

Step by Step guide to cleaning out your office using sustainable practices

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The general rule of thumb for all clean-out projects:

1. Check with your supervisor
2. Check with your building administrator
3. Get our budget code

E-Waste Recycling

Process for E-waste Recycling

1. Check with your supervisor and business office to get approval for this project and your 26 digit budget code.
2. Check w/ your IT support for data destruction and possible recycling.

Organizations that provide e-waste services:

Elemental, Inc.

<http://eleminc.com/>

Supplier # 193966 (Need to create a Purchase Order/need budget code)

Materials accepted:

Computers
Monitors
Printers
Mainframe computers or Servers
Fax machines
Copiers(liquids and toners must be purged)
Wire and Cabling
Telephone systems
Modems
Computer components and parts
Computer peripherals
Televisions
Radios
UPS equipment
Video equipment

PRICING:

\$12/monitor
\$3/printer/scanner/fax/desktop copier
\$3/data destruction if requested
\$150/sub-zero freezers

Not accepted:

White goods
Kitchen appliances
Mechanical equipment
Machinery
Old media or software



No charge for all other items.

You need to call to schedule a pick-up about 1-2 weeks in advance. Please have everything gathered and ready to go when Elemental arrives – this means you will need a temporary holding place. No minimum required.

E-Force Compliance

<http://www.eforcecompliance.com/>

Supplier # 479630 (Need to create a Purchase Order/need budget code)

See attachments at the end for more detailed information.

Shredding

To arrange to have paper shredded in your office:

1. Check with the archives guide to see how long information should be kept and best practices
<http://www.archives.upenn.edu/urc/recrdret/guide2.html>
<http://www.archives.upenn.edu/home/protocols.html>
2. Check with your department chair
3. Check with the business office - get a budget code from business office
4. Call Archives
e-mail • Phone: (215) 898-7024

University Records Center

How to Become a Customer

To become a customer, call Records Manager Kevin Reed at 898-9432.

We will ask you for the following information:

1. Your department's telephone number and address.
2. Your department's official name. If you are part of a school or larger entity, tell us that also. For example: "SAS: Dept. of Economics-International Economics Review".
3. The budget or cost center number you wish charged for storage and services. Storage is charged one month in advance and services are billed for the month past.
4. The person in your department to whom you wish the monthly journal voucher notification to be sent, that person's telephone number, title, e-mail and business address.
5. The names, business addresses and telephone numbers of those individuals who will be making requests for services.

Documents Cleanout

Typically, there are 3 categories of documents to be considered for disposition during an office cleanout:

- 1) Documents that need to be kept, but stored off site, i.e. at Penn Records Center
- 2) Documents to be disposed of securely, i.e. shredded
- 3) Documents that are trash or can be recycled

For off-site records retention:

1. Check with the archives guide to see how long information should be kept and best practices
<http://www.archives.upenn.edu/urc/recrdret/guide>
<http://www.archives.upenn.edu/home/protocols.html>
Or call 215-898-7024

2. Check with your department chair
3. Check with the business office - get a budget code from business office
4. Call Records at (215) 898-9432 to set up account and request delivery of Archive Boxes

For secure disposal/shredding:

1. Check with your department chair for approval to dispose/shred.
2. Get a budget code from business office
3. Call Records Center at 215-898-9432 to set up account and request delivery & removal of confidential dumpsters

For Trash (non-secure disposal):

Place **documents/papers** that can be recycled into blue recycle trash bags. Fill no heavier than you can lift with 1 arm. Blue plastic bags should be requested from Housekeeping.

Books to be disposed of must be placed in boxes. When ready for removal, contact SAS Facilities Planning & Operations Program Coordinator Ruth Kelley at kelleyr@sas.upenn.edu to request removal to SAS recycle dumpster. If boxes are needed, the contact person is also Ruth Kelley.

Note: When preparing for an office cleanout, best practice is to engage Housekeeping in those areas where they can be of assistance and to avoid potential issues.

Should any difficulties arise, a second step would be to contact your Building Administrator and ask them to assist in communicating with Housekeeping.

SAS Battery Recycle Process

1. Request a Big Green Box battery recycle box be delivered to your location by contacting Paige Menees (pmenees@sas.upenn.edu) and Ruth Kelley (kelleyr@sas.upenn.edu).
2. Place box in an easily accessible/high traffic area at your location.
3. When the box is full, contact Ruth Kelley again for removal of the full box and drop off of another empty battery recycle box.
4. Do not seal up full battery boxes. Boxes must be inspected by FPO Sustainability Coordinator prior to sealing & shipping.
5. Instructions for placing items into the box:
Do Not Bag: Alkaline & other low voltage batteries under 9 volts
Must Bag the following types of batteries:

Alkaline batteries 9 volt or greater	Cell phone
PDA's	Laptop
Power Tool	Camera
MP3 Player	Computer accessories
Cell phone accessories	
6. A full color instructional sign to post with your battery recycle box is available for download at: <https://www.sas.upenn.edu/green/resources>

Office Cleanout Process – Miscellaneous Items

Small Appliances (toaster ovens, microwaves):

Label as “Trash” and place in prominent location for removal by Housekeeping.

Refrigerators:

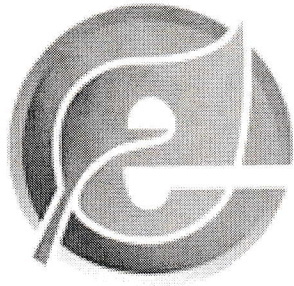
Because refrigerant must be disposed of properly, refrigerators must be removed by Facilities & Real Estate Services (FRES).

Requests should be submitted online: Go to www.upenn.edu

- Select “Faculty & Staff”
- Under “Facilities” heading select “Maintenance Request (AIM)”
- Select “Enter New Work Request” to complete all pertinent information for your request.
- A budget code is required for this service.

Furniture:

SAS maintains a program for furniture re-use/recycle as part of their sustainability efforts. For removal of unwanted furniture, contact Ruth Kelley at kelleyr@sas.upenn.edu.



eForce
compliance

Universal Waste Price List
Effective: 1.4.2016



LIGHTING (Lamps and Ballasts)

Type	Unit Price (Linear Ft.)
Straight Fluorescent	\$0.10 per foot
Compact or Circle Fluorescent Lamps	\$0.45 each
U Bend Fluorescent Lamps	\$0.45 each
Incandescent and Halogen Lamps	\$0.25 each
HID, High Pressure Sodium or Bi-Metal Lamps	\$1.35 each
4ft or smaller Shatter Shield Straight Fluorescent Lamps	\$2.25 each
5-8ft Shatter shield Straight Fluorescent Lamps	\$2.50 each
Finely Crushed Fluorescent Lamps (in 55 gallon drums)	\$295.00 per drum
Broken (not finely crushed) Fluorescent Lamps	\$1.50 per pound
PCB Ballasts Recycling/Incinerating	\$0.95 per pound
Non PCB Ballast Recycling	\$0.10 per pound
PCB Capacitors (Only)	\$3.55 per pound
HID PCB Ballast Recycling/Incinerating	\$0.69 per pound

POWER (Batteries)

Type 1 Batteries .71 cents per pound

Alkaline, Sealed Cells and Battery Packs,

Ni-Cad Wet Industrial \$1.10

Type 3 Batteries .25 cents per pound

Lead Acid

Transformers .25 cents per pound

Capacitors: \$3.05 per pound

Type 2 Batteries .41 cents per pound

Lithium Ion, Ni-Cad Consumer, Nickel Metal Hydride, Zinc Air, Zinc Carbon

Type 4 Batteries \$5.25 per pound (CALL WITH QUANTITY)

Lithium Metal, Magnesium Metal, Zinc Chloride, Button Cells. CALL FOR PRICING NICKEL IRON AND MERCURY METAL

ELECTRONICS

Type 1 Electronics .30 cents per pound

Computers, Printers, Fax Machines
Telephone Systems, Scanners, Keyboards, Mice
Peripherals

Type 2 Electronics \$20.00 per unit

TVs, CRT Monitors

FURNITURE

Standard Pallets No charge

Irregular-size pallets .30 cents per pound

Office Furniture .30 cents per pound

Type 3 Electronics \$50.00 per unit

Projection TVs

ASSET REPORTING: Pricing available per client request, \$50.00 minimum

TRANSPORTATION:

General Pickup: \$125.00 per hour portal-to-portal within a 25-mile radius.

\$150.00 per hour portal-to-portal outside a 25-mile radius.

No drop charge to eForce Facility

INVOICING:

ALL OTHER BULBS are charged at market price.

ALL OTHER BATTERIES are charged at market price.

ALL BATTERY and BULB invoices are charged a \$50.00 processing certification fee in addition to all item charges.

TERMS AND CONDITIONS

Effective: 1/4/16 to 12/31/16

Terms: Net 15 days upon credit approval

Shipping and Packing Requirements:

All shipping containers must be marked with the appropriate Universal Waste designations. eForce can supply all necessary labels to meet Universal Waste requirements upon request.

eForce Compliance will make available customized boxes which will make storage of the various types of bulbs stored easier for transport. Available storage containers are as follows:

4ft. drums	4ft. fluorescent bulbs
8ft. drums	6ft and 8ft fluorescent bulbs
2ft. boxes	CFLs, utubes, 2ft and 3ft bulbs
Gaylords	HID bulbs

All bulbs **MUST** be placed in the appropriate containers as provided by eForce Compliance (or their original containers) in order to ensure minimal breakage. Should a container of bulbs be mixed, a sorting charge in the amount of \$75.00 per hour will be charged for each shipment, billed in 15-minute increments.

Ballasts should be packaged in a DOT-approved poly pail, poly drum or steel drum. All other ballasts that are not marked "non-PCB Ballast" will be identified as PCB Ballast. PCB and non-PCB ballasts must be separated.

Batteries should be packaged in a DOT-approved poly pail, poly drum or a lined steel drum. Batteries must be sorted by type and all non-alkaline batteries must be taped, bagged or separated prior to pick up. DOT compliance sorting charges are \$50.00 per hour and billed in 15- minute increments.

Mercury Containing Devices should be packaged in a DOT-approved poly pail, poly drum or a lined steel drum.

Electronic scrap should be stretch-wrapped to a pallet or packaged in a Gaylord box. No broken monitor or TV glass will be accepted without prior notification.

All battery and bulb invoices receive a \$50.00 processing certification fee in addition to the item charges.

Onsite Delivery:

eForce accepts customer deliveries by appointment only. A copy of all shipping documents must be submitted for review and approval prior to delivery. Loads will not be scheduled if the paperwork is not received and approved.

Containers

eForce will supply the necessary containers for storage at no charge. In the event that containers are not returned to eForce, the following charges apply:

4ft Fiber Tubes \$40.00 each	1 gallon DOT poly pail \$7.50 each
8ft Fiber Tubes \$50.00 each	5 gallon DOT poly pail \$14.00 each

Battery Tubes \$75.00 each

Cell Phone Collection Boxes \$75.00 each

eForce Compliance

Date

Date



Equipment Removal and Recycling

THIS FORM TO BE PRINTED, SIGNED BY PI AND TAPED TO EACH PIECE OF EQUIPMENT TO BE REMOVED.

EQUIPMENT WILL NOT BE REMOVED WITHOUT THIS FORM.

It is important that all equipment being removed from your area be decontaminated if exposed to biological agents, radioactive materials or hazardous chemicals.

Reason for disposal: 1. Broken 2. Not needed (still works)

You are required to certify that your equipment has been decontaminated of each of the following:

1. Biological Agents

Has this piece of equipment been exposed to viable biological agents?

If YES, please state agents, hazard groups, and biosafety level/category: _____

If YES, please describe procedures used to decontaminate the instrument:

2. Radioactive Materials

Has this piece of equipment been exposed to radioactive materials?

If YES, please identify radioactive isotopes: _____

If YES, please describe procedures used to decontaminate the instrument:

3. Hazardous Chemicals

Has this piece of equipment been exposed to chemicals that are very toxic?

If YES, please identify the hazardous chemicals: _____

If YES, please describe procedures used to decontaminate the instrument:

PI Signature certifying that equipment has been decontaminated _____

Date _____ Phone _____ Email _____

*Biosafety Cabinets: call Microclean to schedule decontamination.



PERRY JOHNSON REGISTRARS, INC.

Certificate of Registration

*Perry Johnson Registrars, Inc., has audited
the Environmental, Health and Safety Management System of:*

eForce Compliance Selectronics

3114 Grays Ferry Avenue Philadelphia, PA 19146 United States

*(Hereinafter called the Organization) and hereby declares that the Organization has been audited
by an ISO 17021 accredited certification body in conformance with applicable ANAB
requirements and is found to be in conformance with all requirements of the*

***e-Stewards® Standard for Responsible Recycling and Reuse of Electronic Equipment©
Version 2.0***

This Registration is in respect to the following scope:

Electronic Recycling, Demanufacturing and Hard Drive Destruction

*This Registration is granted subject to the system rules governing the Registration referred to above, and the
Organization hereby covenants with the Assessment body duty to observe and comply with the said rules.*



Terry Boboige

Terry Boboige, President

Perry Johnson Registrars, Inc. (PJR)
755 West Big Beaver Road, Suite 1340
Troy, Michigan 48084
(248) 358-3388

The validity of this certificate is dependent upon ongoing surveillance.

Effective Date:

March 16, 2015

Expiration Date:

January 15, 2018

Certificate No.:

C2015-00801



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Organization is in conformance with:*

ISO 14001:2004

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(248) 358-3388

*The use of the UKAS accreditation symbol is in respect to the activities
covered by the Accreditation Certificate Number 0105.*

The validity of this certificate is dependent upon ongoing surveillance.

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Certificate No.:

C2015-00800



Environmental Processing Report



ELECTRONIC RECYCLING PROCESS

PA DEP # WMGR081D020

EPA # PAR000518720

Sustainable Solutions

Our processes are 100% transparent and we consider the environmental impact of our operations as paramount in our disposal processes. With consideration to the environment, electronics are demanufactured and recycled in local area markets, thus reducing the footprint associated with recycling. All material reclaimed from our processes are reused in secondary markets in the manufacture of new products.

Compliance Assurance

There has been a surge in legislation on both the state and federal level concerning electronics recycling and landfill disposal bans. We maintain detailed records of all electronic waste disposal to protect our clients and assure 100% compliance with all federal, state, local, DEP and EPA regulations and mandates.

Our processes are compliant with ISO 9001, ISO 14001 and the Recycling Industry Operating Standard (RIOS) as well as the EPA's R2 practices and the E-Steward program.

General Recycling Policy

- * Zero Export
- * Zero Landfill
- * Local markets
- * Reduced Footprint
- * Highest Environmental Value Processing

Hard Drive Destruction

Hard drives are physically destroyed so that all data and software are unrecoverable. We employ the use of an in-house hydraulic shear crusher at 2600 psi. to provide complete destruction of all resident data on hard drives.

Auditing

Our downstream vendors are audited on a regular basis and are required to maintain the necessary permits and licenses to process secondary material. We also place restrictions on the use of prison and child labor, U.S. government trade bans, and using recycled material in the manufacturing of weapons of mass destruction.

Material Processing

Plastics are either shredded or separated by color and bailed. All plastics are sent to audited and approved facilities that separate, clean, and grind the material into pellets and sold to manufacturers as feedstock and/or blend.

Electronics are shredded to yield metals. Aluminum is sent to casting or secondary mills, where it is melted and sold to secondary processors, who alloy them for a specific use, or to manufacturers as feedstock. Copper from wire harnesses, cables, and CRT yokes is melted into anodes at a copper smelter. Steel and other metal alloys are sold to steel mills and foundries as feedstock.

Circuit boards are shredded and sent to a refinery for precious metals recovery. Board material is processed utilizing thermal and hydro-metallurgical processes that minimize waste; chemicals and waste waters are recovered/reused, and air emissions from the melting furnaces are captured and used to make industrial-grade sulfuric acid.

Glass from monitors and TV's are taken apart for panel and funnel glass. Panel glass is sorted by composition and is then cleaned, crushed and sorted by size specification and processed for reuse. Ferrous and non-ferrous metal is removed, separated and recycled.



FLUORESCENT LAMP & BALLAST RECYCLING PROCESS

Straight Lamp Treatment Process

Lamps are staged and are loaded onto a lamp crusher feed table into the crushing machine. Crushed and broken lamps are fed into the crusher via a hopper on the feed table. The lamps are broken into pieces approximately 2-3 inches in length and are then conveyed to a hammermill which crushes the pieces. The crushing process breaks the glass away from the aluminum end cap component.

The aggregate is then gravity conveyed into a separator unit which separates the various components of the lamps- aluminum end caps, phosphor powder, and glass cullet. The aluminum end caps are collected in drums and sent to an off-site recycling facility. The glass cullet is collected in a 20 yard roll-off bin and sent to an off-site recycling facility. The phosphor powder is accumulated in 55 gallon drums and stored until it undergoes the retort process. When the waste has been processed, the recycling processor scans the bar-coded unique identification label. A timestamp records the date and time the waste was processed.

Filtration System

A three element filtration system maintains negative air pressure in the crushing machine at all times. The control system on the lamp crusher is programmed with a fail-safe to ensure the machine can not be operated if the filter system is not operational. The filtration system captures errant phosphor powder that is generated inside the lamp crusher during the treatment process. Particulate removal takes place within the final two stages of the filtration system. The first stage of the system is a HEPA panel filter rated at 99.97% efficiency. Vapor removal occurs in the final stage of the filtration system through the use of an activated absorption unit.

Lamp recycling procedures operate under a Federally Enforceable State Operating Permit that requires the monitoring of emissions from filtration system on a routine basis. A Jerome Mercury Vapor Analyzer is used daily to monitor the concentration (expressed in mg/m³) of mercury vapor present in the vent stream. The Jerome Mercury Vapor Analyzer is calibrated annually by the manufacturer.

Manual Lamp Process

The typical construction of HID, CFL, halogen and incandescent lamps require that they be manually processed. These lamps typically contain elements such as wires or plastics that can not be processed by the automated lamp crusher. These lamps are broken into 55 gallon drums; the various components are separated and collected. The mercury contaminated glass is then dumped into the automated lamp crusher and undergoes the treatment process described above. The collected metals and plastics are sent to an off-site recycling facility.

Manual Mercury Device Treatment Process

Mercury devices are manually de-constructed. A drill press is typically used to extract mercury from sealed devices such as mercury switches. Mercury thermometers are broken. The mercury device processing area is equipped with a fume hood to capture any mercury vapor that is released during processing. The various components are separated, collected and sent to an off-site recycling facility.

Ballast Recycling

Non-PCB ballasts contain copper and steel and are recycled by recovering metal components. PCB-ballast is thermally destroyed at a permitted facility.

BATTERY RECYCLING

Material Receipt

Upon receipt and review of shipper's documentation to assure that the documents are accurate and conform to the materials received, all materials are weighed, sorted by chemistry and entered into inventory pending immediate and final processing.

Processing- Alloy Production

Following the material preparation process, battery feedstock's are introduced to an alloying operation- also known as High temperature Metal Reclamation (HTMR).

All of the high temperature metals contained within the battery feedstock i.e. nickel, iron, cobalt, manganese, and chromium report to the molten-metal bath within the furnace, amalgamate and solidify during the casting operation. The low-melt metals, i.e. zinc, lithium, and cadmium separate during the melting operation and are collected as a metal-oxide.

High temperature Metal Reclamation (HTMR)

According to the US EPA, HTMR has been deemed to be the Best Demonstrated Available Technology, for Nickel-Cadmium Battery Recycling.





OFFICE FURNITURE AND EQUIPMENT

Recycling Process

Wood and metal furniture that cannot be remarketed will be recycled.

Wood furniture will be shredded and sent to either a biomass power operation or to an organic composting operation. Metal furniture will be shipped to a metal recycling plant.

In both cases, the material will not be landfilled.

CARPETING

Recycling Process

Carpeting that cannot be remarketed will be recycled.

Vinyl-backed flooring is recycled into new 100% recycled content floorcovering backing. Remnants are shipped to bio-mass power operations.

PALLETS

Recycling Process

Wood pallets are recycled into a finished pallet through a repair process and supplied back into the distribution chain. All untreated wood waste is consumed as an energy product. All metal products such as nails, strapping, etc. are distributed to the metal recyclers.



INK CARTRIDGE RECYCLING

Recycling Process

Ink cartridges are remanufactured for reuse. Approximately 95% of all cartridges received are designated for reuse. In cases where destruction is required, ink cartridges are incinerated.

Any scrap material is used as waste-to-energy. The waste-to-energy process is designated as a "green power" source of electricity and no byproducts of the ink cartridge recycling process is sent to a landfill.



Material Acceptance List
eForce Compliance

Electronics



Desktop Computing

desktops
mini-towers
laptops and handhelds
notebooks
tablets
hard drives

Printers

laserjets
deskjets
thermal
dot matrix
line printers
plotters
paper trays

Peripherals

keyboards
mice
power supplies
cables
speakers
external drives, etc.

Monitors

CRTs
LCDs
WYSE terminals, etc.

Office Equipment

copiers
scanners
fax machines
typewriters



Audio/Video Equipment

tv's and displays
VCR/DVD players
projectors
video and audio conferencing systems
smart/electronic white boards

Mobile Devices

cellular phones,
Blackberry/PDAs, pagers

Telecom Equipment

telephones
switches
PBX
voice mail and VoIP systems
voice stations
headsets

Storage Equipment

video tapes
audio tapes
CD's
tape, hard, thumb flash and zip drives
data backup systems
disk arrays
SAN

Mainframes

mid-range and servers
power conditioning/UPS systems
cabinets,
relay racks

Networking Equipment

hubs, routers, switches, bridges



Parts

AC adapters
memory
motherboards
network, sound and video cards
CD/DVD drives

Healthcare Equipment

All non-biohazardous equipment:
defibrillators
EKG machines
mobile carts/workstations
patient monitors

Banking

currency and coin counters
transaction drawers
check encoders and scanners
receipt printers
ATM machines

Point-of-Sale:

POS systems/registers
barcode scanners
receipt and barcode printers
card readers
touch screen monitors

Miscellaneous:

laptop carry cases
modems
software
cables
cabinets
cameras
video games
ipods, iphones, ipads

Bulbs & Ballast

Bulbs

Straight Fluorescent

Fluorescent bulbs come in typically 4,6 or 8 foot lengths.

Compact or Circle Fluorescent Lamps

CFLs are designed to replace an incandescent lamp and come in many different shapes and sizes.

U Bend Fluorescent Lamps

Easy to identify by the name. U design is a dead giveaway!

Incandescent Lamps

Most common type of lighting used in homes. Operates without a ballast.

HID, High Pressure Sodium or Bi-Metal Lamps

A type of high-intensity discharge lamp that uses sodium under high pressure as the primary light-producing element. used for interior industrial applications, such as in warehouses and manufacturing, and for security, street, and area lighting; they are becoming the most common type of outdoor lighting.

Shattershield

Shattershield bulbs are high-performance safety coated lamp generally have special markings indicating their type.

Finely Crushed Fluorescent Lamps (In 55 Gallon Drums)

Broken (Not Finely Crushed) Fluorescent Lamps

Ballast

PCB Ballast

PCBs were used in the manufacturing of fluorescent light ballasts prior to 1978. Other than a "non-PCB" label, there is no significant marking to indicate whether a ballast contains PCB. PCB ballasts usually are significantly heavier than dry ballasts.

DEHP Ballasts

DEHP, a dielectric fluid and was used in small capacitors found in fluorescent light fixtures from 1980-1991. The disposal of DEHP ballasts should be handled with the same precautions as the disposal of PCB containing ballasts.

non-PCB Ballast

Since 1991, non-PCB ballasts, also known as dry ballasts have been in use. Because these dry electronic ballasts contain no fluid, they may be sent for electronics recycling.

HID PCB Ballast

This type of ballast is used in high intensity discharge lighting applications.



Batteries

Type 1 Batteries

Alkaline Batteries

Alkaline batteries make up a majority of consumer batteries and contain about 1 percent mercury by weight. Alkaline batteries are often used in electronics applications requiring heavy currents for long periods of time (e.g. CD players and radios).

Type 2 Batteries

Lithium Ion

Lithium-ion batteries use different chemistry and accordingly have different safety characteristics. They are formed into a wide variety of shapes and sizes so as to efficiently fill available space in the devices they power. They may explode if overheated or if charged to an excessively high voltage.

NiCad

NiCad batteries are a type of rechargeable battery using nickel oxide hydroxide and metallic cadmium as electrodes.

Nickel Metal Hydride

Nickel-Metal hydride cell, abbreviated NiMH, is a type of secondary electrochemical cell similar to nickel hydrogen cell.

Zinc Air

Zinc-Air batteries (non-rechargeable), and zinc-air fuel cells, (mechanically-rechargeable) are electrochemical batteries powered by oxidizing zinc with oxygen from the air. These batteries have high energy densities and are relatively inexpensive to produce. They are used in hearing aids and in film cameras that previously used mercury batteries.

Zinc Carbon

Zinc Carbon cells also contain about 1 percent mercury and are commonly used in low drain consumer applications (e.g. clocks, calculators, and garage door openers). Carbon-zinc batteries are available in the same sizes as the alkaline and manganese dioxide ("AA", "AAA", 9-volt, "C", "D") varieties. They are one of the most widely used dry primary batteries because of their low cost and reliable performance.

Type 3 Batteries

Lead Acid

Shallow cycle batteries, like the type used as starting batteries in automobiles and small sealed lead acid batteries.

Type 4 Batteries

Metal and Zinc

Lithium Metal, Magnesium Metal, Zinc Chloride, Button Cells. Button cells are the easiest to identify and are typically used to power watches, pocket calculators, hearing aids, and similar compact portable electronics products.

Nickel Iron & Mercury Metal

Nickel-Iron battery (NiFe battery) are a storage battery having a nickel(III) oxide-hydroxide cathode and an iron anode, with an electrolyte of potassium hydroxide. Call 866.468.6935 for pricing.



Office Furniture and Equipment



Office Furniture

desks
chairs
partitions
filing cabinets
bookcases
carts,
stands
lighting
safes
carpeting
tiles
tables

General

paper
plastic
metal
glass
cardboard

Appliances

stoves
washers
dryers
refrigerators
microwaves

Oddball Items

pallets (wood and plastic)
ink cartridges
wood
styrofoam