

IBSTOCK BUILDING SUSTAINABILITY



Matured bank restoration at Birtley using woven willow saplings

Sustainability is a complex subject; many people think solely about energy consumption for manufacturing but this is only a small part of the overall picture. The Government's strategy approaches sustainability using four points:

- Social progress that meets the needs of everyone
- Protection of the environment
- Prudent use of natural resources
- Maintenance of stable economic growth

All must be present to demonstrate sustainability.

WHAT DOES IBSTOCK DO?

IBSTOCK AND SOCIAL PROGRESS

- Ibstock is unique amongst brickmakers, having 22 manufacturing sites across the UK. We are quite literally the 'national local supplier', able to deliver locally manufactured product to local construction sites.
- We support local rural communities where we are probably the single largest employer in some areas of the country. Some 58% of our employees have more than 10 years' service.
- We support local suppliers by using labour and materials from local contractors wherever possible.
- We have an active corporate social responsibility programme which includes school visits and working with clay sculptors and artists.
- We sponsor many societies such as youth football teams and brass bands. We also support drug awareness programmes.
- We support ActionAid by recycling print and toner cartridges to the value of several thousand pounds per annum.
- Ibstock is the only brick manufacturer to publish a 'warts and all' annual environment report on the internet and has done since 1999.
- Ibstock supports financially the Ibstock Cory Environmental Trust which distributes £300,000 pa to community projects under the Landfill Tax Credit Scheme.

For more information visit www.ibstock.com/sustainability

IBSTOCK AND PROTECTION OF THE ENVIRONMENT

- All our 22 manufacturing sites are independently verified and registered with CICS to ISO 14001, the International Environmental Management Standard.
- Ibstock has won many awards for sustainability including:
 - The Sustainability Award at the 2004 Building Awards - the only manufacturer to win this prestigious award.
 - The 2006 CPIA Innovation Award for our approach to environmental management.
- On average, our bricks travel only 80 miles from where they are manufactured to where they are used. This reduces traffic congestion and vehicle emissions.
- Ibstock undertakes pro-active research in environmental technology – Ibstock was the winner of a 1999 Environmental Technology Best Practice Programme Award at the Leicester factory for a Fluoride Reduction technique.
- Continuous improvement techniques are applied to our processes with extensive benchmarking of key improvement indicators.
- We recover and send for recycling approximately 50,000 litres of spent lubricating oils every year.

- We recover and send for recycling in the order of 1,300 tonnes of scrap metals every year.
- We recover and send for recycling over 150 tonnes of wood from scrap pallets every year.



Land restoration, Leicester

- Since 2005 a 16% reduction in CO₂ from kiln combustion has been achieved.
- On average we plant 5,000 trees every year.
- We spend over £38,000 recovering packaging materials from the UK packaging stream every year.

IBSTOCK AND PRUDENT USE OF NATURAL RESOURCES

- Ibstock operates some of the most energy efficient factories in Europe. The energy used to make our bricks has reduced year on year.
- Our bricks have a high recycled content (18% on average) using secondary or waste materials brought into our factories.
- All process waste up to the kiln firing stage is recycled.
- Water is recovered and recycled wherever possible. Some 26 million gallons or nearly 40% of all process water used throughout Ibstock is recovered water.
- 8MW of electricity is generated from landfill gas, enough to power 10,000 homes without the use of fossil fuels.
- We fully restore all our clay extraction sites and combine them with the creation of local amenities whenever possible.



Wayside Arts Trail, Burnley (Photographer: Nigel Hillier)

IBSTOCK AND MAINTENANCE OF STABLE ECONOMIC GROWTH

- We have an established policy of investment in high efficiency/low carbon technologies.
- In the past 5 years over £55 million has been invested in energy efficiency related projects.

eco-products

At Ibstock we have taken some of our environmental ideas and put them into action – creating a range of eco-products that can help meet the special environmental needs of a site – often now a requirement of the planning process. The importance of creating eco-habitats is now recognised in the Code for Sustainable Housing.

Eco-habitats for bats

In the UK there are 17 species of bats, all of which are protected by law. Our range of bat boxes helps to encourage safe habitats for these remarkable mammals, allowing them to live in harmony with people.



Free Access Bat Box A



Enclosed Bat Box B



Enclosed Bat Box C

Free Access Bat Box

- Discrete single bat brick
- Easy to install
- Allows bats to create a natural home habitat within the cavity of the building

Enclosed Bat Box (B & C)

- Designed specifically for the pipistrelle bat
- Available in all brick types
- Attractive motif (option C only)
- Discrete home for bats
- Various sizes
- Several roosting zones are created inside the box
- Bats are contained within the bat box itself
- Maintenance free with entrance at the base
- Ideal for new build & conservation work

	Sizes	Durability
Eco Habitats for Bats - Technical Data: A	215mm x 65mm	F2 S2 - Fully Frost Resistant
Eco Habitats for Bats - Technical Data: B	215mm x 215mm or 215mm x 290mm	F2 S2 - Fully Frost Resistant
Eco Habitats for Bats - Technical Data: C	215mm x 215mm or 215mm x 290mm	F2 S2 - Fully Frost Resistant



Swift Box

Eco-habitats for swifts

Swifts come to the UK for just months each summer from Central and Southern Africa. Despite legal protection their numbers are declining. Since Roman times they have been at home in traditional man-made buildings. However they find it increasingly difficult to find nest sites in modern or refurbished buildings due to the effective sealing of the eaves.

- Designed with the needs of the swift in mind
- Available in smooth red & smooth blue
- Discrete nesting box for location near eaves
- Ideal for new build and conservation work

Size	Total System Weight	Durability
326mm x 140mm	4.5kg/m ²	Frost Resistant

Ecoterre® Earth Bricks

Ecoterre® is a range of unfired clay bricks intended for most internal non load-bearing applications. Unfired clay bricks have excellent sustainability credentials – low energy input, very low waste and high recyclability and Ecoterre® is manufactured in the UK. When incorporated into a building they give thermal mass and acoustic insulation, inhibit condensation and regulate the relative humidity of the atmosphere.

Ecoterre® is available in two sizes and with a smooth finish if required. The distinctive keyed faces of earth bricks have been developed to provide an excellent bond with plaster or mortar to the surfaces. Please note that perforation patterns may vary.



Earth Brick-Standard



Earth Brick-Large

	Code	Size	Configuration	Compressive Strength	Dry Weight	Density
Earth Brick-Standard	EB3590	220mm x 105mm x 67mm	Vertically perforated	3.8 N/mm ²	3.0 Kg	1940 Kg/m ³
Earth Brick-Large	EC3590	220mm x 105mm x 133mm	Vertically perforated	2.9 N/mm ²	6.0 Kg	1940 Kg/m ³

Handling & Storage

Only forks should be used to unload the pallets and the movement of unfired clay bricks should be kept to a minimum. Store in a dry location on the original pallet and ventilate to avoid condensation. They should be stacked no more than two packs high.

Laying

It is recommended that moderately hydraulic lime mortar or clay based mortars should be used to lay the bricks.

Finishes

Unfired clay brickwork can be finished with a variety of breathable materials including clay and lime plasters, clay boards, some paints and limewashes. Only highly vapour permeable paints should be used.

Fixings

Unfired clay bricks will generally only require standard fixings for secondary works such as plumbing, electrics and joinery. Ordinary masonry plugs and screws are suitable for most applications – a list of approved products is available on request or on our website.