



**Hargreaves Drainage specialise in the manufacture of cast iron rainwater, soil and drainage products. We understand the properties of cast iron and are industry experts in the material which offers many benefits.**

## **Strong**

Cast iron will not deflect under loads, this makes it the ideal choice for below ground drainage installations; special bedding and over-excavation of trenches are not required to withstand damage from ground movement. This renowned strength also benefits above ground systems securing against heavy snow falls, high winds and the weight of ladders.

## **Robust**

Cast iron is sturdy and able to withstand the rigors of on site handling; pre-finished products are supplied wrapped to further protect them during transportation. Its low coefficient of expansion and contraction also negates the requirement for expansion joints. High resistance to impact is particularly beneficial in areas such as schools and car parks, where exposed pipework may be liable to accidental damage or vandalism.

## **Durable**

Cast iron pipe systems can be one of the most durable elements of a building, being able to withstand mechanical unblocking and maintenance additional to it's normal daily use. Resistant to damage from hot liquids and cast iron does not warp or fade in the sun; protective primer and high specification paint coatings also provide improved performance when exposed to aggressive substances.

## **Fire Resistant**

Cast iron is non-combustible and in the event of a fire will not contribute to spread or burn away to allow the transfer of flames, emit toxic fumes or melt and drip. Building regulations do not require intumescent fire collars to be fitted to cast iron systems.

## **Low Maintenance**

Known as a fit and forget material, cast iron requires minimal maintenance which is especially important when pipework is concealed, inaccessible and when maintenance would be disruptive to the occupants of the building. Annual inspections are recommended but if systems are correctly installed, only periodic painting should be required.

## **Long Lasting**

Cast iron offers longevity for rainwater, soil or drainage solutions; installations have been proven to last well in excess of 100 years. Physical properties are retained through a product's lifetime and standards remain constant which means extending or repairing existing systems is remarkably easy.

*“Cast iron guarantee”*



## **Sustainable**

Cast iron has a lower impact in terms of energy consumption and CO<sup>2</sup> emissions than PVC and aluminium taking into account, installation cycle, embodied energy, embodied CO<sup>2</sup>, maintenance and repair cost and whole life cost.

## **Recyclable**

Cast iron utilises almost 100% scrap and recycled metal in the manufacturing process and is 100% recyclable at the end of its long life. Cast iron is a Greenpeace recommended drainage material and is the optimal choice for reducing the environmental impact of a project.

## **Quiet**

The sound deadening properties of cast iron offer superior acoustic performance, this is particularly beneficial for internal piping in hospitals, hotels and apartment blocks where noises would be especially disturbing. Exterior above ground systems will not twist or creak due to temperature changes and, when correctly installed, will not rattle in high winds.

## **Cost Effective**

The unrivalled life span combined with low maintenance requirements makes a cast iron system cost effective compared to other materials. It can also provide cost savings when intumescent fire collars, sound insulation, expansion joints, extra support brackets or special bedding requirements are required for alternative products to satisfy building regulations.

## **Authentic**

Cast iron has been utilised since the 15th century, Hargreaves have over 100 years experience manufacturing cast iron using traditional casting techniques. Cast iron rainwater systems in particular stay true to historic styles and therefore preserve the aesthetics of the original architecture of conservation buildings or new projects that wish to respect local heritage. Many listed buildings require genuine cast iron for refurbishment, replica systems cannot retain the strength, character and integrity of an original system.

## **Bespoke**

A comprehensive range of standard products offer rainwater, soil and drainage solutions to most projects; unique castings can be created by our skilled craftsmen to bespoke designs for special requirements. Made to order castings can include radius gutters or ornamental rainwater heads. All standard products can be altered to exact specifications: extended offsets, unusual angles and special bracketry for example can be catered for easily by our in house fabricators. Custom paint finishes in any RAL colour can be supplied to complement your property.

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