

**reducing our
impact on the
global
environment.**

JOHNSON

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climate change...

this is how we
are tackling it

we promote the efficient use of all materials, supplies, energy and transport...



About us

Founded in 1901 H & R Johnson Tiles is the leading manufacturer and supplier of ceramic tiles in the UK, with a long history of market leadership and industry production development.

Part of the Norcros Group we have sister manufacturing bases in Greece, South Africa and India with additional offices in Dubai, USA and Australia.

In 2001 an investment in excess of £35 million allowed us to develop a new fully automated production facility on a single integrated site in Stoke-on-Trent. Our UK factory employs 440 people and produces over 5 million square metres of ceramic tiles for use in the UK and overseas markets.

This investment allowed us to drastically reduce our energy consumption whilst increasing our production capacity.

H & R Johnson products are used in a wide range of commercial and non commercial projects and we supply ceramic tiles to almost every country in the world.

Our strength is based on a comprehensive portfolio of leading edge quality products combined with very high levels of customer service. As manufacturers we have extremely stringent quality and environmental control standards.

In 2006 we created and opened the award winning Material Lab design resource centre at 10 Great Titchfield Street, London. Material Lab offers designers and architects an environment where products such as ceramics, glass, wallpaper, carpet tiles, trims, eco-resins, fabrics and many more materials can be explored.

The Environmental Policy is an integral part of our business ethic and under the control of a main board director. Every possible step is taken to reduce the environmental impact of our production, logistics and administration processes.

Our environmental policy

H & R Johnson Tiles Limited manufacture and supply ceramic tiles to either customer, company or standard specifications. This environmental policy applies to all of H & R Johnson Tiles Limited's operations within the UK. H & R Johnson Tiles Limited is an operational company of Norcros (Holdings) Limited. This policy complies with the Norcros (Holdings) Limited Group Environment Policy and all other company policies.

The Board of Directors of H & R Johnson Tiles Limited considers environmental management an integral and fundamental part of the Company's corporate business strategy. A board member has been appointed to represent environmental issues.

We will take all necessary steps to comply with UK and European legislation and other standards affecting our activities, together with any future standards of protection. Using the principle of continual improvement, the Company is committed to the prevention of pollution and aims to achieve the highest possible environmental standards.

To this end, it is the aim to operate within the constraints of an accredited environmental management system.

This system will establish a framework for identifying all environmental aspects of our materials, processes and products and assessing their impact. We will ensure that, in order to demonstrate continual improvement, mechanisms are established to set and review environmental objectives and targets. These objectives will include:

- The efficient use of all materials, supplies, energy and transport. Wherever possible the principles of sustainable development will be adopted.
- Preventing, reducing or controlling, where practicable, emissions to all environmental media.
- The minimisation of waste from all parts of the company's operations. Wherever possible waste materials will be reprocessed or recycled.

In addition, we will require high environmental standards from suppliers, vendors and contractors involved with the company. We will seek to develop and maintain, where significant hazards exist, emergency plans in conjunction with the emergency services, relevant authorities and the local community.

We will ensure that all necessary resources are provided in the areas of operational control, engineering,

technology and training as are necessary to enable those with specific duties to effectively discharge their responsibilities. We will ensure awareness and participation of all our employees through communication, training and participation in continuous improvement teams.

We will seek to develop the active co-operation and input of all stakeholders within the environmental management system in respect of concerns about the hazards and impacts of our operations. We will ensure that this policy is publicly available to suppliers, customers, stakeholders and the general public through distribution of copies, public registers and the use of information technology.

This policy, its underlying procedures and the effectiveness of its implementation will be monitored and reviewed by the Environmental Management Steering Committee and the Board of Directors. This policy document and the objectives and targets will be updated, as necessary following annual management reviews.

Joseph Matthews
Managing Director
H & R Johnson Tiles Limited



we consistently set new environmental standards for ceramic manufacturing

H & R Johnson have a longstanding commitment to environmental management and has had a formal environmental policy since 1992.

Our environmental management system is certified against the ISO14001 standard.

We were the first ceramics company within the whitewares sector to gain certification against this standard in 1998 and have since successfully upgraded our certification to meet the latest requirements of ISO14001:2004.

We are the only UK wall tile manufacturer to have ISO14001 accreditation.

The company has never been subject to any prosecutions or formal environmental regulatory action for any breaches of environmental legislation.


In 1997 H & R Johnson were awarded the Queens Award for Environmental Achievement for our ceramic waste recycling scheme. To our knowledge H & R Johnson are still the only manufacturer in the world to operate such a system.

Our recycling scheme uses our own ceramic waste material and that of other local ceramics companies. This scheme which has been in continuous use since 1997 also enabled H & R Johnson to win the Manufacturing Industry Achievement Award for Environmentalist of the Year in 1997



recycle





the raw materials...
back to basics

20,000 tonnes of ceramic material is
enough to produce:

**53 million
dinner plates or
120 million cups**

and is the equivalent to the annual total
household waste of 39,000 people*

- *almost the total population of
Christchurch, Dorset***

Each year H & R Johnson recycle 20,000 tonnes of ceramic waste from our own production processes and those of 14 other local ceramic manufacturers including Portmeirion, Steelite and Wedgwood who deliver ceramic waste from their own production plants for re-processing at our Stoke-on-Trent factory.

The ceramic waste is ground to a suitable size and added to standard ceramic materials to create our tile body. These recycled materials comprise on average 25% of our raw material but can be as high as 36%.

Recycling the 20,000 tonnes of ceramic waste annually saves 24,000 cubic metres of landfill.

It is estimated that 235,000 miles of HGV journeys per year using 133,750 litres of diesel (360 tonnes of CO₂) are saved on the transportation of raw materials with this recycling system.

* source – average UK waste 510kgs per person – official government figures

** source – 2001 Government Statistics set Christchurch population at 44,000

Recycling takes place wherever possible throughout the factory and we not only use products which incorporate high percentages of recycled materials but we recycle non-ceramic waste in a multitude of ways.



Pallets
Used pallets are utilised within the factory and for deliveries, we purchase second hand pallets and also repair damaged pallets where possible – annually this saves 1,250 tonnes of virgin timber - approx. 10,000 trees*

Any pallets beyond repair are segregated and sent for chipping so that the material can be recycled into products such as chipboard.

Lighting
350 fluorescent tubes per year are sent for recycling.

Packaging
92% of the content of our packaging is from recycled materials and we recycle all cardboard and plastic wrapping waste. 100 tons of cardboard and other packaging waste is bundled each year and sent for re-processing.

Glaze Buckets
We now re-use 90% of our glaze transportation buckets. We use over 10,000 plastic glaze buckets in our factory – this gives a saving of 5 tonnes of plastic per year.



* source – specific gravity of pine 350 kg/m³,
10m high tree average 200mm diameter trunk

ancillary materials...
waste not, want not!

we save
approximately
10,000 trees*
per year





water
recycle and re-use...

every year we re-use
enough water to:

**fill 400,000
baths***

or flush 5 million toilets**

In our body preparation areas we re-use 30,000m³ of water per year (30% of the total factory water usage). We have also removed water from another part of the production process which saves an additional 2,100m³ of water usage.

32 million litres is the equivalent of:

Filling of 400,000 baths*

5 million toilet flushes or daily usage of over 1 million people**

1 year of water consumption for over 600 households ***

320,000 washing machine cycles****

32,000m³ (32 million litres) per year is enough water to fill 85 standard 25m swimming pools

* source – environment agency average figures of 80 litres per bath

** source – environment agency figures of average 6 litres per flush

*** source – Government Sustainable Development figures of average consumption of 135 litres per day per household

**** source – average 100 litre usage per cycle

annually we save enough energy to boil over 33 million kettles*

energy saving

By speeding up our kilns, changing CRT monitors to flat screens, switching from twice fired to monoporosa production, using automatic light sensors, and re-using kiln exit heat we have dramatically cut our energy consumption.

Since the re-siting to our new single fired production plant in 2001 our annual energy consumption has dropped from 195 million kWh of energy to 153 million kWh of energy

whilst our production has risen from 53,000 tonnes of ceramic tiles in 2001 to 56,000 tonnes of ceramic tiles in 2006. This is an energy saving of 25% per tonne of ceramic tile and equates to 42 million kWh per year. In addition we use the exit heat from our kilns for various processes throughout the factory.

42 million kWh saving is the equivalent to:

33.6 million electric kettle boils*

Lighting of 73,000 homes**

Power to an average television for 24,000 years***

Supplying electricity to power the average home toaster to 730,000 homes ****



* source – 3000 watt kettle used 8 hours per month

** source – 4 x 100 watt lights bulbs used 4 hours per day

*** source – 200 watt television used 3 hours per day

**** source – 1200 watt toaster used 8 minutes per day



each year we
save enough
CO₂ to fly a
Boeing 747
from London to
Glasgow
100 times*

Carbon Trust

Following advice from the UK government backed Carbon Trust we have nominated energy champions responsible for the development of energy saving initiatives throughout our whole operation.

We have incorporated numerous changes to our operation which have seen a saving of 2,400 tonnes of CO₂ emissions per year since 2001.

Changes have included:

Change from twice fired technology to single fired technology (monoporosa)

The usage of automatic light sensors to low usage areas of our offices eg canteen, corridors and toilets etc

Automatic lighting to our tile glazing lines

Changing of computer monitors from CRT to flat screen – when fully complete this will halve our computer monitor power usage

2,400 tonnes of CO₂ is equivalent to:

1 person flying around the world 578 times*

40,000 passengers or 100 flights of a Boeing 747 from London to Glasgow *

9.3 million miles in a petrol powered car**

Average mileage of 775 cars**

2,400 tonnes of CO₂ emissions per year would be offset by the planting of 3,100 trees per year an area of approx 18 acres - 6.5 football pitches***

DEFRA (Department for Environment, Food and Rural Affairs) have set carbon limits for manufacturers. H & R Johnson have stayed within the DEFRA limit every year since moving to our new factory in Stoke-on-Trent in 2001 and have been and currently are in credit with our carbon allowances.



Making business sense
of climate change



* source – British Airways Climate Emissions calculator

** source - 1.8 litre family saloon travelling 12,000 miles per year

*** source – 775 kg of carbon stored in a mature tree



tiles for life... an environmental solution?

A four year study entitled 'Carbon Vision Industry' is under way with the Carbon Trust investigating the life cycle carbon inventory of different building materials. This will involve environmental and economic aspects of carbon footprints and will be run in partnership with numerous Universities. The study is aimed at providing a low carbon answer for building materials and to allow a 50% reduction in carbon emissions associated with UK buildings by 2030.

" It is intended that the building product types in the study would include quarry products; cement and concrete products; steel components; glass; asphalt-based materials; and wood. Perhaps the most challenging feature of compiling carbon inventories for building products is the potential for "open loop" recycling (otherwise known as "cascade" recycling), where wastes and by-products are incorporated into new products, both within the construction industry and in other business sectors. For this reason, this is a sector which would particularly benefit from the application of a whole system approach to modelling, to enable consistency in reporting on carbon emissions for building products within the UK." – Carbon Trust

Correctly specified and installed ceramic tiles should be expected to have a lifetime the same as that of the service of the building in which they are used – BS EN 14411 annex ZA.

No expensive or environmentally damaging maintenance or remedial work is required for correctly specified ceramic tiles.

Ceramic tiles are inert and do not present any hazards if they are landfilled. However, ceramic tiles can be re-cycled after they are removed e.g. crushing for use as inert fillers/hardcore.

JOHNSON

T I L E S

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Every effort has been made to ensure the accuracy of the information given in this publication. In the interests of progress, however, H & R Johnson reserve the right to change this information without prior notice.

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The NAPM mark indicates a minimum waste content of 75% from categories B, C and/or D, and the remainder can be from category A or virgin-fibre pulp.

