

9. Guildhall – Fire Alarm System and Ventilation Report for Facilities Committee – 16.11.2021

Briggs Fire & Security look after the fire alarm system and emergency lighting in the Guildhall. As part of the new fire alarm system a beam detector was installed in the main hall. The hall is currently used as a gym. There has always been a problem with the amount of dust, condensation, and mould in the hall which

meant that the beam detector does not work very effectively, and this causes the alarm to go into 'fault'.

The beam detector was chosen over standard smoke detectors for the following reasons:

- Access both for installation and maintenance. A large scaffold tower would have been required for the installation of smoke detectors, plus the removal or sheeting over of the rubber gym mats
- Routine testing and servicing every 6-months (smoke detectors) is done using a smoke generator on a long pole, even the longest pole would not reach that high without additional access equipment
- If a smoke detector went into fault, it would require a scaffold tower to repair/replace it.
- Number of detectors. At the time we were told that a smoke detector would be required in each 'bay' of the ceiling i.e., 8 detectors.

The fire beam detector is supplied by <https://www.thefirebeamcompany.com/product-range/>. They have reassured us that their system works well in unheated warehouses, food processing units and farm buildings.

In January 2020 Briggs installed an 'anti-fog' kit and re-commissioned the beam detector. However, the problem has still not been resolved and it appears that the air quality in the main hall is deteriorating further and more regularly.

Most of the time the alarm can be re-set as part of the weekly fire alarm check, however, on a number of recent occasions Briggs engineer has had to be called out to re-set the system. The last time it took several weeks before Briggs could send an engineer. We have now received a quote for an engineer to carry out a further investigation into the beam detector fault and have commissioned the work, however, will be still waiting for Briggs to confirm a date.

To date, the cost of repairing and re-commissioning the beam detector plus engineer call outs is **£1,427.17 + VAT**. The quote received for the latest repair is **£511.66 + VAT**.

In addition, there is concern over the condition of the ceiling and walls. A structural engineer carried out an inspection of the ceiling in 2017 following a small section of ceiling falling. The report found the plasterwork appeared to be in relatively good condition and that there were no signs of significant cracking. However, the two photographs below illustrate the condition of the ceiling in September 2017 compared to June 2021. The now extensive black mould growth also extends down the walls, particularly on the north wall to approx. 3m of the floor height and will start to affect the structure of the building.

Image of the ceiling taken in September 2017:



Image of ceiling taken June 2021:



Studio Winter have been appointed to provide professional advice on improving ventilation and air circulation at the upper level and to make some recommendations regarding the cleaning and inspection of the plasterwork ceiling. We have had an initial site meeting to look at options including:

- Getting the upper-level windows working again so they can be opened and closed to improve airflow
- Installing extractor fan/s in either the roof space or the windows
- Installing a free-standing extractor/dehumidifier.

A further report with recommendations is to follow.