

## The building environment you work in

Construction generates 3 tonnes of waste for every person in the country and produces 24% of all waste arising - 13 million tonnes are unused building products.

The energy needed to make one brick is enough to brew 2 pints of beer. Cement production is a major contributor to the annual global output of the greenhouse gas CO<sub>2</sub>. We throw away 2 million bricks each year.

# Bricklayer

## ENVIRONMENTAL INFO SHEET



### Construction waste - the 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, that the person you are giving it to is licensed to carry it and that it is disposed of in a licensed site.

- **SUB-CONTRACTORS** - who give waste to a main contractor, are still responsible for those wastes under the Duty of Care.
- **MOVING WASTE** - if you transport your own waste, you need to be registered as a waste carrier with your Environmental Regulator.
- **HAZARDOUS WASTE** - most building sites need to be registered if they produce hazardous waste.

### Types of waste

There are three main types of construction waste distinguished by their environmental impact. Each is sent to a different type of landfill site.

**Inert waste** - includes set concrete, bricks, tiles, slate, sand, gravel, clay pipes.

**Non-hazardous waste** - includes timber, packaging, insulation, plastic, wet cement, PVA, DPC, empty tins and tubes, metal.

**Hazardous waste** - includes oil, diesel, cement washings, coal tar products, two-part resins, brick cleaner, solvent (white spirit) based products (many paints and waterproofing materials).

On some sites, waste is segregated into different skips so it can be easily recycled. There are now standard colour-coded signs as follows:

Wood - green; Metal - blue; Gypsum - white; Inert - grey; Packaging - brown; Hazardous - orange.

### Special problems for bricklayers' waste

- Water that comes into contact with cement powder or workable concrete can be highly alkaline and defined as hazardous waste.
- Concrete contains chromium, which is polluting to watercourses and groundwater.
- Washout water from trucks and mixers must never enter storm water drains.
- Where possible, store and re-use washout water, allowing the silt to settle.



## Things you can do

**We are all aiming for 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.**

You should:

- Know the products you use and read any product labels.
- Use your materials - don't throw away mortar, cut bricks or insulation.
- Use Fletton commons which use less energy to make than other bricks.
- Use blocks with a high percentage of recycled aggregate, eg Thermalite.
- Know your waste types and segregate wastes when you can.
- Send back pallets - don't waste space in a skip.
- Pack skips well - a skip is up to 70% air.
- Know if your site is registered for hazardous waste.
- Fill the perps to make walls more thermally efficient.
- Minimise the amount of water you use.

## Coming your way soon

**The law on environmental issues is constantly changing. Some initiatives you should know about are:**

**WEEE** - Waste Electrical and Electronic Equipment Regulations affect all forms of electrical equipment, from mobile phones to battery power tools. These will be classified as hazardous waste and need to be deconstructed before disposal.

**Batteries Directive** - on the use and disposal of batteries.

**Part L** of the Building Regulations will set new standards for the conservation of heat and power in buildings.

**Site waste management plans** - do you have one?

**Landfill Directive** regulates the types of waste that can be sent to landfill and sets pretreatment targets.

## Like to know some more?

The **waste hierarchy** defines a number of methods of waste disposal from least to most harmful to the environment. The order is **reduce, re-use, recycle, landfill**.

**Landfill tax** is paid to HM Revenue and Customs for each tonne of waste sent to landfill. The rate is reviewed annually.

Inert waste has stayed at £2.00 per tonne. Non-hazardous waste is £21.00 per tonne and will rise to a target of £35.00 per tonne.

**European waste codes (EWC)** are standard codes for all types of waste based on their source. In construction, they begin with 17. Examples are 17 01 01 concrete and 17 02 01 wood. If a code has an asterisk against it, this refers to the hazardous nature of the waste.

**Waste transfer notes** are a form that should be filled in and accompany any load of waste leaving site (listing the EWC).

## Want some help?

**Website lists sources of recycled building products:**

[www.recycledproducts.org.uk](http://www.recycledproducts.org.uk)

**Type in your postcode and the website will detail local waste handling, recycling and re-use companies and organisations:**

[www.bremap.co.uk/bremap/search.jsp](http://www.bremap.co.uk/bremap/search.jsp)

**Colour-coded skips:**

[www.wascot.org.uk/construction/colour.asp](http://www.wascot.org.uk/construction/colour.asp)

**Details on recycling:**

[www.wrap.org.uk](http://www.wrap.org.uk)

**Legal obligations with respect to waste management:**

[www.netregs.gov.uk](http://www.netregs.gov.uk)

[www.envirowise.gov.uk/construction](http://www.envirowise.gov.uk/construction)



Harwell International Business Centre | Didcot | Oxfordshire | OX11 0QJ  
E-mail: [helpline@envirowise.gov.uk](mailto:helpline@envirowise.gov.uk) Internet: [www.envirowise.gov.uk](http://www.envirowise.gov.uk)

Envirowise - Practical Environmental Advice for Business - is a Government programme that offers free, independent and practical advice to UK businesses to reduce waste at source and increase profits. It is managed by Momenta, an operating division of AEA Technology plc, and Serco TTI.



EN611 © Crown copyright. First printed September 2006. Printed on paper containing 80% recycled post-consumer fibre. This material may be freely reproduced in its original form except for sale or advertising purposes.

*For further information please contact the*

**Environment  
and Energy  
Helpline  
0800 585794**