Durapipe

HTA®

Hot and Cold Water

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HOT AND COLD WATER

Durapipe HTA® is a complete C-PVC pipework system for domestic hot and cold water services, providing secure, quicker and easier installations. Durapipe HTA is a cost-effective alternative to copper.

Significant cost savings can be achieved against copper due to the installed time savings available via the simple jointing method and the product being lightweight.

Durapipe HTA offers a 50 year design-life and due to the high quality material the system remains limescale free and corrosion resistant, leading to a continual smooth bore and subsequent system efficiency through optimum water flow.

In addition, Durapipe HTA offers excellent fire resistance and also helps combat the growth of biofilms.

Key Product Information

- Size Range: 20mm to 160mm
- Pressure Rating: PN25 up to 63mm and PN16 25mm to 160mm
- Temperature Rating: +5°C to +90°C* (PN16 +70ºC at 6bar) (PN25 +70ºC at 10bar)

Key Product Features

- Lightweight and easy to install
- Limescale and corrosion free
- No power or hot works required
- Fully WRAS Approved for drinking water
- Suitable for chemical and heat treatment for both hot and cold water
- Smooth bore providing optimum water flow
- Dedicated bracketing
- European fire classification – BS1d0 (Non-flammable, no smoke, no flaming droplets)
- Recycling friendly – HTA is over 98% recyclable

Typical Applications

- Hospitals and other healthcare facilities
- Schools
- Commercial buildings
- Hotels and residential buildings
- Sports stadia
- Shipbuilding

APPROVED MATERIAL WRAS

*For advice on heating applications please refer to our technical support team.

Product Range Overview

C-PVC Pipe, chamfered both ends (PN16 & PN25)

Elbows 90º

Elbows 45º

Sockets

End caps

T-Piece 90º

Reduced tees

Reducing bushes (Short pattern)

Reducing bushes (Long pattern)

Instrumentation tees (Female brass threaded branch)

Adaptor nipples A (Brass thread male)

Adaptor nipples B (Brass thread male)

Adaptor nipples A (316L Stainless steel male thread insert)

3 Piece unions C-PVC (Male thread brass)

3 Piece unions C-PVC (Female thread brass)

Threaded adaptors female (Stainless steel insert)

Threaded adaptors female (Brass thread)

Tap connectors with brass nuts

Threaded tees reduced 90º (Brass thread female)

Threaded elbows 90º (Brass thread female and back plate)

Threaded elbows 90º (Brass thread female)

Anchor points

Serrated stub flanges

Plain nipples

Ball valves (Double union)

Ball valves (Flanged sockets)

Accessories

Linear expansion compensators to be flanged (PN16)

Fibreglass (Polyester and Polyamid) Reinforced backing rings with PN16 drillings

Flat gaskets (EPDM)

O-Ring gaskets for unions (EPDM)

Expansion/Contraction braids (Male thread x female loose nut)

MONOKLIP brackets with M8 threaded inserts

Welding polymer

Cleaner

Chamfering tool

Pipe cutters

50 YEAR DESIGN LIFE

- Durapipe HTA offers lifetime benefits over a 50 year period.

NO SPECIALIST TOOLS REQUIRED

- No specialist tools, electricity or hot works are required in the jointing process of HTA.

SUITED TO CHEMICAL & HEAT TREATMENT (HOT & COLD)

- C-PVC piping is suitable for both mild chemical dosing and heat treatment for flushing and maintenance purposes.

COST EFFECTIVE

- HTA offers major savings on installed costs when compared to traditional metal pipework.

CORROSION RESISTANT

- HTA is not susceptible to corrosion, meaning that no costly pipe repair or replacement is required.

NO SECURITY ISSUES

- As plastic has no scrap value, there are no security issues with HTA and thus no risk of thefts of pipework from site.

Hot and

A complete system for domest
with rapid, secure, one-

THERMAL CONDUCTIVITY

- A lower rate of thermal conductivity results in energy savings and enhanced engineering value.

FIRE CLASSIFICATION

- Durapipe HTA is Bs1d0 rated (Euroclasses). Non-flammable, no smoke, no flaming drops.

LIMESCALE RESISTANT

- The smooth bore of C-PVC pipe inhibits the build-up of limescale throughout the lifetime of the system.

SPEED OF JOINTING

- Simple one-step jointing means that joints are made easily and quickly, and costs are kept under control.

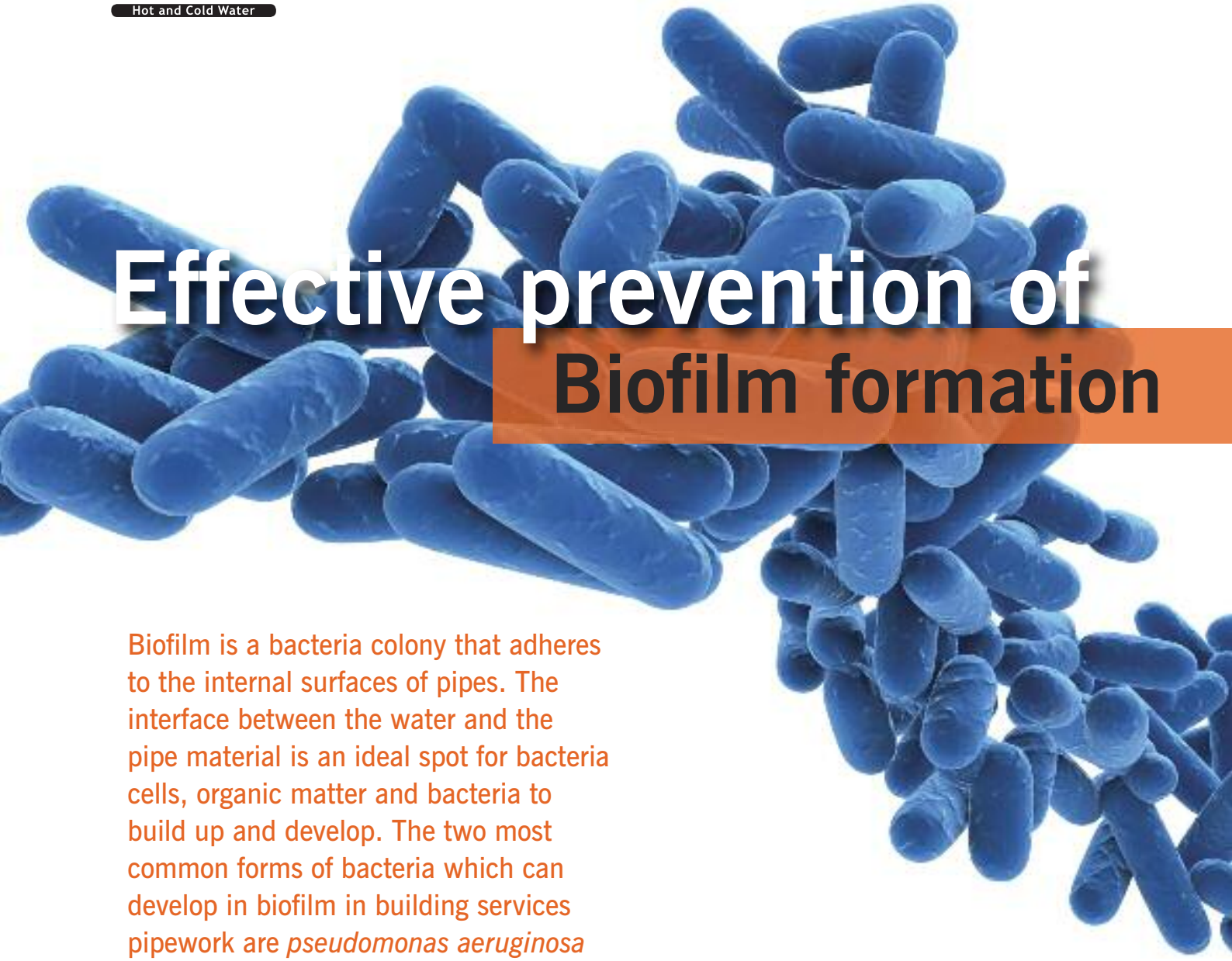
APPROVALS

- Durapipe HTA is WRAS Approved for hot and cold water.

HELPS FIGHT BACTERIA

- C-PVC pipework can help in the fight against the build-up of bacteria by being a poor promoter of biofilm, and thanks to its resistance to preventive and curative disinfection treatments.

tic hot and cold water services
step jointing technology.



Effective prevention of Biofilm formation

Biofilm is a bacteria colony that adheres to the internal surfaces of pipes. The interface between the water and the pipe material is an ideal spot for bacteria cells, organic matter and bacteria to build up and develop. The two most common forms of bacteria which can develop in biofilm in building services pipework are *pseudomonas aeruginosa* and *legionella pneumophila*.

No pipework material can actually prevent the formation of biofilm. However, studies show that C-PVC (of which HTA is composed), is one of the materials which contribute least to biofilm expansion. In addition to the above, C-PVC is ideally suited to deal with the elements of 'good practice' that combat microbiological growth, such as flushing, chemical treatment (chlorine shock) and thermal shock.

The biofilm bacteria forms by attaching itself to sharp or jagged parts of the pipe surface, meaning that limescale build-up or corrosion on the internal bore of the pipe can harbour microbiological growth. So, the smoother the internal pipe surface the better. Therefore, the smooth bore of C-PVC pipework can limit these growth opportunities and restrict biofilm development.

FACTORS ASSISTING THE POTENTIAL FOR BIOFILM

- Stagnant water
- Dead volumes/loops
- Temperature from 25°C to 45°C
- Scale deposits
- Sludge and sediment caused by corrosion
- Poor maintenance

BENEFITS OF C-PVC PLASTIC TO HELP PREVENT AND CURE BIOFILM PROLIFERATION

- Smooth bore – corrosion free
- Smooth bore – limescale free
- Material can withstand continuous preventive chemical treatments (including ClO_2 / chlorine dioxide)

GENERAL GOOD PRACTICE TO COMBAT BIOFILM GROWTH

- Flushing
- Thermal shock
- Chlorine shock

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Jointing Instructions

1. Equipment required.

2. Cut pipe square to required length.

3. Chamfer and trim end of pipe.

4. Measure socket depth.

5. Mark on pipe the socket depth and a known value.

6. Stir welding polymer.

7. Apply welding polymer to fitting and pipe.

8. Push fitting straight home and hold for a few seconds.

9. Final joint.

HTA Working Pressures and Temperatures

	HTA (PN25) 70°C / 10 bar 60°C / 6 bar	HTA (PN16) 70°C / 6 bar 60°C / 4 bar
Temperature °C	Pressure (Bar)	Pressure (Bar)
5	25	16
20	25	16
40	20	12
60	13	8
70	10	6
80*	6	4
90*	4	2

*For advice on heating applications please refer to our technical support team.

Durapipe UK reserves the right to modify the details in this publication as products and specifications are updated and improved. The content of this publication is for general information only and it is the user's responsibility to determine the suitability of any product for the purpose intended.

For further information on all Durapipe UK products and services contact our Customer Services Team as detailed below.

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