



Flammable Solvent Ductwork Sealants

What Happened?

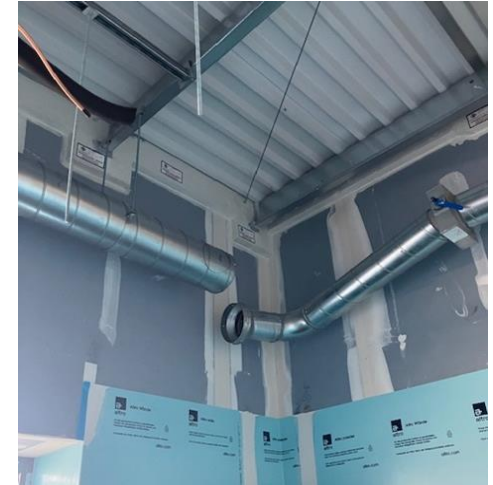
Whilst using an angle grinder to cut a spigot into a run of ductwork, an explosive force occurred within the duct which caused significant damage to the ductwork, fire dampers, and associated items. Fortunately, nobody was injured, however this may not have been the case if circumstances were different.

Our investigation into the incident has highlighted the following:

- A solvent based duct sealant was being used to seal joints in the ductwork.
- As the duct work was being installed within a healthcare environment, the specification required any open ends of the ductwork to be sealed to prevent dust ingress.
- The above allowed solvent sealant vapour to build up within the duct. This was then ignited by a spark from the angle grinder.

Action for all projects:

- Identify if solvent-based flammable sealants are currently being used for ductwork installation and wherever possible substitute them for non-flammable alternatives.
- Ensure Safety Data Sheets and COSHH assessments are in place for all sealants, ensuring they identify whether the product is flammable.
- Wherever possible, Identify alternative solutions to eliminate hot works from duct cutting operations.
- Where solvent sealants must be used in conjunction with sealing the ductwork, arrangements must be put into place to prevent ignition (e.g. purging ductwork, elimination of sources of ignition, etc). A risk assessment must be completed by the contractor supplying and using any flammable sealants.



Safe by choice



Safe by design



Safe lives



Safe places



Safe relationships

REFERENCE	ISSUED	DISPLAY UNTIL
SHE-ALT-2024_22	Nov 2024	Jan 2025