

When a fire strikes inside a museum it can be doubly devastating given that museums are charged with safe keeping of cultural material. While fires are incredibly destructive, in many cases not everything is lost in a fire, and much can be salvaged.

Salvage operations can be complex because objects may be damaged by the fire itself which renders them as extremely fragile and prone to disintegration once disturbed or moved. Objects can also be damaged by soot which is chemically corrosive, greasy and difficult to remove. If objects survive the flames and soot they are often damaged by the water used to quench the flames putting even relatively impervious objects at risk of mould damage.

Never enter a disaster site without official clearance from the relevant authority. If you are waiting to enter a site, use the time to plan: you will need a clear process to follow with a secure place to work, equipment and people to help.

Be aware that even though the fire has been extinguished buildings have become unstable and asbestos may have been exposed.

The thing about salvage operations is that they need to be systematic and done quickly.

Here are some tips we hope you'll never have to use:

- Know who is in charge of the operation and follow their directions carefully.
- Ensure safety equipment and clothing is available and worn by everyone.
- Find a secure and protected location to store and treat objects. Have labelling equipment on hand and non-invasive methods of attaching it.
- Ensure the environment is well ventilated as soot and smoke will be impregnated into many objects and both contain toxic substances. Wear a mask at all times.
- Descriptions of A-list objects should be circulated and all volunteers or staff notified to look for them. A-list objects are those identified as having the highest priority for salvage, and something normally defined as part of your disaster prevention plan.
- Photograph objects in situ before removing them. This can be helpful for insurance purposes, and for tracking which objects were where when the disaster struck. Memories fail and records may be damaged.
- Begin salvaging from easiest access point and clear entrances, corridors and thoroughfares first.
- Sort objects into type of damage sustained. This can be difficult as many will have sustained multiple types of damage. Use zip lock bags, trays, boxes and crates to sort, separate and relocate to a safer place.
- Once objects have been relocated, use a hierarchy of damage control and treat those that are likely to sustain further damage first. For many objects mould will be the biggest threat as it grows quickly in damp, unventilated areas and once established is difficult to remove and will quickly ruin objects. It is also a considerable health hazard.
- Wear cotton or nitrile gloves when handling objects; though soot and ash will adhere to nitrile and latex gloves so be aware of cross contamination.
- Do not wipe building rubble, soot, ash or water off objects as this may cause more damage. Wet objects can be very heavy. Move the wettest objects first as they can cause further damage to 'less wet' objects.
- If it is feasible, leave very fragile objects in-situ until a trained conservator is onsite who will either advise on best action or move and stabilise the objects themselves.
- Vacuuming with a HEPA vacuum is the preferred method of removing soot, ash and dust though minimal handling is essential to prevent chemicals abrading or penetrating the object's surface. Dry surface cleaning is followed by wet surface cleaning, both of which should be done by a conservator or under supervision by one, as different materials require different methods of cleaning.

You might also like:

Read how volunteers and staff responded to the recent fire at the Waltzing Matilda Centre in Winton on the Queensland Museum and Community Collections blog

<https://blog.qm.qld.gov.au/2015/06/23/mdo-response-to-fire-at-waltzing-matilda-centre/>

Disaster resources and conservation disaster contacts

AICCM

<https://aiccm.org.au/disaster/>

Cleaning soot damaged objects

Australian War Memorial

<https://www.awm.gov.au/about/our-work/projects/conservation/soot>

First aid for audio visual material

National Film and Sound Archive

<https://www.nfsa.gov.au/preservation/guide/home/first-aid-fire>