# Clay drainage fired to perfection

All the ammunition you need to specify our superior clay drainage



### The finest pipe on Earth, made from the earth.

At Hepworth we have always believed that for future-proof drainage 'clay is the way' – the ultimate sustainable, durable, cost-efficient and high performance sewerage solution. Here's why:

Clay is a 100% natural and plentiful raw material. Sourced from our local quarries which minimises transportation, the clays are carefully blended to take advantage of their distinct mineralogy prior to heat treatment in a calciner, a globally unique process for clay pipe production.

Filtered moorland rainwater is used to hydrate the clays during pipe extrusion. They are then guided through driers utilizing recovered heat from energy efficient fast firing roller kilns, supporting our environmental policy, leading to BS EN ISO 14001 certification.

Up to 15% of any off-cuts, trimmings or product used in testing are ground down and re-introduced into the manufacturing process with no loss of quality. With total end-of-life recyclability, vitrified clay is the ultimate birth to rebirth manufacturing process.

Even our quarries are expertly returned to flourishing natural habitats, alongside a tree planting programme to continually offset the carbon impact of quarrying activities.

For most construction materials, sustainability is a pipe dream; for Hepworth Clay it's a natural and actual reality.

# Clay for today

If you set out today to create the perfect material for drainage, clay would be the product you'd invent.

Clay pipes are inert, making them impervious to almost any chemical or physical attack.

Vitrified Clay's strength not only means it's highly resistant to static and dynamic loadings, it also doesn't need as much granular bedding, cutting installation costs as well as the carbon footprint of aggregate transportation.

It's a genuine fit and forget solution too, that will be trouble-free for future generations. And with no renovation or repairs needed, service costs are as low as its installed risk profile.

To which can be added the Hepworth hallmark of precision manufacturing to guarantee consistent quality, standards compliance, a complementary jointing performance and total service support.

Clay has been used in drainage for more than 6,000 years. For every consulting engineer making a choice today, it is the natural choice for the future.



#### Superior sustainability

Clay is a future-proof material, 100% natural and 100% recyclable.



#### Superior quality

Kitemarked to BS EN 295-1, supported by a declaration of performance and CE mark.



#### Superior strength and durability

Naturally high product strength enhances in-use performance resulting in a lifetime expectancy of over 100 years.



#### Superior bedding performance

Recycled aggregates arising from selected construction demolition waste are approved for use with clay pipes.



#### Superior jetting performance

Hepworth pipes carry a lifetime jetting guarantee, jet proof to 7500 psi\*.

#### Superior chemical resistance

Clay is inert, so is unaffected by any effluent approved for discharge into a public sewer.

# Giving the alternatives both barrels

## Superior sustainability

Clay is a 100% natural and plentiful raw material, which is also 100% recyclable at the end of its operating life, giving it a true birth to rebirth capability.

We add only moorland rainwater and heat in a production process that uses recovered heat for drying prior to firing to keep environmental impact to a minimum.

Choosing Hepworth Clay is the optimum environmental choice, evidenced by its use at the Wolseley Sustainable Building Center.

## Superior strength and durability

High pipe strength is an inherent quality of vitrified clay and is enhanced by our manufacturing expertise. The only calcinated roller kiln pipe process in the world produces straighter and more homogeneous pipe than traditional clay.

A Hepworth 300mm SuperSleve pipe has a crushing strength of 72 kN/m.

That natural material strength also delivers the highest resistance to imposed loading, higher sewer jetting pressures and most chemical or physical attacks.

# Superior bedding performance

The natural strength of clay drainage enables recycled aggregate to be used as a bedding material, reducing costs and environmental impact during the construction process.

The savings can be significant when a full trench depth of granular material can actually be more expensive than the pipe.

Hepworth can advise on the optimum soil and ground conditions from geotechnical reports to establish when this sustainable and costefficient solution can be deployed.

### Superior chemical resistance

Once vitrified, clay is one of the most inert materials on earth, rendering it resistant to almost all chemical attack.

Hepworth Clay is completely unaffected by any effluent allowed in an adopted sewer system virtually eliminating the risk of exfiltration.

With a resistance to practically all chemicals and compounds that might be found in the ground, clay is the perfect choice when specifying drainage for contaminated brownfield sites.

# Superior jetting performance

Clay drainage's resistance to high water pressure jetting means more blockages will be cleared first time with reduced risk.

SuperSleve pipe has a Lifetime Jetting Guarantee<sup>\*</sup> 7,500 psi at a flow rate not exceeding 20 gals/min held static for 5 minutes, providing a 50% higher operating pressure than the WRc requirement for clay pipes.



### Superior quality

Hepworth Clay products are kitemarked to EN 295-1, have a declaration of performance and CE mark, and are manufactured under a quality system approved to BS EN ISO 9001. Regular quality checks are made at key stages to guarantee factory process control, with regular ongoing quality audits made by external European and worldwide quality inspectors. Random sample pipes are crushed to ensure that the strength that is imprinted onto the pipe is delivered to site.



### Perfect piping. Proven joints.

Hepworth Clay is as impressive in the ground as it appears on paper.

Satisfying BS EN 295-1:2013, our advanced jointing technology passes the angular deflection and shear resistance tests to cope with the effects of subsidence or ground movement.

It's a performance which means that the lifetime expectancy of over 100 years applies to the entire clay drainage system, not just the pipe.

The availability of short length pipes, often used at manhole or junction positions not only reduces cutting and construction time on site, it also helps to further ensure the integrity of the seal is never compromised.



#### Hepworth Clay

is available in **100, 150**, **225** and **300mm** diameters.

### For more information Call 0844 856 5152 or visit www.hepworthclay.co.uk



Hepworth Clay drainage systems from Wavin are manufactured from natural materials to produce durable, high strength, quality products. This enables sustainable installation on site using recycled aggregates, and rigorous maintenance regimes in service. These market leading clay drainage systems are accepted within the built environment for residential, adoptable, commercial and industrial applications.

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