



Isle of Man
Government
Reilrys Ellan Vannin

Department of Environment, Food and Agriculture

Rheynn Chymmyltaght, Bee as Eirinys,

HEALTH & SAFETY AT WORK INSPECTORATE:

INVESTIGATION OF THE MOUNT MURRAY HOTEL & COUNTRY CLUB FIRE

Summary

1. Roy Michael Cross trading as Roofcraft was appointed to undertake repairs to the roof of the accommodation block of Mount Murray Hotel and Country Club following snow storms which had occurred in the previous winter.
2. The works included the replacement of the lead sheets in roof valleys with fibreglass.
3. In November 2013 Roy Michael Cross, trading as Roofcraft assisted by 2 of his employees stripped the lead and began the process of laying fibreglass resin onto plywood sheets in the valley above the accommodation block.
4. 2 to 3 rows of roof tiles were removed from the lower part of the valley so that protective weather flashing could be created underneath the tiles and existing bituminous underfelt to create a weatherproof seal.
5. While laying fibreglass on the 6th November 2013 it started to rain, work was abandoned for the day. The area was covered to keep the rain out.
6. When the contractors arrived the next day they discovered that rainwater got in and spoilt the fibreglass previously applied.
7. When newly laid fibreglass becomes wet, the curing process can be affected and in some cases a satisfactory cure will not take place.
8. Mr Cross and his employees attempted to clear the roof of the spoilt materials using shovels, rags and their gloved hands.
9. The plywood needed to be dried off in order to replace the fibreglass. In order to speed up the drying process Mr Cross used a gas fired blow torch he borrowed from the hotel to attempt to dry the damp plywood previously coated with the fibreglass materials.
10. A witness reported that the surface caught fire very quickly and the flames spread rapidly to the other roofing materials including the bituminous felt and timber roofing materials.
11. One of Mr Cross's employees went to get the fire extinguisher that had been previously placed on the scaffold tower but when he returned the valley was full of smoke and was unable to use the extinguisher, he left via the scaffold.
12. Mr Cross was able to telephone the Fire Service before escaping from the roof. He was assisted in escaping the fire by golf course staff who, having seen the situation brought a tele-handler from the golf club to assist him in getting down from the roof. He escaped the incident with only minor burns to his hands.

13. The weather conditions at the time meant that there was a strong south westerly wind with average speeds of 20 to 30 mph and gusting up to 40mph. This contributed to fire spread within the roof space.
14. The fire alarm panel print out showed that the alarm activated soon after the fire took hold. The inputs on the alarm panel coincide with the spread of the fire. The fire alarm and emergency systems worked satisfactorily and about 100 staff and guests evacuated safely.
15. The fire was halted at the link bridge between the accommodation block and the reception area due to a combination of the steel cladding present underneath the roof tiles which was a different construction to the rest of the roof and the fire and service's application of water in that area to contain the fire.

Failings

16. Mr Cross carried out the work on the roof in a manner that was not safe and despite being a very experienced roof worker he failed to fully understand the risks involved in using flammable substances and failed to put procedures in place that would protect his employees, the hotel staff and guests from those risks.
17. It was established that Mr Cross did not fully consider the dangers and had not implemented any safe systems of work. There was no agreed means of raising an alarm to warn hotel staff or guests in the event of an outbreak of fire on the roof, he did not familiarise himself with the hotel emergency systems and procedures.
18. Mr Cross did not liaise with hotel management concerning work he was undertaking on the roof. Duty managers reported that Mr Cross did not report to the hotel reception in accordance with hotel policies and procedures. The duty manager was not aware that Mr Cross was working on the roof of the hotel, more importantly that he was using a gas fired blow torch on the roof above where hotel guests were sleeping. He did ensure that a portable fire extinguisher was available but this was left on the scaffolding and wasn't placed in close proximity to the work area.
19. Mr Cross did not himself have and did not issue his employees with all of the appropriate personal protective equipment such as eye protection, suitable overalls, gloves or respiratory protection required when working with hazardous fibreglass materials.

Investigation

20. Mr Cross has not given an account of the events on the day of the fire but the expert report states the fire started because a gas fired blow torch was used to dry off plywood previously coated with flammable roofing materials which took hold spreading into the roof space and to other parts of the building.
21. There were anecdotal reports that the fire appeared to have taken hold on the surface of the roof tiles and that the tiles were flammable. Due to the anecdotal nature of the reports it was deemed important to test the tiles to determine whether or not they were flammable or easily combustible.
22. Testing of the tiles was undertaken by the Fire and Thermo fluids Department, Health and Safety Laboratory, Buxton. These tests determined that the tiles were

not flammable nor were they easily combustible but the tests did conclude that they were combustible. However a flame could not be sustained on the surface of the tile positioned at an angle similar to that of the hotel roof tiles when a blow torch flame consistent to the one used by Mr Cross.

23. Inspectors tested the tiles with a gas fired blow torch with operating temperatures in excess of 1,800°C for a period up to 10 minutes, outside in windy conditions and a flame could not be sustained for more than a few seconds after the flames was removed.
24. It was established via suppliers of roofing materials that resins, similar to the ones that had been applied to the plywood sheets would still have been emitting flammable vapours following the overnight rain and would have been emitting vapours until cured.
25. The Fire Service was satisfied with the hotel's emergency fire arrangements. None of their previous fire safety inspections had flagged up any significant concerns.
26. HSWI's investigation into the hotel's fire procedures did identify several minor deficiencies with the fire alarm systems within the hotel but these were unrelated and did not contribute to the fire or hinder the safe evacuation of staff and guests.

27. Expert witness Evidence

In his report, the expert witness concluded:

'Given the volatility of the fibreglass products which have a lower explosive limit of only 1.1%, and a flash point of 31 degrees, I consider that the action of attempting to dry the wet plywood with a high heat output LPG blow torch liberated sufficient flammable vapour which ignited.

Due to the removal of the first two rows of tiles in the roof valley, the fire spread into the roof void and spread internally till it came to a compartment wall where it was prevented from spreading further.

The intense fire within the roof void impinged on the underside of the roof tiles, but it was not the roof tiles which initiated the fire'.

28. Charges

FIRST COUNT

STATEMENT OF OFFENCE: Failing as an employer, within the meaning of The Health and Safety at Work etc. Act 1974 (of Parliament) as applied to the Isle of Man, to conduct its undertaking in such a way as to ensure, so far as reasonably practicable, the health, safety and welfare at work of his employees pursuant to section 2(1) of the said Act, contrary to Section 33(1)(a) of the said Act.

PARTICULARS OF OFFENCE: ROY MICHAEL CROSS trading as ROOFCRAFT, on the 7th day of November 2013, in the Isle of Man, being an employer within the meaning of the said Act, failed to discharge his duty under section 2(1) of the said Act, in that he failed to ensure, so far as was reasonably practicable, the health, safety and welfare of his employees, engaged in remedial roof work at the Mount Murray Hotel and Country Club, Santon, by failing to ensure that the system of work adopted was safe.

SECOND COUNT

STATEMENT OF OFFENCE: Failing as an employer, within the meaning of The Health and Safety at Work etc. Act 1974 (of Parliament) as applied to the Isle of Man, to conduct its undertaking in such a way as to ensure, so far as reasonably practicable, that persons not in his employment who may be affected thereby were not thereby exposed to risks to their health and safety pursuant to section 3(1) of the said Act, contrary to Section 33(1)(a) of the said Act.

PARTICULARS OF OFFENCE: ROY MICHAEL CROSS trading as ROOFCRAFT, on the 7th day of November 2013, in the Isle of Man, being an employer within the meaning of the said Act, failed to discharge his duty under section 3(1) of the said Act, in that he failed to conduct his undertaking, namely remedial roof work to the Mount Murray Hotel and Country Club, Santon, in such a way as to ensure, so far as was reasonably practicable, that persons not in its employment, who may be affected thereby, including employees, guests and clients of the Mount Murray Hotel and Country Club, were not thereby exposed to risks to their health or safety, by failing to ensure that the system of work adopted was safe.

THIRD COUNT

STATEMENT OF OFFENCE: Failing to comply with Regulation 10(1)(c) of the Management of Health and Safety at Work Regulations 2003, made under The Health and Safety at Work etc. Act 1974 (of Parliament) as it has effect in the Isle of Man, contrary to Section 33(1)(c) of the said Act.

PARTICULARS OF OFFENCE: ROY MICHAEL CROSS trading as ROOFCRAFT, on 7th November 2013, in the Isle of Man, failed to take all reasonable steps to inform the other employers concerned, namely Mount Murray Country Club Limited, of the risks to their employees' health and safety arising out of or in connection with the conduct of his undertaking in that he failed to alert them that he was working on the roof or inform them of the type of work he was undertaking.

29. Verdict

The trial was heard in the Isle of Man Court of Justice, High Court in front of a Jury on 24 November 2016. Deemster Main Thompson presided over the trial.

Roy Michael Cross entered a not guilty plea for all of the above charges denying any responsibility and opted not to give evidence during the trial, withdrawing all of his witness including his expert witness. No defence was offered by Mr Cross during the trial.

The Jury of 7 people found Mr Cross guilty of all 3 charges.

30. Sentencing

At sentencing, Mr Cross was ordered to pay £2,400 towards costs and to complete 240 hours of community service.

A probation report said that Cross still believed that he did all he could to minimise the risk of fire. The report said that he'd been surprised and disappointed with the Jury's verdict. Deemster Main-Thompson said while passing sentence:

*'Any objective observer would have been puzzled by any other outcome. You chose to challenge it to the bitter end when guilty pleas would have **saved a significant amount of money**. From November 2013 Health and Safety Inspector, Mr Robert Greaves wrote to you five times but you didn't respond until June 2014 and your response was glib and disrespectful with a blasé attitude.'*

The Deemster added:

'It is evident from what you have said to probation, despite having sat through a trial, you remain in denial. You've persisted with your erroneous contention. Your denial is very hard to contemplate. It is to me very frustrating that you have been unable to move on from that position. I suspect it is your way of coping with what happened. You have come within a whisker of losing your liberty. You have asked for a merciful sentence and you will receive mercy.'

Following sentencing Mr Greaves, Senior Health and Safety Inspector added:

'This incident was easily preventable, if the roofing contractor had a safe system of work in place for using a blow torch on the roof of the hotel the fire would not have started.

The potential for a fire when working with flammable roofing materials is highlighted in the industry's own guidance.

Fire was a foreseeable risk that should have been part of the risk assessment process for carrying out this work.

Instead, the firm's failings meant that a hotel was destroyed and the lives up to 100 hotel guests and staff were put at risk.'

For further information concerning this investigation or any other Health and Safety matter please feel free to contact the Health and Safety team on 685871 or at:

worksafe@gov.im

6th February 2017

