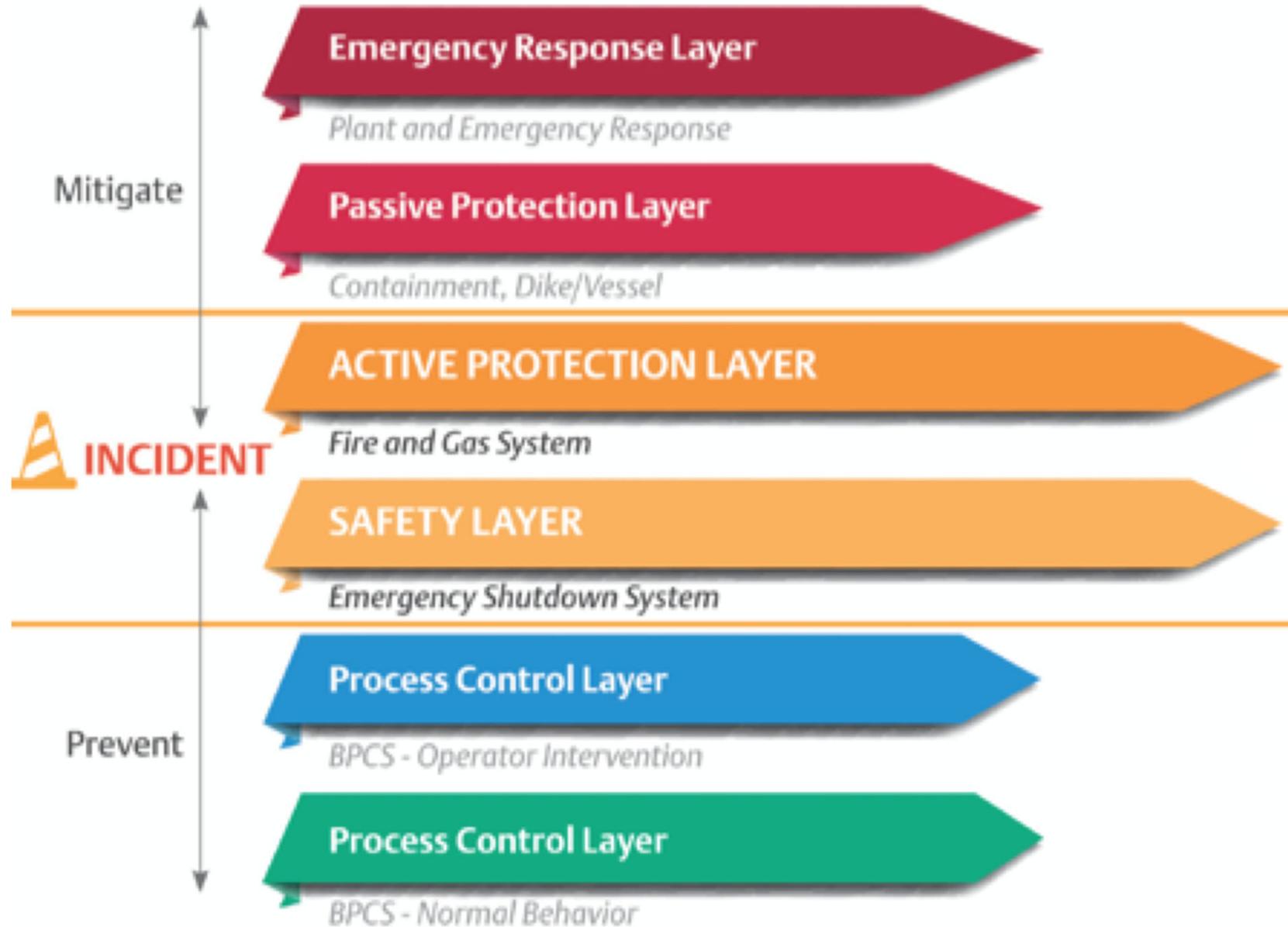
FACT:

1. **The Titanic complied with all codes,**
2. **Lawyers can make any device legal,**
3. **Only YOU can make them safe
& keep them safe!**

Technological Disasters 1900-2000



NOTE: Immediate fatalities as a proxy to overall damage. Disaster defined as >10 fatalities, >100 people affected, state of emergency or call for international assistance.



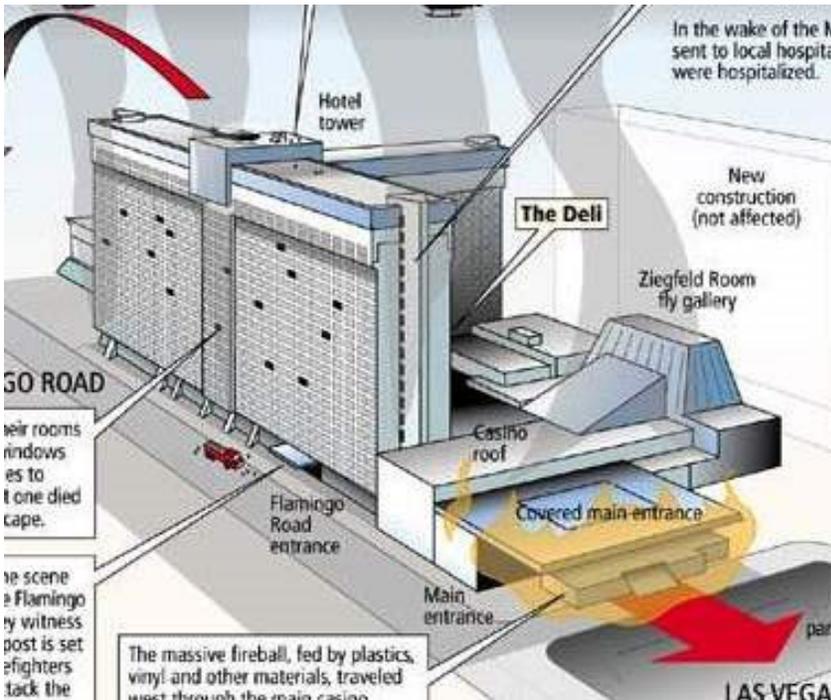
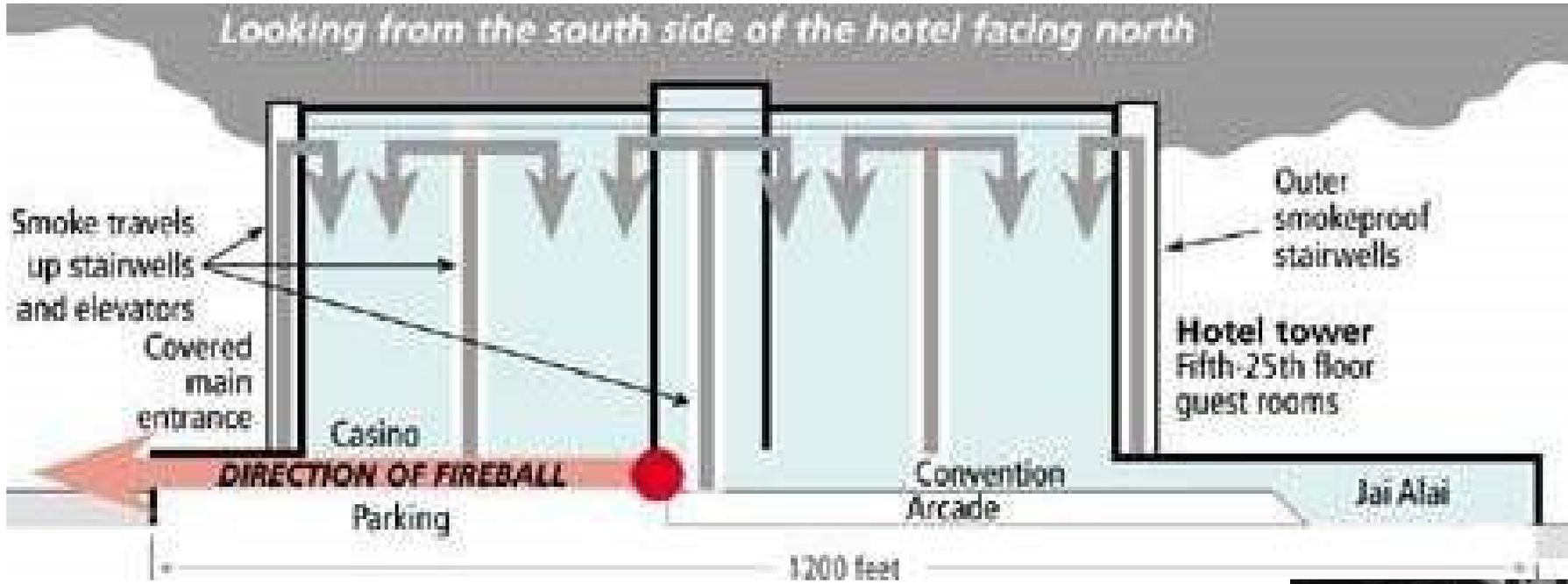


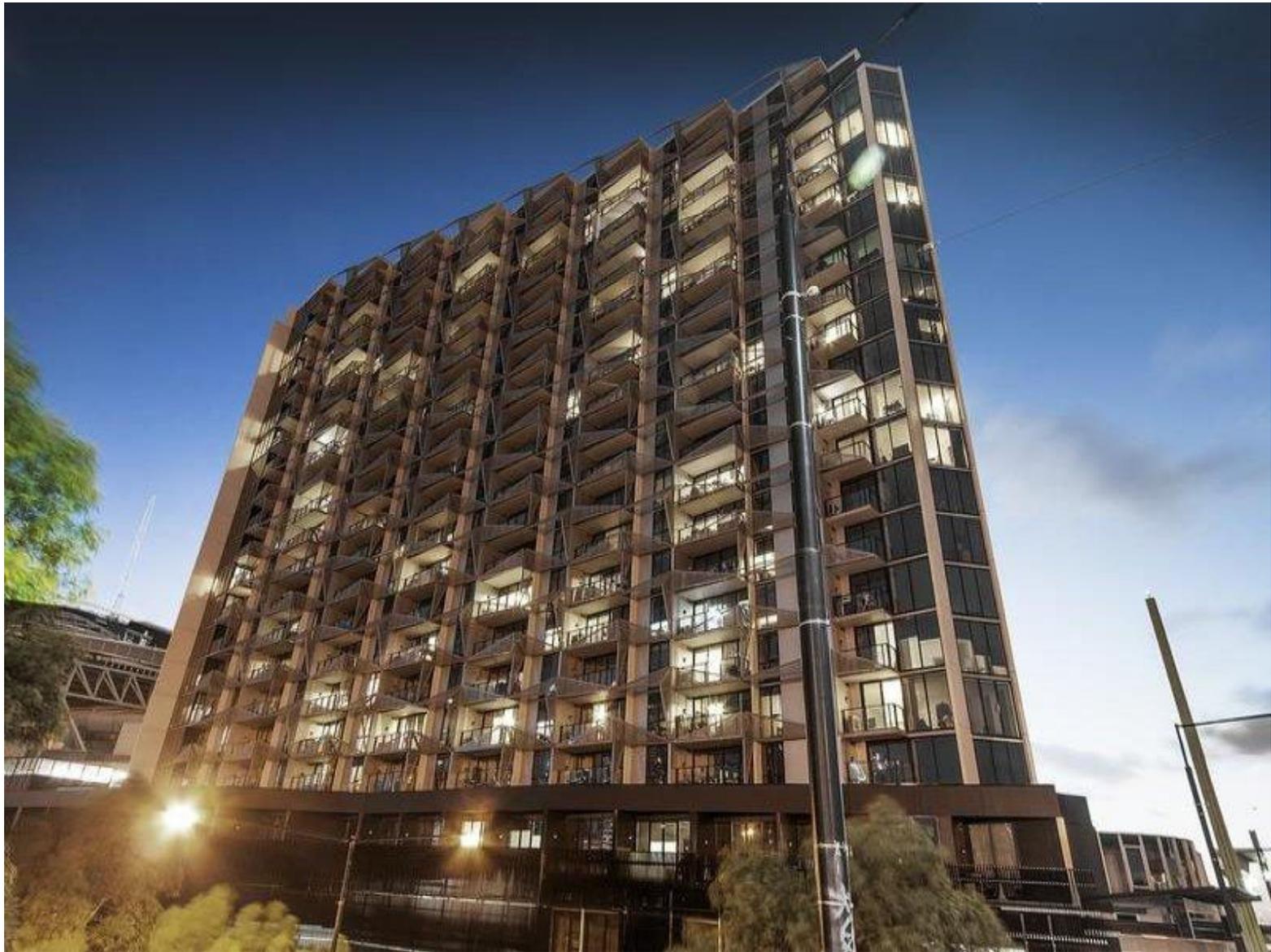
Fire can EAT anything



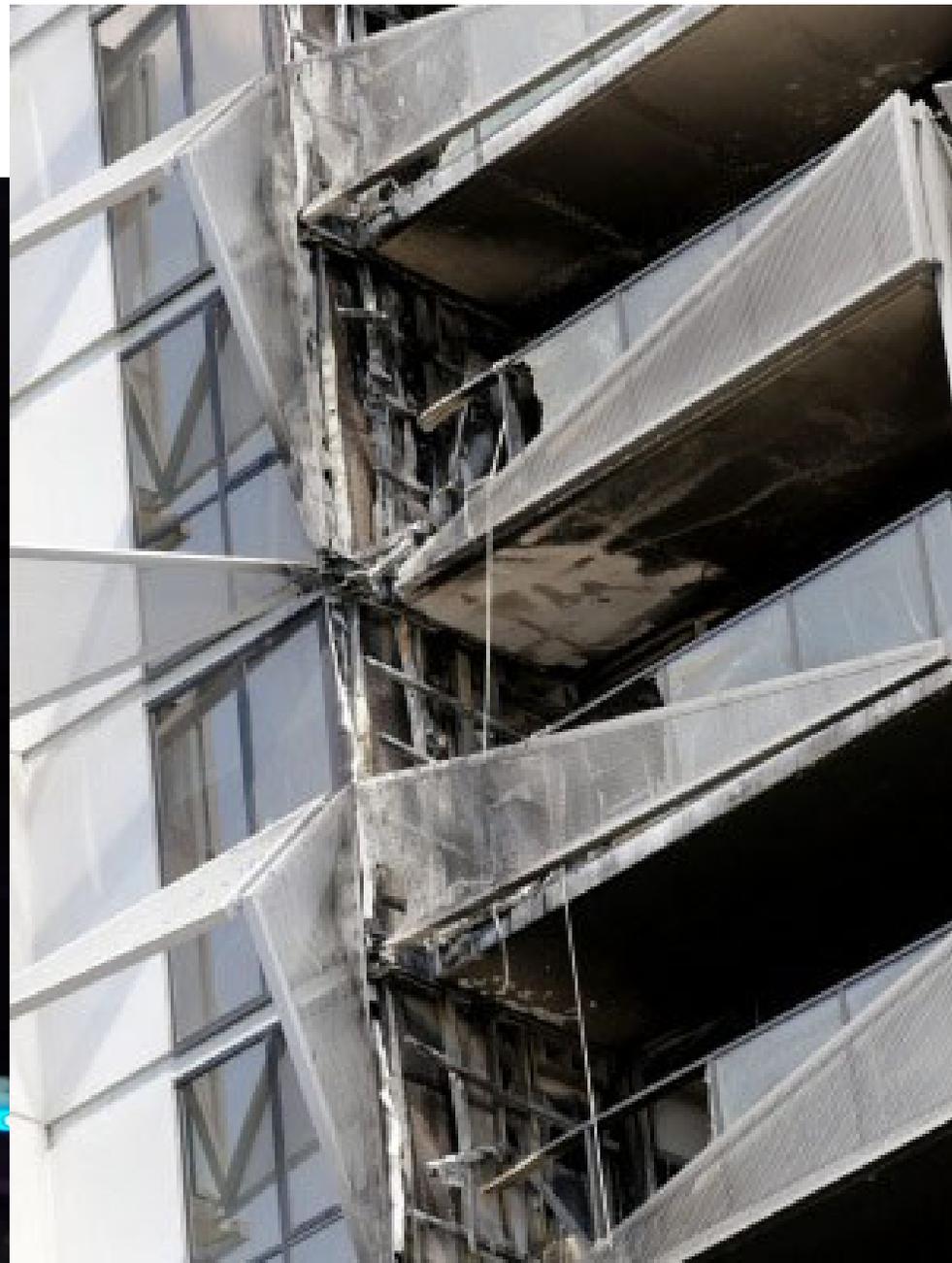


MGM Grand Nevada 21st November 1980 – 85 died
78 guests, 7 staff – injured 588 guests & 25 staff.



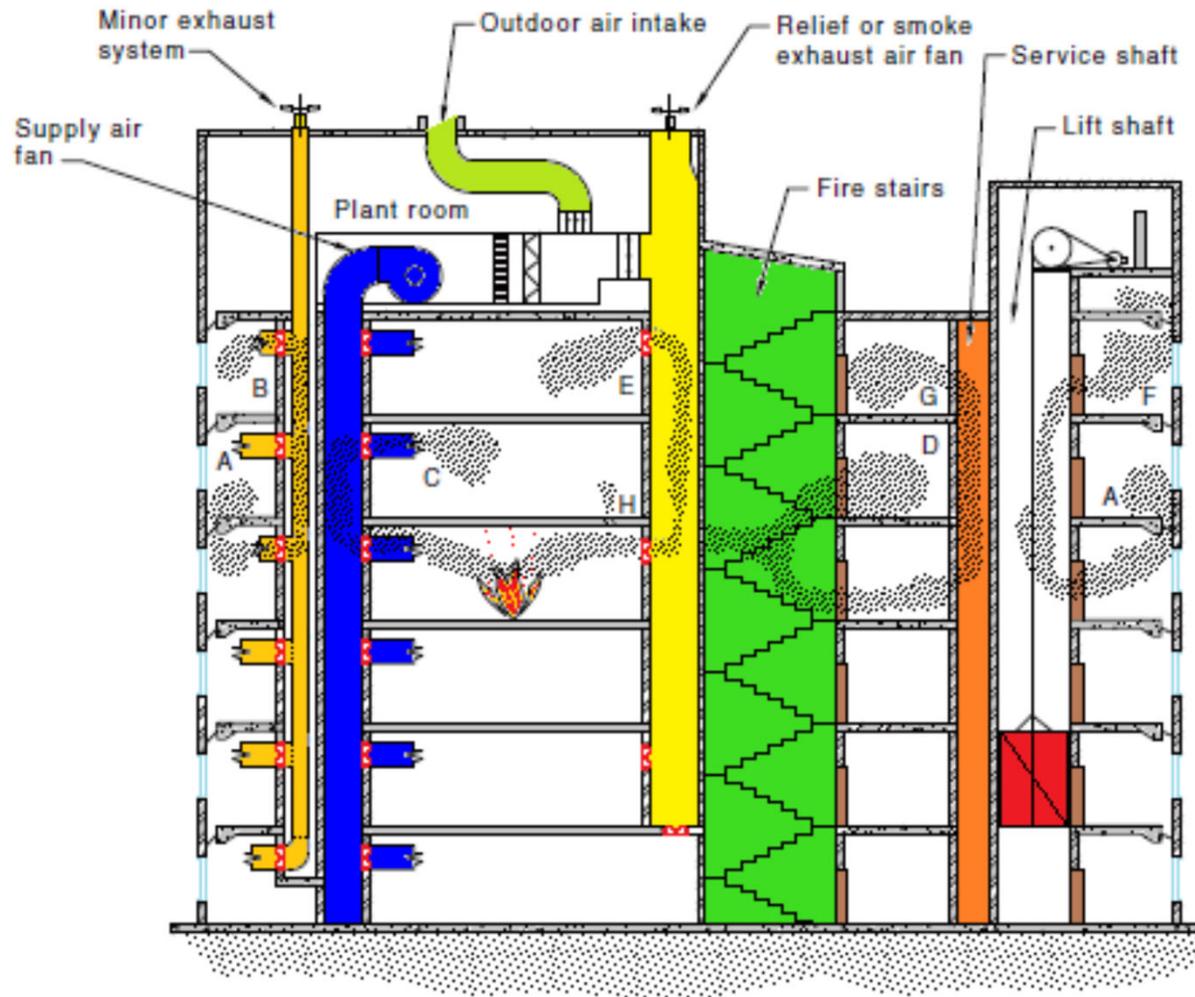


673 Latrobe St Docklands (Melbourne) 2014



Fire spreads quickly - vertically





LEAKAGE PATHS SHOWN ABOVE:

- | | |
|--|---|
| <i>A Leakage between floors via poorly sealed or return air path</i> | <i>E Leakage between floors via relief spandrel</i> |
| <i>B Leakage between floors via ductwork of minor exhaust, e.g. toilet exhaust</i> | <i>F Leakage between floors via lift shaft</i> |
| <i>C Leakage between floors via supply air ductwork</i> | <i>G Leakage between floors via service duct or riser shaft</i> |
| <i>D Leakage into fire stairs and then on to typical floors from fire stairs</i> | <i>H Leakage between floors via gaps or cracks in structure</i> |

INSTALLING FIRE & SMOKE DAMPERS

- Why do we need to install them?
- Who requires us to install them?
- Where must they be installed?
- How do they work?
- How are they installed?
- How can the community be sure they are installed correctly?

CARING FOR FIRE & SMOKE DAMPERS

- Do they need regular testing?
- Do we need to maintain them?
- What happens when they must be installed in “special” situations?
- Can we fix incorrect installations?

END OF PAPER No. 1