



Following the 2011 fire at the Diamant Hotel in Canberra, which caused over \$10million in damage, Allianz Insurance instructed GKA Investigations Group to examine the fire scene and determine the circumstances the cause of the fire.

The subsequent report was accepted by the ACT Coroner and provided the basis for a major recovery action mounted in the Federal Court by a group of aggrieved parties.

This Case Study underscores the need for a comprehensive forensic and factual fire scene examination report as the basis for successful liability and recovery proceedings.

A PIECE OF CANBERRA'S HISTORY

A coveted heritage building, the Diamant Hotel, once graced by visiting Parliamentarians, home to Clive Packer, Albert Namatjira and the site of the Mabo land-rights decisions, stands as a bastion to Canberra's past.

The building has undergone several incarnations during its ninety years. Built as Hotel Acton it became a hostel during the depression, later government offices and was reborn in 2006 as the Diamant Hotel - part of the luxury New Acton development. Sadly, it was almost lost during a devastating fire five years later.



The fire burns in the Flint Restaurant area

THE DEVASTATING FIRE

On the 23 June 2011, fire crews were called to a blaze that was spreading quickly and extensively. The fire burned for a number of hours before being suppressed. There was no loss of life but as Superintendent Tony Flaherty reported 85 per cent of the restaurant and office complex was gutted.

"Construction of the building certainly did affect the firefighting efforts in that it did have timber and the like in it," he said. "Once the fire did get hold it managed to spread extensively and quickly through the building."

Damage was estimated in excess of \$10 million and many livelihoods were adversely affected in the following months as the site was secured and made safe.

A CORONIAL INQUIRY

ACT Chief Coroner Lorraine A. Walker presided over the Inquiry in November 2012. She determined that this was not a malicious act but a series of actions and events that had catastrophic yet avoidable consequences.

CORONIAL INQUIRY RECOMMENDATIONS:

- Stricter staff training – where cooking equipment is installed in a commercial kitchen all staff be required to sign that they have read the instruction manual as to its use before being allowed to operate it.
- Strong certification processes to be in place
- Clear documentation for contractors, in which the scope of the works to be undertaken, particularly where sub-contracted, and the scope of work to be certified, are clearly delineated in writing. All certifications to support a Certificate of Completion should append to them the letter of instruction delineating what is required to be certified.



The Wood fired oven that was at the heart of the blaze.

A FAILURE OF SYSTEMS

In 2006, New Acton, containing the refurbished and newly named Diamant Hotel, was being completed and commercial kitchens installed.

Ductwork was being designed and, in accordance with Australian Standards prevailing at that time, there was no requirement for separate flues for each cooking appliance. The new leasee, however, decided to have a wood-fired oven in the kitchen. Later standards required separate exhaust arrangements for solid fuel appliances.

The sub-contractor for the kitchen ductwork was a refrigeration mechanic by trade and owner of an air conditioning company. An easy choice possibly, he was already involved in the refurbishment, but with no experience installing commercial kitchens it was perhaps a foolhardy undertaking - organising the manufacture, having no detailed plans to work from nor familiarity of the applicable Standards. The mechanical specification drawings complied with the Code, yet the plans were not complied with!

When it came to final certification of the work a number of specialist certifications from the project manager were relied upon. It appeared that various letters and stages of certification and examination of the ductwork never took place - assumptions were made that the certification covered the kitchen ductwork as well as the air conditioning, however it is not clear it did. It became apparent, during a reconstruction, that the ductwork didn't comply with the design specifications - having only two access panels in the relevant ductwork, insufficient to allow effective cleaning.

Consequently, cleaning of the ductwork, about four times a year, was hampered. Given the limited access points it wasn't possible to reach the extremities of the duct where grime accumulated, particularly on two right-angled bends.

It comes then as no real surprise that during a busy restaurant period, when the wood-fired oven was being used extensively, a fire broke out in the duct.

FIRE SCENE INVESTIGATION

Chief Fire Examiner Greg Kelly headed the site examination and he was able to quickly isolate the dirty exhaust ducts above the pizza oven as the source of the fire.

A spray filter attached to the wood-fired oven to cool gasses entering the ductwork had been turned off by kitchen staff, apparently it caused smoke to come back into the restaurant. It was designed to extinguish any embers floating upwards and drop them into a collection tray. Had it been in operation, it could have curtailed the fire.

The ductwork was concealed by a snugly fitting mezzanine chipboard structure. The proximity of the ductwork to the mezzanine had caused the pyrolysis on the chipboard and clearly the heat from the ductwork was a significant risk for a future fire.

Elements of the exhaust ducts breached the building standards and it was discovered that the ductwork itself was very thin.

Ceiling sprinklers in the building were problematic so an alternative design, involving the erection of a firewall between the Flint and Bicicletta restaurants was installed. Luckily this held up.

KEY PROBLEMS:

1. The engineering specifications were not followed. The number of access points to the flue detailed on the specifications were not included in the finished product.
2. This failure was not picked up on inspection/certification.
3. It was impossible to effectively clean the ductwork. If the ducts were cleaner, the fire may not have taken hold.
4. A sprinkler system inside the flue that was supposed to cool down gases and extinguish embers going into the ducts had been turned off.

Greg Kelly, GKA Investigations Group.



The burnt out area of the Diamant Hotel complex

THE SCOPE OF THE INVESTIGATION

Whilst the source of the initial fire was quickly established, the fact that it had spread so far and caused so much damage raised many other questions.

The subsequent investigation covered:

- the original refurbishment work
- the heritage requirements
- the lack of a sprinkler system
- the project management process
- the design, manufacture and installation of the ducting
- the certification process
- the restaurant operating procedures

THE RECOVERY CLAIM

In 2014 the Diamant Hotel saga hit the Federal Court.

A confidential substantial multimillion dollar settlement in favour of the property insurers reflected the apportioning of responsibility between a number of parties and brought to a close one of GKA Investigations Group's longest open court matters. During the 6 years, the company has made no fewer than 5 expert submissions to both the Coronial Inquiry and the Federal Court.



At the request of the ACT Coroner, the ductwork was reassembled so that the Court could fully understand the circumstances of the fire.



Fire Scene Examiner Mark Pellegrino examines the fire scene from above.

THE POWER OF THE TRUTH

A timely professional fire scene investigation was able to establish the circumstances surrounding this catastrophic fire and provide the basis for the apportionment of responsibility, the allocation of recovery monies and the basis for Coronial recommendations to prevent any similar occurrence.

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