

## Your guide to...

### Managing hot work

You work hard to build and maintain your business. That's why it's important to ensure you're protected from all potential losses, especially when they're avoidable.

Understanding the risks of hot work activities and following the proactive steps in this guide can help improve the effectiveness of your staff, equipment, and reduce preventable incidents and potential losses.

#### **Hot work = high risk**

Hot work includes any process that can be a source of ignition and usually involves one of the following:

- ✓ welding
- ✓ cutting or grinding
- ✓ brazing
- ✓ soldering
- ✓ torch applied roofing
- ✓ MIG/TIG welding
- ✓ pipe thawing

#### **Establishing a hot work plan**

All maintenance staff and any contractors responsible for hot work are advised to follow a strict set of guidelines to prevent the risk of fire:

- ✓ Ensure there is a hot work procedure and permit system in place. Refer to *Aviva hot work permit* for standard procedures.
- ✓ Management should supervise the hot work permit process and review it with contractors.
- ✓ Review the site for specifics – pre-work evaluation, fire protection, construction details, etc.
- ✓ Where possible, use alternative methods or technologies to avoid the use of open flame or spark. For example, use mechanical cutting instead of flame cutting.
- ✓ Use only licensed, qualified, and fully-insured contractors to carry out the work. Proof of certificate of liability showing an 'in force' policy is a must.
- ✓ Ensure responsibilities for hot work operations are clearly detailed in written contracts.



### Hot work to do list

- ✓ Perform a pre-work site inspection.
- ✓ Review the location of work to be completed and contractors performing the work.
- ✓ Review the location of combustibles, flammable liquids, or alternative methods before issuing a permit.
- ✓ Seal openings and cover materials that can't be removed with acceptable barriers. Any vertical openings should be reviewed as sparks can travel downwards.
- ✓ Ensure any fire protection equipment is operating properly and fire extinguishers are close by.

### Issuing a hot work permit

- ✓ Ensure fire watch procedures and staff are in place.
- ✓ Any hot work being performed must meet all criteria before a permit is issued.
- ✓ The permit should be posted at the work site in a visible location.
- ✓ Fire watch is the most important part of these operations.
- ✓ Fire watch should remain in place for a minimum 60 minutes but may extend to as long as 2 hours depending on Aviva warranties applied to your policy.
- ✓ A final inspection of the hot works area may be required after 4 hours of completing activities for such reasons as combustible construction or lack of adequate clearances to combustibles.
- ✓ Fire watch personnel should review areas adjacent and below work areas. Loss history has shown that sparks can travel to areas outside the work location.

### Summary

Whether performing repair work at a customer's site, or during the construction of a new building, hot work operations pose a significant fire hazard. Loss history has shown that no matter the extent of work being performed, the exposure is no different if it's a small repair or large project. Take caution when performing hot work, and keep your building safe.

### Resources

Occupational Health and Safety – Hot works [https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=STANDARDS&p\\_id=9853#1910.252\(a\)\(1\)\(i\)](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9853#1910.252(a)(1)(i))

NFPA report on Home and Non-home structure fires involving torches, burners, and soldering equipment - <http://www.nfpa.org/~media/files/research/nfpa-reports/appliances-and-equipment/ostorches.pdf?la=en>.

NFPA 51B – Standard for Fire Prevention During Welding, Cutting, and other Hot Works - <http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=51B>

### Warning

According to the National Fire Protection Association (NFPA), cutting and welding too close to combustible materials was the most common factor contributing to fires related to hot work.

For further information on this topic, please contact your independent insurance broker.

Visit [avivacanada.com/riskmanagement](http://avivacanada.com/riskmanagement) for more *Your guide to...* information sheets on other loss control topics.

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