



Management and disposal arrangements for lithium type batteries

This guidance covers mobile phones, laptops, cordless tools/equipment, e-cigarettes, vaporisers and similar items.

With the increased use of powerful batteries in the University and in society in general, it is important that the University adopts suitable protocols regarding the procurement, use, charging and storage of these batteries, in order to reduce the risk of fire.

Storage and disposal of old/damaged lithium batteries

Where storage of lithium batteries is required, there will be a requirement to provide suitable storage facilities, which will need to be located in a suitable location. All proposals to store such items should be subject to consultation with and approval from the Fire Safety Unit.

Lithium batteries require specialist disposal arrangements. Advice is available from Estates Operations ([Waste Management](#))

Should there be any concerns regarding the safety of a specific item, advice should be obtained from the FSU before the item is used.

Please note that whilst a swollen laptop battery should not be used and should be safely disposed of, it is usually a sign of battery degradation and not necessarily a safety risk.

The following guidance should be adopted when managing the storage of old, swollen or damaged laptop batteries;

- Wear suitable single-use gloves and avoid skin contact
- Tape any wire ends securely with electrical insulation tape
- Establish a dedicated store, outwith the building or in a stand-alone structure, well away from the building, if possible
- Ensure that the storage area is secure, cool and dry
- Ensure that the store itself, as well as the containers, are provided with suitable hazard warning signs.
- Ensure that batteries are stored in a non-metallic, water tight container
- Ensure that container is positioned well away from any combustible materials
- Store battery in container of vermiculite/sand or other chemically inert cushioning material
- Ensure that container is positioned well away from any combustible materials

The below products or similar are recommended for the above storage arrangements.



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If an external storage solution cannot be obtained, consideration may be given to an internal solution, subject to FSU approval. As a minimum, the following will be necessary:

- The storage facility will be located in a single, separate compartment affording a minimum fire resistance of 60 minutes, with an FD60S fire door set;
- The location of the store should not be accessed directly from a protected zone;
- The building must not be used for sleeping accommodation;
- The store should be provided with a specific, Lithium-ion storage cabinet affording a minimum fire resistance of 90 minutes;
- The store should not be used for the storage of any other items;
- The store should be provided with an automatic smoke detector;
- The store itself, as well as the containers, are provided with suitable hazard warning signs.





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You should note that portable fire extinguishers will not extinguish a lithium ion battery fire. In the event of such a fire, you never attempt to extinguish a fire involving a battery and should simply raise the alarm and evacuate the building in accordance with the University's emergency procedures.

IT SHOULD BE NOTED THAT FROM 1 JULY 2023. THE SFRS (SCOTTISH FIRE AND RESCUE SERVICE) WILL NOT ATTEND FIRE ALERTS UNLESS THE BUILDING IS USED AS SLEEPING ACCOMMODATION. TRAINED SECURITY OFFICERS, COMMUNITY SUPPORT OFFICERS AND/OR NOMINATED STAFF WILL CONDUCT THE INVESTIGATION OF THE FIRE ALERT TO DETERMINE IF THE SFRS ARE REQUIRED OR THE INCIDENT IS A FALSE ALARM. THE SFRS WILL ATTEND AS NORMAL TO CONFIRMED FIRES - EMERGENCY NUMBER (9)999

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Document version

Version number	Summary of change	Date and by whom
1.0	Final version published	27/02/2023 Wes Boulstridge
1.1	- Addition of SFRS UFAS changes - Clarification paragraph 3	03/07/2023 N Sangster
2.0	- Version 1.1 extended into 3 documents - disposal, large and small equipment. All available to download here.	28/11/2023 Wes Boulstridge

If you require this document in an alternative format please contact The Health and Safety Department on health.safety@ed.ac.uk or call (0131) 651 4255

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