



Permit to Work Guide

Mechanical Systems Isolation

This guide is intended for Curtin University's Contractors, Vendors, University Staff, Students, and Permit Managers*. The information contained in the guide is to assist Permit Applicants in successfully obtaining a permit by understanding Curtin's minimum requirements.

Permit Applicants will have control over the way work is undertaken and will be operating under their own safety management system. This includes the responsibility to put in place appropriate control measures to eliminate risks so far as is reasonably practicable, or, if it is not reasonably practicable to eliminate risks, to minimise health, safety, and operational risks, so far as is reasonably practicable.

**A Permit Manager is a person trained and authorised by Curtin University to approve permits.*

properties.curtin.edu.au/working-with-us

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BEFORE PERMIT APPLICATION

1.1 Permit information

Mechanical Systems Isolation Permit

To be issued for any activity or situation that requires a mechanical system to be to be shut off, impaired or otherwise taken out of service, completely or in part.

Examples:

Repairs or maintenance on elevators, escalators, fume cupboards and heating and air-conditioning systems, including chillers / boilers and chilled / heating water in plant rooms.



Please note:

Permit to be submitted minimum **2 business days** prior to commencement of works, a longer notice period is strongly encouraged.

1.2 Ensure:

Contractor Company Status is COMPLIANT on Rapid Global (where applicable).

Worker(s) have completed induction(s) for Curtin University (where applicable).

Contractor Company and worker(s) hold required licenses and competencies to do the task (where applicable).



1.3 Plan & Consult

Discuss works with Permit Manager to investigate potential impacts of the service isolation and identify relevant stakeholders.

Engage with relevant Curtin University stakeholders to agree on isolation methodology.

Identify all potential hazards associated with the works and outline control measures.

Use stakeholder feedback received to prepare required documents for permit application.

Consider if other permits are required, i.e Hot Works Permit and / or Confined Space Entry Permit.



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LODGING PERMIT APPLICATION

2.1 Submit Application

<https://properties.curtin.edu.au/working-with-us/permits/>

Location Plan showing area of intended isolation and affected area(s).

Services Plan / Survey Information.

Work Methodology.

Risk Management Plan / Safe Work Method Statement (SWMS).



→ 2.2 Important

- Consultation with the relevant Curtin stakeholders prior to application for a Permit to Isolate is integral when planning a service isolation.
- Ensure only competent workers carry out mechanical work.
- An approved mechanical service isolation permit does not mean that the mechanical service will be isolated by a Curtin staff member on the permit start date.
- A separate maintenance work order (**10 business days notice**) is to be raised to request attendance of an Operations & Maintenance staff member to attend site to isolate the service.



Please note:

Submission of permit does not constitute an approval. No works are to commence until approval notice email is received.

2.3 Issue Permit

Permit Manager approves permit when they are satisfied applicant has met all relevant requirements.

Work may begin based on the documentation submitted with the application and in accordance with the conditions outlined in the issued permit.



Please note:

- **Isolation Procedure** – the Permit Applicant must follow a suitable and compliant isolation (lock-out/tag-out) procedure when performing energy source isolation.
- **Pre-work Verifications** - A procedure to check that the equipment / service is completely isolated from all sources feeding the service is required, i.e “test before you touch”.

AFTER PERMIT APPROVAL

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3.1 Conduct Works

Permit Holder will have control over the manner in which work is undertaken and will be operating under their own safety management system to effectively manage risks involved.

If any issues arise, stop works and escalate to Permit Manager (note: not SCC). Works may only proceed once the issue is resolved.



Please note:

Before commencing any work, it is essential that the required service isolation is verified to be effective.

AFTER WORKS ARE COMPLETED

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4.1 Close Permit

Permit Holder to notify Permit Manager once all works pertaining to the permit are finished.

Inspect the area to ensure no hazards remain as a result of the works.

Where applicable, Permit Holder to send through relevant documentation to Permit Manager to close the permit.



→ Frequently Asked Questions (FAQ)

1. What is the difference between a Mechanical service vs a Hydraulic service?

Mechanical services include water used for the purpose of heated water or chilled water, these are water circuits that are directly connected with “Mechanical” equipment or systems. Hydraulic services are connected to plumbing activities and include potable water, drainage, sewerage pipes and systems.

2. What qualifications do I need to work on a mechanical system at Curtin?

You will need to hold relevant trade or technical qualifications that are nationally recognised with a registered training provider, i.e a Vocational Education and Training (VET) course such as Certificate III in Air Conditioning and Refrigeration to work on HVAC systems.

A Refrigerant Handling Licence from the Australian Refrigeration Council (ARC) must be held by any person who carries out work in relation to refrigeration and air conditioning (RAC) equipment.

3. Who are the relevant stakeholders in a Mechanical Service Isolation Permit?

Please consult with and involve the Curtin University Infrastructure Manager (Mechanical) and Service Manager, Mechanical, if a mechanical (i.e elevator / fume cupboard), heating, ventilation or cooling system needs to be isolated or worked on. There could be a knock-on effect on the wider Curtin community as a result of a service isolation.

Refer to Curtin University Project Guidelines (Lift services and Mechanical, ventilation and air conditioning services) which specify expectations to ensure that all selected building materials and services are fit for purpose, provide value for money, are of sound construction, offer local support, integrate with other services and design concepts, are easily maintained and can be scaled within the University environment.

4. How long can I isolate the mechanical service for at Curtin?

The duration of the Isolation required is to be carefully considered as this has a significant impact on Curtin University assets, its tenants and patrons.

There are three (3) types of Mechanical Isolations that can be carried out:

Type 1) **Daily Isolation.**

Type 2) **Extended Isolation - With Daily reinstatement.**

Type 3) **Extended Isolation - With No Daily reinstatement.**

→ Frequently Asked Questions (FAQ)

5. What are the differences between the 3 types of mechanical isolations?

- i) **Daily Isolation** - An isolation that will be completed and reinstated within a single day.
- ii) **Extended Isolation With Daily Reinstatement** - An isolation that will occur over multiple consecutive days, with the service reinstated each day.
- iii) **Extended Isolation With No Daily Reinstatement** - An isolation that will occur over multiple consecutive days, without being reinstated each day.

6. Does Curtin University have a Lock Out Tag Out procedure (LOTO)?

Yes, this document can be found on the Curtin Health & Safety website – it outlines methods and equipment to be used to achieve safe and effective isolations.

Please note:

- Always verify that isolations have been completed successfully before starting work.
- Tags act as warnings and a mean of providing vital information to others at the workplace.
- All required details on the tag must be clearly and permanently entered in the spaces provided, with emphasis given to the reason for placing the tag.
- Yellow “Out of service” tags should be removed only by an authorised person who is both familiar with the equipment and fully aware of the reason that the tag was placed.
- Red “Personal Danger” tags should be removed only by the person whose name is on the tag.

