Central Operations Services
Hot Work Permit Process

A **hot work permit** is required for any work involving open-flame, producing hot surfaces, or generating sparks or molten material, of sufficient energy to ignite combustible, ignitable, or flammable materials.

It includes work involving brazing, cutting, grinding, soldering, torch-applied roofing, radial-mechanical and torch cutting, welding and post-weld heating using a gas-fired burner or electrical resistance heater

Permit form is on the second and third page of this document. It can be filled and signed digitally.

The process for this permit is:

Before the hot work, Contractor to:

1. Inspect hot work area and decide on precautions to take.
2. Determine length of the fire watch after the hot work, using the fire watch matrix.
3. Determine whether a fire system interruption is required and if so, request authorisation to perform the interruption, and obtain evidence of such authorisation (typically a fire system interruption authorisation email from Central Operations Services Facilities Services).
4. Fill this permit form to document the above and sign it to assure that these precautions will be implemented for the hot work.
5. Provide a copy of the signed permit to the relevant University Contract / Project Manager responsible for the work, prior to starting the hot work.
   N.b formal permit authorisation from University Contract / Project Manager is generally not required however the manager may request a signed copy of the permit some time in advance in order to review proposed precautions.

When starting the hot work, Contractor to:

1. Implement precautions as described in the permit.
2. Undertake hot work within permit timeframe, maintaining continuous fire watch. A signed copy of permit must also be available on site.

When the hot work is over, Contractor to:

1. Maintain a fire watch for the time noted in the permit.
2. Sign that the fire watch is over immediately after the fire watch.
3. Undertake a final check at the end of the fire watch and sign the permit closure.
4. Send copy of the closed permit to the relevant University Contract /Project Manager.

N.B a hot work permit can only be for one shift or day. A new permit needs to be filled as per above for every shift or day.

N.B Please confirm with the relevant Facilities Services Supervisor that planned hot works are not within 6m of a building with Aluminium Composite Cladding

Please contact the relevant University Contract / Project Manager responsible for the work if you have questions about this process.

THE UNIVERSITY OF SYDNEY

Central Operations Services
Hot Work Permit #_____

This Hot Work Permit is required for any work involving open-flame, producing hot surfaces, or generating sparks or molten material, of sufficient energy to ignite combustible, ignitable, or flammable materials.

Work Description

Date of Works		Start		Finish	**This permit is valid for one shift only.**
Building / Location		Room / Area / Object			
Works to be performed				Work Order #	
Type of Hot Work					

Contact Details

University of Sydney	**Contractor Managing Works / Principal Contractor (if applicable)**	**Contractor performing works**
University Project / Contract Manager	Company	Company
	Site Supervisor	Site Supervisor
Contact	Contact	Contact

Precautions to Take – within 10 metres of hot work (tick relevant boxes)	To Do / To Ensure	Not Required
Sprinklers are in operation in the hot work area.	○	○
No fire system interruption affects the hot work area (other than authorised interruption for this permit)	○	○
Appropriate extinguishers are serviceable and readily available.	○	○
Hot work equipment is in good working condition.	○	○
Combustible materials are removed from hot work area.	○	○
Combustible materials that cannot be removed are shielded.	○	○
Sources of flammable gas, liquid, dust/lint are removed, de-energised, isolated, drained, purged.	○	○
Combustible accumulations are cleaned (debris, oil residues, dust/lint).	○	○
Openings, piping, voids, ductworks that may allow ignition sources to pass are shielded.	○	○
Ventilation and conveying systems are shut down.	○	○
Thermally conductive materials are identified and hot work area extended where heat may transfer.	○	○
Additional required precautions:	○	○

Fire Watch	To Do / To Ensure
Continuous fire watch performed during hot work. (mandatory)	☐
Continuous fire watch post hot work for hour(s) and minutes (as per fire watch matrix).	☐

Fire System Interruption (Fire Isolation)	Yes	Not required
Is it necessary to isolate fire detection equipment? If so, equipment to be isolated:	○	○

If so, hot work cannot start before an **Application for Fire System Interruption** has been formally authorised by Central Operations Services. System must be restored at the work and of each day unless authorised otherwise.

Authorisation for Fire System Interruption obtained by		Date obtained	

Authorisation to Commence

Signed permit must be provided to the University Project / Contract Manager (relevant Supervisor for the works) before start of hot work.

I have inspected the worksite and the precautions, fire watch and fire system interruption noted in this permit will be in place. Contractor site supervisor for hot work (name and signature):

End of Fire Watch

Fire watch post hot work finished at (time)		Contact	
Fire watch completed by (name and signature)			

Permit Closure

Permit with signed closure must be provided to the University Project / Contract Manager (relevant Supervisor for the works) after final check.

I have inspected the worksite at the end of the fire watch and worksite is firesafe.
Time of final check:
Final check by (name and signature):

Fire Watch Matrix

To determine length of the fire watch, select the applicable option in the fire watch matrix:

→ Level of risk →

↓ Level of risk ↓				Construction and occupancy for the hot work area		
			Fire detection system	Non-combustible construction AND no combustible materials	Combustible construction OR with combustible materials	With ACP (Aluminium Composite Panels) OR with flammable material/ liquid/gas
	Type of hot work	High Energy	Not operating / not present	30 minutes fire watch ○	* Contact COS ○ (minimum 1-hour fire watch)	* Contact COS ○ (minimum 1-hour fire watch)
			Operating	30 minutes fire watch ○	1-hour fire watch ○	1-hour fire watch ○
		Low Energy	Not operating / not present	30 minutes fire watch ○	30 minutes fire watch ○	1-hour fire watch ○
			Operating	Not required. ○	Not required. ○	30 minutes fire watch ○

** You must contact COS who will advise on the length of the fire watch required, before signing the hot work permit.*

Type of hot work:

- High Energy:
  - Torch applied roofing.
  - Metal-working that involves radial-mechanical or torch cutting, grinding, welding, hot riveting, welding joints or heat treating.
  - Pipe assembly and installation, including radial saw cutting, wheel grinding, and soldering, brazing.
  - Installation of powder-driven fasteners.
  - Thermal spraying.
  - Pipe fabrication producing ERW or helical pipe.
  - Shrink wrapping using fuel-fired burners (e.g., hand-held weed burners).
  - Thawing ice plugs in piping (in place).
- Low Energy:
  - Heat welding single-ply membrane joint using an electric welding iron.
  - Soldering repair or alteration within installed electrical/electronic equipment.
  - Unrated electrical equipment temporarily used in hazardous/classified electrical area.
  - Cold-work drilling, cutting in hazardous/classified electrical area.
  - Soldering an electrical/electronic component.
  - Fusing plastic pipe or other part.
  - Hot gluing.
  - Shrink-wrapping using electrically-heated hot air gun.

Fire detection system: an automatic smoke detection system with remote alarm that sounds in a constantly-attended location. The system is operating only if covering the entire hot work area and working normally during the fire watch period (not affected by an interruption/isolation).

Construction and occupancy: the construction and occupancy for the hot work area (within 10 metres around the hot work) is defined as follow:

- Non-combustible construction AND no combustible materials: construction materials in the area are not combustible AND there are no other combustible materials in the area.
- Combustible construction OR with combustible materials: construction materials in the area are combustible OR there is presence of combustible material in the area.
- ACP (Aluminium Composite Panels) OR with flammable material/liquid/gas: there is presence of ACP in the hot work area OR flammable materials/liquids/gases.