

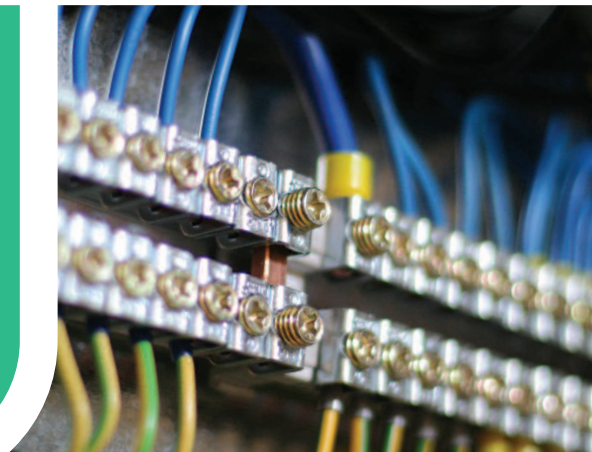
The building environment you work in

Over 190,000 tonnes of cabling, wiring and lighting are used each year in the construction industry. Of this, 39,000 tonnes (20%) are wasted annually. Cable can be recycled, the copper is extracted and the plastic used in traffic cones and piping.

Fluorescent lighting is more energy efficient than incandescent light bulbs, lasting eight to ten times longer and using 75-80% less energy. But we discard approximately 100 million fluorescent tubes every year, which are hazardous and need to be disposed of accordingly.

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Construction waste - some key facts

Waste is 'any substance or object that the holder discards or intends to discard'.

You have a **Duty of Care** to:

- **KNOW** - what is in your waste.
- **CHECK** - that the person collecting it is licensed to do so.
- **PROVE** - that it is disposed of in a licensed site.

Hazardous Waste Regulations require producers of hazardous waste to register their premises, which includes most building sites. A **Material Safety Data Sheet** must accompany any material supplied to you that has potentially hazardous properties.

A **waste carrier's licence** must be held by anyone who transports waste.

Waste transfer notes should be filled in and accompany any load of waste leaving site (listing the European Waste Catalogue (EWC) code).

Segregating waste helps to improve its management. There are standard colour-coded signs for waste

containers: Gypsum - white, Inert - grey, Mixed - black, Wood - green, Hazardous - orange, Metal - blue, Packaging - brown.

The **waste hierarchy** defines methods of waste disposal according to their environmental impact. The order is **reduce, re-use, recycle, landfill**. You should always be trying to move your disposal solution up the scale.

Landfill tax is paid to HM Revenue and Customs for each tonne of waste sent to landfill. The rate is reviewed annually and is currently £2.50 per tonne for inert waste and £32.00 per tonne for non-hazardous waste.

Landfill Directive - all waste going to landfill must now be treated to change the characteristics of the waste to reduce its volume, or reduce its hazardous nature, or facilitate its handling, or enhance its recovery.

EWC codes are standard for all types of waste. Examples are 17 04 01 copper, bronze, brass; 17 08 gypsum-based construction material; 17 04 10* cables containing oil, coal tar and other dangerous substances. The * refers to the hazardous nature of the waste.

Site waste management plans

(England only) - to improve construction waste management and are mandatory for projects with a value over £300,000.

Types of waste

The wastes you produce are categorised for disposal according to their environmental impact.

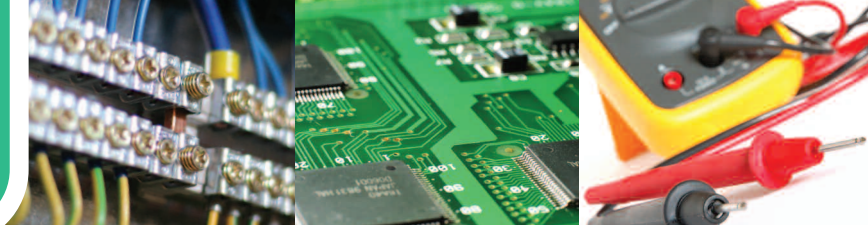
Inert waste - includes bricks, blocks, set concrete and mortar, asphalt, glass, ceramics and tiles, slate, sand, gravel.

Non-hazardous waste - includes timber, paper, plastic, packaging, empty tins and tubes, PVA, topsoil, insulation, metal, steel, food, carpets, gypsum and plasterboard (if less than 10% of a load), ironmongery, lath and plaster, water-based glues, paints and mastics.

Hazardous waste - includes solvent-based mastics and glues, paints, varnishes, sealants, wood stains and wood preservers, additives and waterproofing products, spray paints, coal tar products (eg some roofing felts), batteries, fluorescent tubes, asbestos, oil, petrol, diesel, waste containing PCBs (eg resin-based flooring, sealants, sealed glazing units).

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Things you can do

You have many priorities at work and health and safety are first. We are all aiming for the BPEO - the best practical environmental option - a balance between getting the job done well and considering the environmental impact. Using the best environmental option can also save you money.

- The best type of waste is no waste; work out your own ways to eliminate waste from your work.
- Packaging waste can be a problem. Work out ways of reducing it.
- If you cannot eliminate or reduce waste, make sure it is recycled. To discuss the options, contact your local waste management contractor.
- Know the types of waste you produce and, particularly, if they are hazardous.
- Damaged work is wasteful; take steps to protect completed work so others cannot damage it.
- At a practical level, be efficient in your work; reduce tails to a minimum and don't install more lights and sockets than are needed.
- Find out how much recycled content there is in the materials you use and try ones with higher recycled content.
- Encourage the use of low energy lighting.
- Bad storage can be wasteful. Keep stores secure, dry and organised.
- Make sure customers know how best to use what you have installed. Leave manuals and clear maintenance instructions.

Coming your way soon

The **Waste Strategy for England** aims to halve construction and demolition waste to landfill by 2012 and raise landfill tax to £48.00 per tonne by 2010.

Batteries Directive - to reduce the environmental impact of battery disposal.

Draft Climate Change Bill - aims to reduce CO₂ at 1990 figures by 26-32% by 2020, and 60% by 2050.

Like to know some more?

Environmental taxes - in 1996 there were no environmental taxes. In 2006 the Landfill Tax, Aggregates Levy and Climate Change Levy raised over £1.8 billion.

Waste Electrical and Electronic Equipment (WEEE) Regulations - all businesses that use electrical and electronic equipment must store, collect, treat, recycle and dispose of WEEE separately from other waste. This includes power tools, mobile phones, CCTV and alarm systems, computers and microwaves (but not the fabric of the building, such as lifts). Visit www.environment-agency.gov.uk

The RoHS Directive aims to restrict the use of certain hazardous substances in electrical and electronic equipment. It bans placing on the EU market new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants.

Want some help?

Waste management

www.ciwim.co.uk/pm/316

Site waste management plans

www.netregs.gov.uk/netregs/legislation/380525/1555007/?version=1&lang=_e

Hazardous waste

www.environment-agency.gov.uk/subjects/waste/1019330/1217981/?version=1&lang=_e

Legal information

www.netregs.gov.uk/netregs/processes/367026/?version=1&lang=_e - concerning electrical work

Recycling

www.bremap.co.uk/bremap/search.jsp - type in your postcode and the site details local waste handling, recycling and re-use organisations

Advice

www.envirowise.gov.uk/construction - advice and practical support

www.wrap.org.uk/ - information and advice on environmental issues in construction

Energy

www.est.org.uk/ - energy saving ideas

www.carbontrust.co.uk - calculate your carbon footprint

www.envirowise.gov.uk/construction

envirowise } ADVICE LINE 0800 585794

Harwell | Didcot | Oxfordshire | OX11 0QJ | E advice@envirowise.gov.uk www.envirowise.gov.uk

Envirowise - sustainable practices, sustainable profits. Envirowise is a Government-funded programme dedicated to putting the sustainable use of resources at the heart of business practice. It is managed by AEA Technology plc and Serco TTI. Envirowise is funded by Defra, the Scottish Government, the Welsh Assembly Government and Invest Northern Ireland.



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