



10 common causes of fire loss

Fires in commercial and industrial properties can start in simple, everyday ways, often through routine activities.

These risks don't always appear overnight. They can build up over time as work routines change, seasons shift or spaces are used differently.

This FAQ brings together ten common causes of fire loss we see across many types of businesses. It's designed to be a starting point to help you understand where fire risks can arise and support everyday conversations about fire awareness in your business. Please note, these FAQs are not a site-specific assessment and don't replace professional advice.



1. Poor housekeeping

What is housekeeping, and why is it a cause of fire?

Housekeeping refers to how clean, tidy and well-organised a business site is, both inside and outside. When waste, dust, pallets or excess materials build up, fires can start more easily and spread faster. Regularly removing waste and keeping areas clear reduces fuel for a fire.

Ways to reduce risk

- Incorporate site checks into daily routines. Quick walk-throughs can help identify waste build-up, blocked exits or new hazards before they become a problem.
- Ensure access to fire-fighting equipment is not blocked or restricted.
- Assign designated storage areas. This way, materials, pallets and equipment do not block walkways, exits or high-risk zones.
- Be mindful of where heat-producing equipment is used or stored, especially near items that can easily catch fire.
- Encourage shared responsibility. When everyone understands the importance of keeping areas clear, it is easier to maintain safer habits.
- Review housekeeping during busy periods. Times of increased production, seasonal work or change can introduce new risks. These may not always be obvious.

Small, consistent actions like these can make a meaningful difference over time by reducing the chance of a fire starting and limiting its spread.



2. Electrical faults

How do electrical faults cause fires?

Electrical fires are often caused by damaged, ageing or overlooked equipment. Faulty wiring, poor maintenance, or overloading of power boards can cause a fire. These risks are often hidden until a failure occurs.

Ways to reduce risk

- Use electrical equipment as intended. Avoid overloading power boards or using extension leads as permanent solutions.
- Inspect for damaged cords, plugs or fittings and fix or replace immediately.
- Be mindful of equipment heat. Devices that feel hot, smell unusual or cause the power to cut out should not be used and checked promptly for faults. Repair or replace as needed.
- Include regular visual checks as part of your routine. Particularly in equipment rooms, offices or production areas.
- Review electrical demand during times where systems may be under more strain. These can include periods of business growth and seasonal peaks.



3. Hot work

What is hot work and why is it high risk?

Hot work activities such as welding, cutting, grinding or brazing, generate heat and sparks that can ignite nearby materials. Fires can start immediately or several hours later if heat reaches something nearby that can catch fire. Using controlled hot work practices, including permits, fire watchers and suitable firefighting equipment, can manage this risk.

Ways to reduce risk

- Carefully plan any hot work you need to undertake. Identify nearby materials that can easily catch fire and isolate these before work commences.
- Know where the nearest fire alarm is and ensure a fire extinguisher or fire hose are easily accessible
- Treat short or routine tasks with the same caution as major works.
- Use barriers, screens or fire blankets to control sparks and heat spread.
- Maintain awareness after the job is done – stay on site for at least 60 minutes after any hot work. Check all tools are turned off and away from items that could catch fire. Delayed fires are a risk.
- Ensure those involved in the work understand their role in monitoring the area during and post work. They are not just there to solely complete the task.



4. Hazardous substances

What are hazardous substances and do they need special care?

Hazardous substances include flammable liquids, gases and certain chemicals. If stored or handled incorrectly, they can easily ignite or exacerbate a fire.

Ways to reduce risk

- Follow manufacturers' storage and handling instructions.
- Keep hazardous substances in set storage areas, not just where is convenient.
- Limit the amount of hazardous substances kept outside storage areas to the bare minimum.
- Keep storage and handling areas tidy to reduce spill and fire risk and limit the amount of time the lid of the substance is open.
- Make sure people know what substance they're working with, not just how to use it.
- Ensure the work area is well ventilated to reduce any flammable vapours and to support the health and safety of the person handling the substance.
- Reassess controls when substances, processes or volumes change.
- Safely dispose of any cloths, rags, paper that may have residue on them.



5. Smoking

How does smoking increase fire risk?

Fires can start when cigarettes are not discarded properly or when smoking occurs in non-designated areas - particularly near entrances, waste areas or yards. If smoking is allowed on site, it should be limited to designated areas and should be well clear of any combustible materials and supported by proper disposal bins.

Ways to reduce risk

- Clearly define where smoking is and isn't permitted.
- Position smoking areas away from buildings, waste and storage zones.
- Provide suitable disposal options and maintain them regularly.
- Set expectations clearly and reinforce them regularly. Keep an eye out for unofficial smoking spots and deal with them quickly to reduce fire risk.



6. Congestion

How can production and storage activities increase fire risk?

Fire risk increases when areas are congested, poorly organised, or where waste accumulates. When production and storage aren't clearly separated, small fires can quickly escalate and become difficult to control.

Ways to reduce risk

- Keep production and storage areas separate. Mixed-use areas can increase both the risk and potential size of a fire.
- Maintain clear access paths so people and equipment can move safely.
- Remove waste during the production cycle, not after.
- Review the layout of workspaces, storage areas and equipment regularly, especially after any growth or operational changes.
- Encourage people to question crowded or awkward setups rather than working around them.



7. Building materials

Do building materials affect how a fire behaves?

Yes. The way building materials react to heat or sparks can affect how quickly a fire grows and how much damage it does.

Ways to reduce risk

- Be aware of the building materials used during repairs, upgrades or temporary works.
- Avoid substituting materials based on convenience alone.
- Seal gaps and openings that could allow fire or smoke to spread.
- Pause and reassess fire risk when modifying older buildings.
- Ensure improvements to performance or efficiency don't introduce new fire risks.



8. Neighbouring buildings

How do neighbouring building contribute to fire risk?

Fires can spread easily from nearby buildings, especially when they're close together. Fire can spread more easily depending on how close buildings are, how they're constructed, and features like outdoor storage, doors, and windows.

Ways to reduce risk

- Keep external storage away from boundaries.
- Regularly review fence lines, shared walls and boundary areas for build-up of any materials that could catch fire.
- Avoid placing waste, pallets or goods where a neighbouring fire could reach.
- Be mindful of openings, such as doors and windows that face adjacent properties.
- Consider external areas as part of your overall approach to managing fire risk.



9. Arson

What can increase the risk of arson?

Arson often involves materials that are easy to access and can quickly catch fire, such as pallets, stored goods or waste. The risk can increase after hours, in poorly lit areas or where security is limited.

Ways to reduce risk

- Remove or secure anything that could easily catch fire near public areas to reduce the risk.
- Use lighting that clearly shows all areas and doesn't leave dark spots.
- Lock or restrict access to bins, cages and storage after hours.
- Use security cameras to monitor high-risk outdoor areas such as waste zones, yards and boundary lines. Visible cameras can also act as a deterrent.
- Encourage people to notice and report changes to security conditions.
- Review risks regularly as security needs can change over time.
- Graffiti can be a sign that a site is easily accessible and may be at greater risk of arson.



10. Natural events

How can natural events lead to fires?

Natural events such as earthquakes, storms, flooding or lightning can damage buildings, equipment or services. Fires can start right away or later if equipment has been moved or utilities like power or gas have been damaged.

Ways to reduce risk

- Secure equipment to reduce movement and therefore, damage.
- Make sure people know where shut-off points are and when to use them.
- Check systems after events. Do not assume everything is fine.
- Be cautious restarting operations after disruption.
- Build post-event checks into recovery routines.
- Install surge protection.
- Implement flood barriers in low-lying areas.
- Install equipment restraints.
- Ensure racking systems are seismically braced and shelving restrained.
- Install seismic shut off valves for piped gas supplies.

Summary

Understanding these common causes of fire can help businesses improve fire risk awareness and reduce the likelihood and impact of fire loss across commercial and industrial properties.