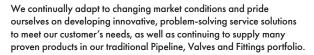


# PRODUCT PORTFOLIO GUIDE



## **ABOUT ASHWORTH**

Ashworth is recognised as one of the leading distributors of commercial heating, plumbing & drainage solutions to the Building Services, Industrial, Data Centre and Tunnelling markets, providing market-leading products from a network of strategically located branches across the UK.



That's one of the reasons why we have been in the business for over 100 years. We employ knowledgeable staff equipped to answer our customers enquires and needs, whether that be sourcing a new range of products or simply providing service on our stocked product portfolio.









## **OUR KEY VALUES**



#### **People**

The key strength within our business are our colleagues, due to the vast product ranges we supply, the importance of correct product identification & selection, goods that are delivered safely and complete to site, we highly value industry experience and therefore recruit the best in class.



#### **Products**

Operating within the Building Services and Industrial markets requires us to stock and supply high quality market leading branded products suitable for critical applications. We operate to ISO9001, ISO 14001 and are registered under Achilles® Supply Chain and Safe Supplier Management schemes.



#### **Service**

Our transport fleet operates to FORS Silver and our vehicles are equipped with HIAB off-loading facilities complete with all the latest health & safety equipment to safely convey material to site. The lorries are specified with Euro 6 engines that meet the stringent London low emission zone standards.

### **CONTENTS**

	Pipe Systems	4
	Valves & Controls	23
V.	Drainage Systems	31
<b>#</b> ○ <b>#</b>	Pipe Hanging Systems	39
	Pumps & Expansion	43
	Accessories & Consumables	48



#### **Terms & Conditions**

A copy of our Terms & Conditions are available upon request from your local sales office, representative or can be downloaded from our website at www.Ashworth. uk.com. E&OE.

#### **Images**

The colours of products depicted in this publication are within the constraints of the printing process and may not be used for colour matching and are representation only and do not necessarily show the product on offer.

Specialist distributors of commercial heating, plumbing & drainage solutions



# **PIPE SYSTEMS**

We stock a comprehensive range of tubes, flanges and fittings including Carbon Mild Steel, Malleable, Stainless Steel, Copper and Plastic.



Metal Pipe Systems	5
Copper Systems	9
Stainless Steel Systems	14
Plastic Systems	15
System Accessories	20





































#### **STEEL TUBE**

TATA Steel tube is recognised for robustness, reliability and its wide variety of industry use. Both **INSTALL PLUS 235** (BS EN10255/10217-2) & **INLINE 265** (BS EN10217-2/API5LB) are multi-certified, hot-finished and come with a range of ends and finishes.

- UK manufactured with traceability and fully technically supported with mill approvals, datasheets, tech-subs, DOP, BIM, compliance approvals, CPD's and specification assistance. Compliant with the Pressure Equipment Directive
- Size options from 15nb (OD 21.2mm) to 500nb (OD 508mm), Imperial from ½" to 20"
- Large bore tube available
- Carbon Neutral Optimis range available





#### **STEEL TUBE**

We source a variety of tube manufactured within the EU and further afield to satisfy our clients' requirements.

- EN10255/EN10217-1/BS1387 Cold finished from 8mm (1/4") to 150mm (6")
- API 5L HFI pipe from 50mm to 600mm (2" to 24")
- SAW pipe from 600mm to 1200mm (24" to 48")
- APL/A106 HFS pipe up to 600mm (24")
- A333 low temperature up to 400mm (16") API













ETAL





#### **MALLEABLE IRON FITTINGS**

GF Piping Systems ensures high quality production standards when it comes to their range of whiteheart malleable iron. It has long durability and excellent resistance to mechanical stress; these fittings are the most popular and common in the market today.

- BS EN10242 Kite Marked
- 6mm (½") to 100mm (4")
- Suitable for gas, oil, air and hot/cold supply
- · Available in hot-dip galvanised or black





#### **WELD FITTINGS & FLANGES**

A wide range of carbon steel fittings and flanges are stocked in branch with extensive specification coverage.

- ANSI/ASME B16.9 Fittings range from 15 to 900mm and material grades to ASTM A234 WPB & ASTM A420 WPL6 (LTCS)
- N10253-2/BS1965 Fittings range from 15 to 400mm (½" to 16") and material grade to P235GH/ASTM A234 WPB
- ANSI B16.5 Forged Class 150 to 2500lb
   Fittings range from ½" to 24" and grades to

ASTM A105N, ASTM A350 LF2 and ASTM A694

- BS EN 1092 (BS4504) Forged PN6 to PN40 – Fittings range from 15 to 300mm (½" to 12") and grades to BS EN 10025 S235JR & ASTM A105N
- Plate & Blinds PN6 to PN40 Flanges from 15 to 900mm (½" to 36") and grades to \$235JR & P245GH
- B510 Flanges Slip-ons forged & plate up to 12", only plate above 12" and blinds from 5 to 900mm (½" to 36")





#### **WROUGHT IRON FITTINGS**

We also stock a range of British Standard steel pipe fittings for low pressure applications such as pipework systems for water supply and sewage applications.

- BS 3799, 3000, 6000 PSI fittings up to 600mm (24")
- BS EN10241 Mild Steel Tubulars from 6mm (½") to 150mm (6")





#### **GROOVED SYSTEMS**

Victaulic grooved systems are all about saving time and money through ease of installation and reduces downtime on maintenance. These fittings eliminate the need for hot works which improves jobsite safety.

- Sizes range from 60.3mm to 323.9mm
- Noise and vibration attenuation
- Accommodates piping system movement in smaller spaces, less stress on components

















#### **COMPRESSION FITTINGS**

GF Piping Systems provide **PRIMOFIT** malleable iron compression fittings which offer full end load capability, allow for angular deviation and various pipe type connections. These are considered best suited for new installations, pipe repair and pipe work extension.

- Suitable for Steel, PE, Lead and Special steel pipes
- 15mm (½") to 50mm (2")
- Angular deviation of up to 3 degrees
- Arrive pre-assembled & ready for installation





#### **MULTI-USE COUPLINGS**

Teekay couplings are extremely versatile and can be used on many pipe applications including Carbon steel, Ductile iron, Stainless Steel, Copper and many more. No special tools or flange connections are needed, no on-site hot works, electrofusion, welding or grooving is required. All couplings are WRAS approved and are designed and manufactured in the UK.

- Up to PN42 pressure rating on most couplings
- Suit most pipework materials from 21 mm to 4200mm Pipe OD's



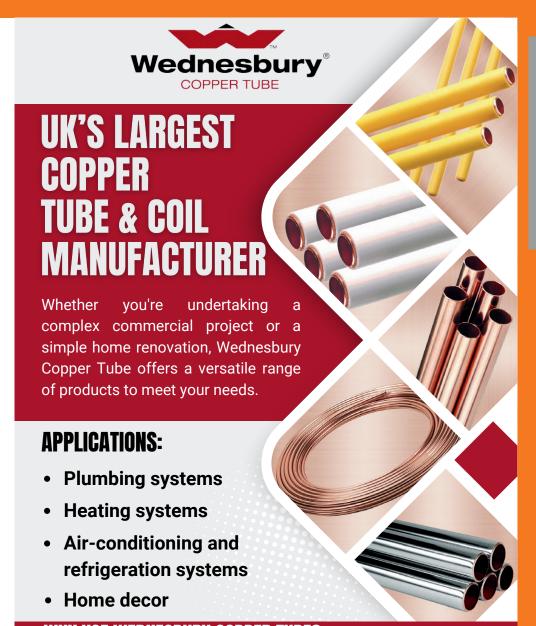












## WHY USE WEDNESBURY COPPER TUBE?

- · Worldwide trusted and reputable brand
- Made in Great Britain
- Products come with a 25-year guarantee against manufacturing defects
- Company operates sustainable practices
- Copper tubes and coils are available in a wide range of sizes







#### **COPPER TUBE**

Wednesbury is a UK Based Manufacturer of copper tube for plumbing, heating and a wide range of industrial applications since 1921 and is a proud sponsor of Made in Britain.

- 25-year guarantee against manufacturing failures
- Made from 100% recyclable copper with anti-microbial properties
- · Hard, Half Hard and Soft Tempers for malleability
- · Strength and ductility in high and low temperature
- EN1057 R250/BS2871 Table X from 6mm to 159mm
- EN 1057 R220/BS2371 Table Y from 6mm to 76mm and X from 6mm to 8mm





#### **PEGLER XPRESS**

Pegler **Xpress** is a no-fuss solution for domestic, commercial and industrial applications. It retains high performance while avoiding the need for solder, adhesives, or additional jointing materials.

- Sizes from 15mm to 108mm
- Unique Leak Before Press feature which ensures unpressed fittings are identified

- · Completed joints have electrical continuity
- BSI Kitemark approved (BS 8537)
- Chrome Plated range available
- Material available in Copper, Stainless Steel and Carbon
- · Gas and valve variants if required













**■**GEBERIT

**GEBERIT MAPRESS** 

# DESIGNED FOR SPEED **BUILT FOR BUSINESS**





No wonder so many business-minded installers are switching to Geberit Mapress. Quick and easy to install, with no hot works or costly one-hour cooling down period, our advanced pipe fitting solutions offer leak-free, hassle-free performance and unrivalled support.

geberit.co.uk/mapress

COPPER





#### **GEBERIT MAPRESS**

Geberit Mapress copper is a quick and cost-effective press-fit system designed with safety in mind.

- Size range from 15mm to 108mm
- Protection end caps to stop debris and dirt from compromising the system
- · Coloured pressing indicators help identify unpressed fittings
- · Safer connecting method as no open flame required therefore no colling down period
- Available in Copper, Stainless Steel, Carbon Steel and CuNiFe





#### **COPPER FITTINGS**

Pegler provides several options with unique properties depending on the solution required.

- Yorkshire Potable Integral Solder Ring (ISR) capillary fittings in sizes from 6 to 66.7mm. Creates a reliable joint without needing additional end-feeding solder
- Endex Range of end feed capillary fittings manufactured from copper, gunmetal and DZR alloy, designed for jointing copper tubes to BS EN 1057 in sizes from 6 to 159mm
- Kuterlite Quick, easy-to-use heat-free system. Excellent for repairs and in applications where ongoing maintenance is envisaged. Sizes from 15 to 54mm





**PIPE SYSTEMS** 

#### **COPPER FITTINGS**

We supply essential copper fittings for use in domestic, commercial heating and plumbing applications both water and gas. WRAS approved, EN1254 compliant and a 25-year warranty.

- Compression Manufactured within the UK. Mechanical heat free connection. Full range is available in Chrome Plate
- Solder Ring A ring of high-quality lightweight lead-free solder in each fitting
- End Feed Lightweight, fast & simple joints created through capillary action





#### **BI-METAL FLANGES**

If you require a flange suited for chemical processing, we highly recommend Bi-metal as the ideal option. Also known as Composite or spinning flanges, these are perfect for use with copper and copper alloy tubes for water and sanitary applications.

• BS4504 Compliant - Table 16/23













STEEL

ES





#### **GEBERIT STAINLESS STEEL**

Geberit Mapress Stainless Steel is a quick and cost-effective press-fit system designed with additional safety in mind. Protection end caps stop debris and dirt from compromising the system ensuring a cleaner installation process.

 No open flame required and no cooling down period means safer joining

- · Coloured pressing indicators highlight unpressed fittings
- Size range from 15mm to 108mm
- · Available in Copper, Stainless Steel, Carbon Steel and CuNiFe
- CrNiMo Steel 1.4401 (EN10088)





VSH Powerpress - Designed for galvanised

and a clean working environment is assured

Sizes from 15mm to 54mm

thick wall steel pipe. Installation times are reduced,

VSH Tectite - 316L push fit system from 15mm to

#### **PEGLER STAINLESS STEEL**

Pegler Stainless Steel solutions for when water quality and hygiene are crucial requirements.

VSH Xpress - Press-fit fittings for quicker installation heat free jointing.

- 316L press systems from 15mm to 168.3mm
- 444 WRAS approved press systems from 15mm to 54mm

• Gas press systems from 15mm to 108mm















Mallable Iron

GF Piping Systems is a leading supplier of piping systems and solutions for the safe and reliable transport of liquids and gases.

Customer-centric innovation and sustainability remain the defining values. Our extensive range includes piping, fittings, valves and process automation. No matter the size of your project, GF provides the perfect system to meet your needs.





www.gfps.com/uk

ш

PRESSUR





#### **ABS & PVC**

Polypipe Effast's plastic systems maintain optimum flow rates while under high pressure.

- Effast ABS Ideal for chilled and potable water, food stuffs and beverage applications. Operating temperatures as low as -40 $^{\circ}$ C. Sizes available from  $\frac{1}{2}$ " to 2"
- Effast PVCU Ideal for high pressure systems and potable water and food product supply. Metric from 16mm to 315mm and Imperial from  $\frac{1}{2}$ " to 8"





#### **PLASTIC PIPING SYSTEMS**

GF Piping Systems offer high quality products for safe transportation of water, chemicals & gasses and can provide off-site fabrications to meet your requirements. Their range includes:

- COOLFIT 2.0 Polyethylene pre-insulated high-performance system for temperaturecontrolled transportation
- FUSEAL Chemical waste drainage with flame retardant properties up to 6" standard
- INSTAFLEX Efficient, flexible option for simple processing & high hygiene from 16mm to 225mm

- ELGEF Plus Extensive HDPE piping system. Sizes from D20 - D2000 suitable from -50°C to 60°C
- GF PVC-U Bio-attributed for use in chemical, textile, water treatment & vacuum lines. Imperial from 3/8" to 8" and Metric from 6mm to 400mm
- GF ABS Energy efficient cemented system used in water treatment & Marine applications with temperature ranges of -50 to 60°C, Imperial from ½" to 4" and Metric from 16mm to 315mm



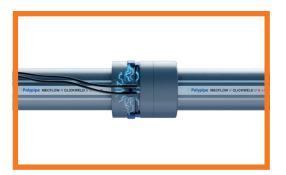


#### **POLYPROPYLENE PIPE & FITTINGS**

Aquatherm is ideal for heating and cooling systems from commercial buildings to single-family residences. Simply cut & weld as per requirement.

- Available in sizes 20mm to 630mm
- · Corrosion-resistant and withstands high pressures and temperatures
- Long-lasting material with excellent thermal and sound insulation
- Highly sustainable, non-toxic and antimicrobial





#### **MECFLOW**

MecFlow Fusion is a highly engineered product designed for robustness and tested to achieve a fire classification rating of B-s1, d0\* in accordance to EN13501. Used in plantroom, riser, header and runout applications from 20mm - 315mm.

- Tough multi-layer PP-RCT pipe composition that's reinforced by microfibres for added mechanical strength
- · Suitable for a variety of applications, including boosted cold water, low temperature hot water, chilled water and heating applications
- Produce secure, long-lasting joints with minimal fuss using fusion welding techniques, including the unique patented CLICKWELD electrofusion jointing technology

\*Fire classification rating according to EN13501, installed according to building regulations.















COMMERCIAL



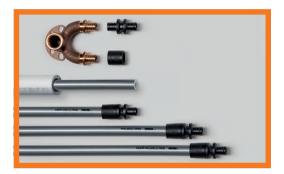


#### **MDPE & PVC**

We also supply intelligent solutions for more complex industrial applications either in straight lengths or coils.

- MDPE Blue & Yellow Potable water and Gas handling from 20mm to 180mm
- PVCU Imperial & Metric Chemical & Industrial fluid handling from 1/2" to 8" or 16mm to 315mm
- ABS Imperial & Metric Chilled & cold-water systems from 3/8" to 8" and from 16mm to 315mm





#### PRE-INSULATED MLCP

Take your project to the next level with REHAU building solutions. Experts in supplying sustainable pipework for: heating and plumbing, underfloor heating, and water management systems. Their Rautitian range is O-ring free and made from universal polymer which provides optimal hygiene, future-proof reliability, and high performance as standard.

- · 10 bar WRAS-approved heating and plumbing system
- RAUTITAN fex (PE-Xa)
- EVERLOC™ compression sleeve fitting
- · Independent certification of 'cavity-free' joint
- · Only simple visual inspection of fittings is required





#### **PLASSON MDPE**

Plasson mechanical fittings have revolutionised how PE pipes are connected using their unique high grade copolymer design. They can withstand high working pressure while conveying water and other fluids in a multitude of areas for example urban and inter urban infrastructure, industrial, mining, landscape, farming as well as optical fibre duct systems.

- NBR seals
- WRAS Approved
- Sizes available from 16mm to 160mm





#### **MULTI-LAYER PIPE**

RIIFO Multilayer unites the benefits of PEX and weld aluminium to create a high degree of flexibility and toughness. A clean and corrosion-proof hot and cold-water supply option that excels in residential, commercial and industrial applications.

- Working temperatures between -40°C and 95°C
- ISO accredited by NSF and AENOR
- Sizes available from 12mm to 75mm













**ACCESSORIES** 

**SYSTEM** 





#### PIPE INSULATION

Pipe insulation is necessary for energy-conscious clients with refrigeration, air conditioning or heating and cooling project requirements. Ashworth supplies low conducive lagging in many sizes and wraps to ensure all temperature conditions last longer, remain consistent and save money in the long term.

- Thermal conductive materials
- · Flexible installation options given in either Class O or Self-sealing, slit or un-slit
- Size ranges of 15mm to 67mm





If you want to know more about us or want to get in touch and talk about how we can help support your business, you can ring one of our strategically placed branches around the UK or visit our website and contact us at www.Ashworth.uk.com.



You can also follow us on social media via LinkedIn at

www.linkedin.com/company/ashworth www.linkedin.com/showcase/ashworthenergy ->







#### **GAUGES & THERMOSTATS**

With over 100 years of industry experience, Brannan is a leading UK manufacturer of quality, reliable and sustainable gauges, thermometers and digital meters for use across sectors including HVAC, Process and Oil & Gas.

- · Customisable dial designs for different industrial measurement requirements.
- · Bi-metal or Stainless Steel casinas
- Clip-on and extension options available
- Indoor and weatherproof options available

For added protection and longevity against the effects of hot pressure substances and rapid pressure surges, a choice of brass and mild steel U and Rina syphons can complement the aquaes.





#### **BINDER TEST POINTS**

A well-known staple, Test Plugs have been essential for uninterrupted pressure and temperature performance monitoring for decades.

- · Cost-saving and reliably effective
- · Available in Brass and 316 Stainless Steel
- Sizes come in 8mm (1/4") to 15mm (1/2") BSPT
- Temperature range from -8°C to 135°C
- Max pressure 35Bar, 500PSI















# **VALVES & CONTROLS**

Our valve portfolio features some of the biggest brand names within the building services, water and gas markets and covers a wide selection of valve types, sizes and materials to serve our client specifications.

These include but are not limited to: Ball, Butterfly, Balancing, Check, Combination, Commissioning, DPC, Gate, Globe, Pressure Reducing, Strainer, Safety, Solenoid, **Thermostatic Mixing**. These can come made in Bronze, Brass, Cast Iron, Ductile Iron, Gun metal and Stainless Steel.



Valves Controls

**NABIC**<sup>®</sup>





24

29











# **ASHWORTHONLINE!**

The 'Ashworth Online Seven'

**Bespoke & customised registrations** 



ASHWORTH.UK.COM

Specialist distributors of plumbing & drainage so

**ASHWORT** 

VALVES







#### **VALVES**

Albion's well-established high-quality valve selection makes them a reliable choice. They offer traditional and specialist valve applications from ball, butterfly, check, gate, globe and strainers to press, hydronic, pressure control, solenoid, public health and more. Award winning in-house technical support is ready to advise on any project.

- Brass, Bronze, Cast & Ductile Iron, Gunmetal and Stainless Steel materials are on offer
- All products meet the necessary standards and approvals, such as WRAS, EN331, EN161, ATEX and API 607. Albion adheres to ISO standards 9001, 14001 and 45001





#### **VALVES**

Pegler Valves are manufactured by Aalberts Integrated Piping Systems UK, a renowned British company, known for their reliability, durability, and innovation in valve technology. Many are WRAS or NSF approved and certified to British Standard. ISO 9001 accredited.

- High-quality materials: Brass, Stainless Steel, and other durable alloys
- Robust construction: Designed to withstand high pressure and temperature conditions
- Precision engineering: Ensures accurate flow control and efficient operation
- · Meets various international standards for safety and performance







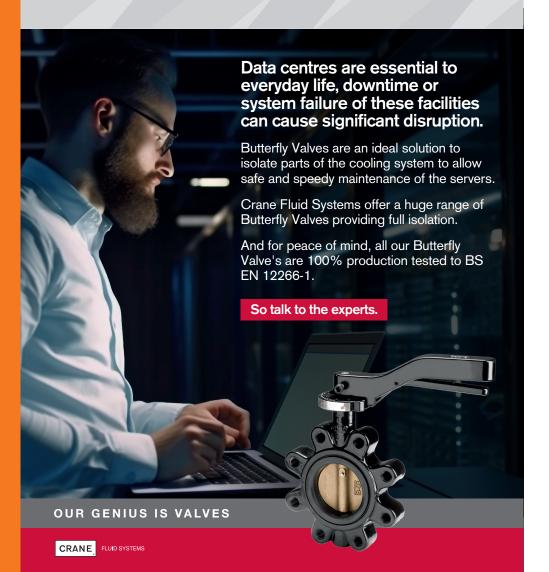






# THE IDEAL VALVE SOLUTION FOR **DATA CENTRES**

**VALVES & CONTROLS** 







#### **VALVES**

Crane offers a range of traditional valves including ball, butterfly, check, gate, globe and strainers, alongside a range of WRAS approved public health & safety valves including strainers and thermostatic mixing. In addition, the ProBalance range offers dynamic and static balancing valve solutions.

- Valve sizes range from 15mm to 600mm (½" to 24")
- Brass, Bronze, Cast & Ductile Iron, Gunmetal, Stainless Steel and Plastic materials are on offer with a variety of finishes including DZR and Chrome Plate
- · All products are available as BIM ready product components. Crane adheres to ISO 9001 and the Pressure Equipment Directive (PED)





#### **GROOVED VALVES**

Victaulic's grooved end valves were developed as an innovative pipe joining solution that improved safety, reduced risk and compressed project schedules. All grooved valves are easy to maintain, repair and operate.

- Type selection includes ball, butterfly, check, commissioning, gate, check and strainer
- Installation time up to 3 times faster than flanged connections
- · Reduced system footprint and total cost as dismantling is no longer required
- Conform to ASTM A-536 and ASTM A-395 specifications



















#### **TENANT VALVES**

Reliance Tenant Valves are combination valves that control and monitor water supply to multi-unit sites. A one-piece cartridge designed to reduce labour costs and potential leak points.

- Tenant Valve Advance Supplies to multi-occupancy sites. WRAS approved for hot and cold water. Temperatures up to 65°C
- Tenant Valve Compact Ideal for applications with a pre-installed water meter or any project that
  uses a master meter. WRAS approved for hot and cold water. Temperatures up to 65°C





#### **RESIFLOW VALVES**

The Pegler ResiFlow Valve, RES1 is a unique prefabricated utility array with the specific function of providing a potable water supply into multi occupancy high rise buildings. The primary function of the valve is to maintain system operating requirements by pressure reduction and allow ease of maintenance to the supplied dwelling via

the easy shut off the water supply.

- Brass
- ¾" & 1"
- PN16
- EPDM
- -10°C to 80°C













**5** Bray



#### **VALVES**

Bray specialises in helping customers with their flow control requirements. Their modular product line of butterfly valves, ball valves, actuators and accessories offer the best compatibility, economy and quality performance in the flow control industry.

**Butterfly Valves** - Resilient Seated, Lined, High Performance, & Triple Offset butterfly valves engineered for reliable performance in the most demanding applications.

- Peace of mind: Over 36 years of industry experience
- Quality Assurance (ISO 9001, 14001 & 45001): Products are designed, manufactured, and certified to the most stringent requirements
- Solutions: NEW VAC & Clean Room facilities for that one stop experience

**NABIC** 



#### **CONTROL VALVES**

Nabic manufacture a high-quality precision engineered range of safety and pressure relief valves as well as control valves in Gunmetal and Stainless Steel suitable for a wide variety of fluids including steam, hot water and air. NABIC valves are ideal for vented and unvented heating systems, hot water and steam boilers, compressed air systems, pump relief and bypass.

- NABIC range includes High Lift Safety valves, Safety Relief valves with or without flanges, Pressure Relief valves, combined Pressure & Temperature Relief valves and anti-vacuum valves
- NABIC valves are compliant with BS EN ISO 4126-1:2013
- Most NABIC valves are WRAS approved
- All safety valves are set, tested, stamped and sealed prior to dispatch
- Pressure test certificate and letters of conformity supplier upon request

ASHWORTH Specialist dis



# DRAINAGE SYSTEMS

We work in partnership with industryleading manufacturers to provide you with high-quality, versatile and long-lasting drainage and rainwater products.

A comprehensive range of materials are available to help cover any soil and waste project requirements. These include sustainable cast iron, corrosion resistant HDPE, lightweight and easy to install PVC and durable Polypropylene Pipe solutions.

Cast Iron Above & Below Ground Drainage 32

Above Ground Drainage

PP Chemical Waste

Specialist distributors of commercial heating, plumbing & drainage solutions

■GEBERIT ©
+GF+





34

37









DRAINA

ONNO

GR

ELOW

08

AB

RON





#### **SOIL & WASTE**

PAM specialises in the manufacture of cast iron drainage systems, for commercial, public and residential buildings. These systems are quick and easy to install, adjust and dismantle and come with a long working life and material construction which is 100% recyclable.

- St Gobain ENSIGN AGILIUM® cast iron above ground with an A1 fire rating from 50mm to 300mm
- St Gobain Timesaver® cast iron below ground with a kitemark approval to BS 437. Sizes from 100mm to 225mm
- · PAM also offers a technical take-off and support and pre-assembly service





#### **ROOF OUTLETS**

We have extended our range of VortX outlets to include a new line of high-quality and competitive aluminium roof outlets. They are manufactured here in the UK enabling us to minimise transport-related carbon emissions, provide a consistently excellent service and retain total control over quality.

- Vertical spigot roof outlets in 100mm and 150mm diameters
- Strong and robust performance
- · Clamping Ring on the vertical and angled roof outlets can accommodate a liquid membrane of 2-3mm to full membranes with hot bitumen of 8mm
- · Raising pieces and gravel guard



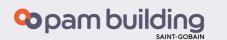














## **ENSIGN AGILIUM®**

#### INTRODUCING ENSIGN AGILIUM®

The latest addition to PAM Building UK's cast iron drainage systems. Designed with flexibility and durability in mind, Ensign Agilium is the perfect solution for commercial and public buildings with tight deadlines and complex layouts. Ensign Agilium reduces its environmental impact and facilitates the daily work of installers. An innovation that is part of our eco-design approach.

30% lighter - easier to carry and faster to install.

20% reduction in carbon emissions - better for our planet.

Compact fittings - space saving in constrained areas.

With its lightweight design, Ensign Agilium is easy to install and handle, reducing installation time and costs. But don't let its lightweight design fool you - Ensign Agilium is still made of the same high-quality cast iron as our other drainage systems, providing superior strength and resistance to corrosion. It's also compatible with our pre-assembly service, saving you even more time and money on-site.

So whether you're working on a new build or a refurbishment project, Ensign Agilium is the perfect choice for a fast, efficient and reliable drainage solution. Contact us today to learn more about how Ensign Agilium can benefit your project.

#### CONTACT US:

www.pambuilding.co.uk

DRAINAGE

GROUND







#### **HDPE SYSTEMS**

Polypipe Fuze HDPE is a fully accredited and BBA certified drainage system suited for use in commercial building services. Specifiers and installers can take advantage of the in-house fabrication service to design drainage to specification.

• Terrain FUZE - Modern high density polyethylene system with excellent impact, abrasion, chemical and extreme temperature

- resistance. Versatile application for any above ground drainage and waste projects. Available from 40mm to 315mm.
- Terrain Q Above ground noise reducing acoustic drainage system built with triplelayered Polypropylene with impressive chemical resistance, anti-fouling protection and a fire rating classification of B-s1 d0. Available from 40mm to 200mm.





#### **PVC SYSTEMS**

Polypipe Terrain PVCu is fully accredited and suitable for all types of commercial, high rise residential, domestic, industrial and public sector installations. It is lightweight and easy to handle making it quick to install. With a wide range of solvent and push-fit options this gives unrivalled installation options to match any project.

- · Fully adaptable with the HDPE Terrain FUZE drainage system
- · High quality finish and colours to match









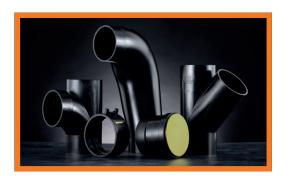




DRAINAGE

GROUND





#### **HDPE SYSTEMS**

Geberit HDPE is a robust and reliable wastewater and rainwater discharge drainage system designed for a multitude of applications including roof and land drainage. Flexible and resistant to impact and UV radiation with a leakproof permanence.

- Pipes available from 32mm to 315mm with a comprehensive range of fittings
- · Various jointing options including buttwelding, electrofusion and screw connections
- 100% recyclable
- Geberit HDPE Silent db20 acoustic from 56mm to 160mm



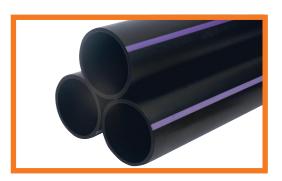


#### **TRAPS & WASTE FITTINGS**

McAlpine is the first company in the UK to manufacture plastic traps and remains one of the best choices for high quality bathroom and shower wastewater systems.

- All traps, waste outlets and overflows meet the requirements of EN 274-1-2002
- Most trap outlets and fittings have Multifit connections which suit plastic waste pipes subject to BS EN 1451-1-2000 and EN 1329-1-2000, copper pipe and lead pipe
- Most traps are available from 1 1/4" to 1 1/2"





#### **DURAPIPE DRAINAGE**

Ashworth provides several drainage solutions for projects that require more specialist concerns.

- Durapipe Friaphon A drainage option that is purpose-designed to be sound attenuated that
  offers excellent sound insulation. Ideal for care homes, apartments and hospitals where sound is major
  factor for wellbeing. Sizes range from 110mm to 160mm.
- Durapipe Vulcathene A complete BBA approved laboratory drainage system option which
  provides chemical resistance even at high temperatures with UV degradation prevention. Sizes from
  38mm to 152mm.





#### **FUSEAL DRAINAGE**

**FUSEAL®** is the only thermoplastic chemical waste drainage in the UK, which has flame retardant properties. This provides added security to the end user. The distinctive colour and markings also give a clear identification.

- Excellent chemical resistance and physical properties
- · Ideal for handling special waste mixtures of acids, bases and solvents
- Applications can include, school, college and university laboratories, hospitals and the health sector, chemical process, utilities and food and beverage













**CHEMICAL WASTE** 

## **DRAINAGE SYSTEMS**





#### **MULTI-USE COUPLINGS**

VIP Polymers VIPSeal flexible couplings were created to join and repair low to no pressure sewerage and drainage pipes of any material and size combination. The elastomeric seals and rubber is designed to be long-lasting and durable while also meeting all relevant UK water industry standards.

- Sizes range from 50mm to 620mm
- CE, UKCA, BS EN 681-1 & EN295-4 compliant
- Grade 1.4301 Stainless Steel heavy-duty tension and shear bands for general applications
- Grade 1.4401 Stainless Steel bands for high corrosion or contaminated ground areas and marine environments



# ASHWORTH

Specialist distributors of commercial heating, plumbing & drainage solutions



If you want to know more about us or want to get in touch and talk about how we can help support your business, you can ring one of our strategically placed branches around the UK or visit our website and contact us at www.Ashworth.uk.com.



You can also follow us on social media via LinkedIn at

www.linkedin.com/company/ashworth

www.linkedin.com/showcase/ashworthenergy





Specialist distributors of commercial heating, plumbing & drainage solutions

ASHWORTH

# PIPE HANGING SYSTEMS

Having a strong and versatile framework is the basis for success when it comes to project planning. We take pride in supplying essential channel, fittings and fixings that conform to the highest standards. This covers not just steel but brass, malleable iron, plastic and phenolic as per requirement.

Installation should also be easy, that's why we work alongside suppliers who can cater for your individual specifications as not every project is the same but should always commence smoothly.

Channel & Fixings 40
Pipe Support 41

Pipe Clips 42





S

FIXING

CHANNEL





#### **CHANNEL BRACKETS & FITTINGS**

To satisfy the need for versatility in the construction of effective channel support, we ensure that the ability to create joints and connections between sections of channel is unlimited.

- Washers
- Flat Plates
- T Plates
- Top Hat
- Splice

- Angles
- Wing
- Tower
- Delta
- Window

- Clamps
- Purlin
- Toggle
- Base
- Beam





#### **PIPE SUPPORT**

Secure and safe pipe support can be achieved regardless of material, elevation or angle with our high-quality collection of clips, bolts, bands and blocks.

- Split Bands
- Saddle Clamps
- U Bolts
- Unlined Clips

- Rubber Lined Clips
- Filbo
- Phenolic Blocks
- Wood Blocks





#### **CHANNEL**

Complex support system can be easily built from our range of strong and flexible channel and accessories to compliment.

- 21 x 41 Pre-Galvanized available in 2m, 3m and 6m lengths.
- 41 x 41 Pre-Galvanised available in 2m, 3m and 6m and in Slotted or Plain Channel
- 41 x 41 Pre-Galvanised Back-to-Back
- End Channel and Studding Caps





#### **GENERAL FASTENERS**

Every branch carries an extensive range of fasteners vital to supporting the groundwork of any project.

- Nuts & Washers
- · Spring Washers
- Screwed Rods
- Eye Bolts
- Connectors

- Channel Nuts
- Spring Channel Nuts
- Penny Washers
- High Tensile Bolts
- Screws

- Anchors
- Wedge Nuts
- Rawl Bolts
- Thru Bolts
- Swivels

















#### **PIPE CLIPS**

Our pipe clips reflect the diversity required within pipe supporting by allowing a wide catalogue of sizes and materials to be on hand for our customers. Available in standard and corrosion-resistant finishes for durability and longevity.

- For use with Steel, Cast Iron, Copper and Plastic tubes
- Malleable Iron in Black or Galvanised
- Screw-on bracket
- · Back Plate
- Single
- Double

- Brass or Chrome Plated
- Hospital
- Screw on
- Back Plate
- Single
- Double





#### **TALON PIPE CLIPS**

Talon's pipe clips reflect the diverse nature of projects by supplying a selection that incorporates various materials and types making them suitable for pipes including PEX, copper, MDPE and PVC pipework. They also offer accessories to compliment the installation process.

- · Coloured identification for various applications
- Sizes available from 10mm to 35mm















# PUMPS & EXPANSION



Closed water heating systems always run the risk of pressure building which can lead to disastrous results if left unmaintained. This reason alone is why a combination of expansion vessels and pumps are required to keep systems running smoothly and safe.

We have established partnerships with suppliers who provide energy efficient and effective pressure solutions so that you will always have options to control and mitigate whatever your project requires.

Pumps

44

Expansion

46











PUMPS





#### **PUMPS**

Wilo produce locally manufactured and hightech energy-efficient pumps and pump systems for both residential houses and commercial facilities. Their experienced technical team and digital on-site assistance alongside remote monitoring can support any HVAC to water supply and drainage projects.

- Easy to commission and maintain
- Ready-to-plug, quick electrical connection
- · Variable and constant differential pressure
- Pump venting function
- Wilo-Stratos & Yonos MAXO automatic power adjustment, nominal pressure 6 to 16, pump connections DN32 to DN100





#### **BOOSTER SETS AND PRESSURISATION UNITS**

To meet complex requirements for providing a continuous water supply in large buildings (such as energy efficiency, operational reliability, hygiene and reliability in supply), you need an innovative partner. Wilo has comprehensive expertise in this area. We provide high-efficiency pumps, which can be connected to a system, according to demand, and easily integrated into the building automation system.

- Booster Sets Fully automatic water supply and pressure boosting inlet mode, either from the public water supply or from a tank
- Packaged system for automatic topping up of system with wholesome water via AB airgap. Available in one or 2 pump versions in wallmount, freestanding or open pack variants
- Pressurisation units for maintaining the required system pressure in closed heating, ventilation and air-conditioning systems

















#### **PRESSURISATION UNIT**

Our innovative range of highly energy efficient, locally manufactured, pressurisation equipment and booster sets cover a multitude of LPHW or CHW demands for large domestic and commercial sealed heating systems as well as chilled water systems.

- · Compact and installer friendly design with direct connection to mains or booster supply
- Microprocessor technology for early warnings of system leakage and unrivalled precision in water treatment calculation
- · All products are CE approved
- · Units comply with PED 97/23/EC





**SCAN ME** 

If you want to know more about us or want to get in touch and talk about how we can help support your business, you can ring one of our strategically placed branches around the UK or visit our website and contact us at www.Ashworth.uk.com.



You can also follow us on social media via LinkedIn at

www.linkedin.com/company/ashworth
and
www.linkedin.com/showcase/ashworthenergy





**EXPANSION** 





#### **FLAMCO FLEXVENT**

Flamco floating air vents guarantee top quality ventilation for closed central heating and cooling installations. All Flexvents are thoroughly tested before leaving the factory.

- Captive cap with open/close function for leak protection
- Working temperature from -10°C to 90°C
- Sizes available in 3/8", 1/2" and 3/4"





#### **CHEMPOT & RAPIDVENT**

We are on hand to provide options for the safe removal of unwanted sediment and air for projects that require it.

- Chempot Vessels designed for accurate measurements in systems involving precise chemical dosage and removal. Available in 6,11 & 18 litre versions. WRAS approved
- Rapidvent Flanged air and dirt removers created for HVAC piping systems. Available from 50mm to 200mm. WRAS approved





#### **EXPANSION BELLOWS**

Albion offers a selection of carbon steel flexible connectors to provide your piping systems with the resilience needed to absorb noise and vibration, to compensate for thermal growth or to permit motion of other elements.

- EPDM/NBR Body
- PN16 Screwed Flexible Connectors
- Available in BSP Taper BS21 (ISO 7/1) or NPT (ANSI B1.20.1)
- PN6 to PN25 Flanged Flexible Connectors
- Most are BS4504 Compliant





#### **EXPANSION BELLOWS**

We also provide our own range of zinc coated Carbon Steel bellows. Suited for systems carrying chilled and heated water these units are full bore and come with reinforced collars and EDPM bodies for excellent vibration and noise level absorption.

- Drilled PN6 or PN16 available
- · Made of anti-tamper carbon steel
- No Tie bars













**CONSUMABLES** 

GENERAL

Specialist distributors of commercial heating, plumbing & drainage solutions

# **ACCESSORIES &** CONSUMABLES

Whatever you require on the worksite, we have you covered. All our branches hold a selection of the UK's best jointing compounds, sealants, soldering, paints, oils, treatments and tools for any pipework related on-site work you may need to undertake.

Keep healthy and protected while using these essentials with our range of testing equipment. We value our ability to supply what our customers need as well as what keeps them legally compliant and safe.





General Consumables

49

Measurement Tables & Charts

52







## **ACCESSORIES & CONSUMABLES**





#### **FIXINGS, SEALANTS & JOINTING**

Jointing pipe and fittings can require a few industry essentials to get right. Each branch has well-known brands on hand for your convenience.

- Flux
- Hemp
- Solder
- Welding Rods
- Brazing Rods

- Rawl Plugs
- Screws
- Cotton Thrum
- Lubricant
- Silicone

- PTFE
- Rocol
- Loctite
- Fernox
- Wisemans





### **PAINT, OIL, TOOLS & TREATMENTS**

On-site safety and hygiene is just as important as attaining long-lasting and effective pipe systems. We stock a range of products to achieve both.

- · Red Oxide Paint
- Yellow Ochre Paint
- · Green Primer Paint
- · Galvanising Spray
- Threading Oil
- Drain Cleaner
- Fernox
- Hygiene
- Inhibitor Paint Brushes

- Rothenberger
- · Protective& Safety Equipment
- Bags of Rags
- Steel Wool

















#### **LOCTITE 55/557**

A general-purpose thread-sealing application designed for metal and plastic pipes and fittings. A quick and easy reliable seal allowing pipe adjustment up to 45 degrees.

- Resists temperatures up to 149°C(300°F)
- Tested in accordance with EN 751-2 and DIN 30660.
- DVGW/KTW approved for gas and potable water
- Complies with KIWA GASTEC QA AR 214 for hydrogen gas
- WRAS approved and certified to NSF/ANSI Standard 61





#### **AIR BAGS & DRAIN TESTING**

A viable alternative to test plugs, Horobin inflatable sealing bags and drain testing kits are ideal for any project which requires trouble-free pipe sealing and maintenance.

- · Durable and tough PVC
- Can be fitted with a pressure gauge to prevent overinflation
- · Ideal for use in areas where access is smaller than the test diameter
- Pipe diameter coverage of 25mm up to 450mm













## MANUFACTURER LINKS

**Albion** www.albionvalvesuk.com **Aquatherm** www.aquatherm.com **Brannan** www.brannan.co.uk Bray www.bray.com Crane Fluid Systems www.cranefs.com **Geberit** www.geberit.co.uk **Georg Fischer** www.georgfischer.com Henkel www.henkel.co.uk Horobin www.horobin.co.uk **McAlpine** www.mcalpineplumbing.com Mikrofill www.mikrofill.com Nabic www.nabicvalves.com **Pegler Yorkshire** www.galberts.com

Plasson

Wilo www.plasson.co.uk

**Polypipe** www.polypipe.com Rehau www.rehau.com Reliance www.rwc.com RIIFO www.riifo.com

www.saint-gobain-pam.co.uk **Saint Gobain Talon** 

www.talon.co.uk

Tata Steel www.tatasteeleurope.com www.teekay.com Teekay

**Test Plugs** www.test-plugs.com Victaulic www.victaulic.com **VIP Polymer** Wednesbury

www.vip-polymers.com www.wednesburytube.com

www.wilo.com/gb/en

Final reliance on information lies with the client; always consult with the manufacturer where necessary.

### **IMPORTANT LINKS**

Achillies Utilities Vendor Database Service (UVDB) Alcumus British Metal Tubes and Fittings Association (BMFTA) Timber Research and Development Association (BMTRADA) Lloyd's Register Quality Assurance (IRQA)

www.achilles.com/uvdb www.alcumus.com www.bmtfa.org www.bmtrada.com www.lrga.com

# **FLANGE TABLES**

	BS1560 ASA 150						
Nominal bore inches	Flange dia.	Thickness inches	Length and diameter of bolts mm	Number of holes	P.C.D. inches		
1/2	3 1/2	7/16	M12 x 50	4	2 3/8		
3/4	3 7/8	1/2	M12 x 55	4	2 3/4		
1	4 1/4	9/16	M12 x 55	4	3 1/8		
1 1/4	4 5/8	5/8	M12 x 65	4	3 1/2		
1 1/2	5	11/16	M12 x 65	4	3 7/8		
2	6	3/4	M16 x 70	4	4 3/4		
2 1/2	7	7/8	M16 x 75	4	5 1/2		
3	7 1/2	15/16	M16 x 75	4	6		
4	9	15/16	M16 x 75	8	7 1/2		
5	10	15/16	M20 x 90	8	8 1/2		
6	11	1	M20 x 90	8	9 1/2		
8	13 1/2	1 1/8	M20 x 90	8	11 3/4		
10	16	1 3/16	M20 x 100	12	14 1/4		
12	19	1 1/4	M20 x 100	12	17		

BS1560 ASA 300						
Nominal bore inches	Flange dia.	Thickness inches	Length and diameter of bolts mm	Number of holes	P.C.D. inches	
1/2	3 3/4	9/16	M12 x 55	4	2 5/8	
3/4	4 5/8	5/8	M16 x 65	4	3 1/4	
1	47/8	11/16	M16 x 65	4	3 1/2	
1 1/4	5 1/4	3/4	M16 x 70	4	3 7/8	
1 1/2	6 1/8	1	M20 x 75	4	4 1/2	
2	6 1/2	7/8	M16 x 75	8	5	
2 1/2	7 1/2	1	M20 x 90	8	5 7/8	
3	8 1/4	1 1/8	M20 x 90	4	6 5/8	
4	10	1 1/4	M20 x 100	8	77/8	
5	11	1 3/8	M20 x 110	8	9 1/4	
6	12 1/2	1 7/16	M20 x 110	12	10 5/8	
8	15	1 5/8	M20 x 120	12	13	
10	17 1/2	1 7/8	M24 x 150	16	15 1/4	
12	20 1/2	2	M30 x 150	16	17 3/4	

	BS10 Table D						
Nominal bore inches	Flange dia.	Thickness inches	Length and diameter of bolts mm	Number of holes	P.C.D.		
1/2	3 3/4	3/16	M12 x 40	4	2 5/8		
3/4	4	3/16	M12 x 40	4	2 7/8		
1	4 1/2	3/16	M12 x 40	4	3 1/4		
1 1/4	4 3/4	1/4	M12 x 40	4	3 7/16		
1 1/2	5 1/4	1/4	M12 x 40	4	3 7/8		
2	6	5/16	M16 x 50	8	4 1/2		
2 1/2	6 1/2	5/16	M16 x 50	8	5		
3	7 1/4	3/8	M16 x 50	4	5 3/4		
4	8 1/2	3/8	M16 x 55	4	7		
5	10	1/2	M16 x 55	8	8 1/4		
6	11	1/2	M16 x 55	8	9 1/4		
8	13 1/4	1/2	M16 x 55	8	11 1/2		
10	16	5/8	M20 x 60	8	14		
12	18	3/4	M20 x 60	12	16		

		BS10	Table E		
Nominal bore inches	Flange dia.	Thickness inches	Length and diameter of bolts mm	Number of holes	P.C.D. inches
1/2	3 3/4	1/4	M12 x 40	4	2 5/8
3/4	4	1/4	M12 x 40	4	2 7/8
1	4 1/2	9/32	M12 x 40	4	3 1/4
1 1/4	4 3/4	5/16	M12 x 40	4	3 7/16
1 1/2	5 1/4	11/32	M12 x 40	4	3 7/8
2	6	3/8	M16 x 50	4	4 1/2
2 1/2	6 1/2	13/32	M16 x 50	4	5
3	7 1/4	7/16	M16 x 50	4	5 3/4
4	8 1/2	1/2	M16 x 55	8	7
5	10	9/16	M16 x 55	8	8 1/4
6	11	11/16	M20 x 65	8	9 1/4
8	13 1/4	3/4	M20 x 65	8	11 1/2
10	16	7/8	M20 x 75	12	14
12	18	1	M20 v 90	12	16

		BS10	Table F		
Nominal bore inches	Flange dia. inches	Thickness inches	Length and diameter of bolts mm	Number of holes	P.C.D. inches
1/2	3 3/4	3/8	M12 x 40	4	2 5/8
3/4	4	3/8	M12 x 40	4	2 7/8
1	4 3/4	3/8	M16 x 45	4	3 7/16
1 1/4	5 1/4	1/2	M16 x 50	4	3 7/8
1 1/2	5 1/2	1/2	M16 x 50	4	4 1/8
2	6 1/2	5/8	M16 x 55	4	5
2 1/2	7 1/4	5/8	M16 x 55	8	5 3/4
3	8	5/8	M16 x 55	8	6 1/2
4	9	3/4	M16 x 65	8	7 1/2
5	11	7/8	M20 x 75	8	9 1/4
6	12	7/8	M20 x 75	12	10 1/4
8	14 1/4	1	M20 x 90	12	12 3/4
10	17	1 1/8	M20 x 90	12	15
12	19 1/4	1 1/4	M20 x 90	16	17 1/4

BS10 Table H						
Nominal bore inches	Flange dia. inches	Thickness inches	Length and diameter of bolts mm	Number of holes	P.C.D. inches	
1/2	4 1/2	1/2	M16 x 50	4	3 1/4	
3/4	4 1/2	1/2	M16 x 50	4	3 1/4	
1	4 3/4	9/16	M16 x 50	4	3 7/16	
1 1/4	5 1/4	11/16	M16 x 55	4	3 7/8	
1 1/2	5 1/2	11/16	M16 x 55	4	4 1/8	
2	6 1/2	3/4	M16 x 65	4	5	
2 1/2	7 1/4	3/4	M16 x 65	8	5 3/4	
3	8	7/8	M16 x 65	8	6 1/2	
4	9	1	M16 x 75	8	7 1/2	
5	11	1 1/8	M20 x 90	8	9 1/4	
6	12	1 1/8	M20 x 90	12	10 1/4	
8	14 1/2	1 1/4	M20 x 90	12	12 3/4	
10	17	1 3/8	M20 x 100	12	15	
12	19 1/4	1 5/8	M20 x 125	16	17 1/4	

# **FLANGE TABLES**

	EN1092 - 1 (BS4504) Table 6							
Nominal	Flange dia.	Thickness	Length and diameter of	Number of				
bore mm	mm	mm	bolts	holes	P.C.D. mm			
15	80	12	M10 x 40	4	55			
20	90	14	M10 x 45	4	65			
25	100	14	M10 x 45	4	75			
32	120	14	M12 x 50	4	90			
40	130	14	M12 x 50	4	100			
50	140	14	M12 x 50	4	110			
65	160	14	M12 x 50	4	130			
80	190	16	M16 x 60	4	150			
100	210	16	M16 x 60	4	170			
125	240	18	M16 x 60	8	200			
150	265	18	M16 x 60	8	225			
200	320	20	M16 x 65	8	280			
250	375	22	M16 x 70	12	335			
300	440	22	M20 x 70	12	395			

	EN1092 - 1 (BS4504) Table 10						
Nominal bore mm	Flange dia. mm	Thickness mm	Length and diameter of bolts	Number of holes	P.C.D. mm		
15	95	14	M12 x 45	4	65		
20	105	16	M12 x 50	4	75		
25	115	16	M12 x 50	4	85		
32	140	16	M16 x 60	4	100		
40	150	16	M16 x 60	4	110		
50	165	18	M16 x 60	4	125		
65	185	18	M16 x 60	4	145		
80	200	20	M16 x 65	8	160		
100	220	20	M16 x 70	8	180		
125	250	22	M16 x 70	8	210		
150	285	22	M20 x 70	8	240		
200	340	24	M20 x 80	8	295		
250	395	26	M20 x 80	12	350		
300	445	26	M20 x 80	12	400		

EN1092 - 1 (BS4504) Table 16						
Nominal	Flange dia.	Thickness	Length and diameter of	Number of		
bore mm	mm	mm	bolts	holes	P.C.D. mm	
15	95	14	M12 x 45	4	65	
20	105	16	M12 x 50	4	75	
25	115	16	M12 x 50	4	85	
32	140	16	M16 x 60	4	100	
40	150	16	M16 x 60	4	110	
50	165	18	M16 x 60	4	125	
65	185	18	M16 x 60	4	145	
80	200	20	M16 x 65	8	160	
100	220	20	M16 x 70	8	180	
125	250	22	M16 x 70	8	210	
150	285	22	M20 x 70	8	240	
200	340	24	M20 x 90	12	295	
250	405	26	M24 x 90	12	355	
300	460	28	M24 x 90	12	410	

EN1092 - 1 (BS4504) Table 25							
Nominal	Flange dia.	Thickness	Length and diameter of	Number of			
bore mm	mm	mm	bolts	holes	P.C.D. mm		
15	95	16	M12 x 50	4	65		
20	105	18	M12 x 55	4	75		
25	115	18	M12 x 55	4	85		
32	140	18	M16 x 60	4	100		
40	150	18	M16 x 60	4	110		
50	165	20	M16 x 65	4	125		
65	185	22	M16 x 70	8	145		
80	200	24	M16 x 70	8	160		
100	235	24	M20 x 80	8	190		
125	270	26	M24 x 85	8	220		
150	300	28	M24 x 100	8	250		
200	360	32	M24 x 100	12	310		
250	425	40	M27 x 100	12	370		
300	485	48	M27 x 110	16	430		

EN1092 - 1 (BS4504) Table 40									
Nominal	Flange dia.	Thickness	Length and diameter of	Number of					
bore mm	mm	mm	bolts	holes	P.C.D. mm				
15	95	16	M12 x 50	4	65				
20	105	18	M12 x 55	4	75				
25	115	18	M12 x 55	4	85				
32	140	18	M16 x 60	4	100				
40	150	18	M16 x 60	4	110				
50	165	20	M16 x 65	4	125				
65	185	22	M16 x 70	8	145				
80	200	24	M16 x 70	8	160				
100	235	24	M20 x 80	8	190				
125	270	26	M24 x 85	8	220				
150	300	28	M24 x 100	8	250				
200	375	32	M27 x 100	12	320				
250	450	40	M30 x 110	12	385				
300	515	48	M30 x 120	16	450				

		EN1092 - 1 (E	3S4504) Table 64	1	
Nominal	Flange dia.	Thickness	Length and diameter of	Number of	D.C.D
bore mm	mm	mm	bolts	holes	P.C.D. mm
15	105	20	M12 x 65	4	75
20	130	22	M16 x 70	4	90
25	140	24	M16 x 75	4	100
32	155	24	M20 x 80	4	110
40	170	26	M20 x 85	4	125
50	180	26	M20 x 85	4	135
65	205	26	M20 x 85	8	160
80	215	30	M20 x 90	8	170
100	250	32	M24 x 95	8	200
125	295	34	M27 x 110	8	240
150	345	36	M30 x 115	8	280
200	415	46	M33 x 130	12	345
250	470	54	M33 x 140	12	400
300	530	62	M33 x 150	16	460

# GENERAL DIMENSIONS

#### Length - Imperial/Metric Metric/Imperial inches inches 1 25.4 10 0.39 2 50.8 20 0.78 3 76.2 30 1.18 4 101.6 1.57 5 127 50 1.96 6 152.4 60 2.36 7 177.8 70 2.75 8 203.2 80 3.14 9 228.6 90 3.54 10 254 100 3.93 20 508 200 7.8 30 762 300 11.8 40 1016 400 15.7 50 1270 500 19.6 60 1524 600 23.6 70 1778 700 27.5 80 2032 800 31.4 90 2286 900 35.4 100 2540 1000 39.3

# WELD FITTINGS

		BS 1965												
				BS1965										
Bore	Outside D	iameter	Wall Thickness											
mm	inches	mm	inches	mm	weight									
15	0.840	21.3	0.104	2.6	medium									
20	1.062	26.9	0.104	2.6	medium									
25	1 215	22.4	0.128	3.2	medium									
23	1.313	33.4	0.160	4.0	heavy									
1 1/4 32 1.688		42.4	0.180	3.2	medium									
32	1.000	42.4	0.160	4.0	heavy									
40	1.004	40.2	0.128	3.2	medium									
40	1.906	40.3	0.160	4.0	heavy									
50	2 275	40.2	0.144	3.6	medium									
30	2.3/3	00.3	0.176	4.5	heavy									
4.F	2 075	72	0.144	3.6	medium									
05	2.8/3	/3	0.176	4.5	heavy									
00	2.500	000	0.169	4.0	medium									
80	3.500	00.9	0.192	5.0	heavy									
90	4 000	101.6	0.176	4.5	medium									
	4.000		0.212	5.4	heavy									
100	4.500	114.3	0.176	4.5	medium									
	4.500		0.202	5.4	heavy									
5 125 5.563		141.2	0.192	5.0	medium									
125	5.563	141.3	0.212	5.4	heavy									
150		1/00	0.192	5.0	medium									
150	0.023	108.3	0.212	5.4	heavy									
			0.212	5.4	medium									
150	6.625	168.3	0.250	6.3	heavy									
			0.281	7.1	other									
			0.212	5.4	medium									
200	8.625	219.1	0.250	6.3	heavy									
			0.312	8	other									
			0.250	6.3	medium									
250	10.750	273	0.312	8.0	heavy									
			0.375	9.5	other									
			0.250	6.3	medium									
300	12.750	323.9	0.281	7.1	heavy									
			0.312	8	other									
350	14.000	355.6	0.375	9.5	heavy									
400	16.000	406.4	0.375	9.5	heavy									
	15 20 25 32 40 50 65 80 90 100 125 150 200 250 3300 350	15         0.840           20         1.062           25         1.315           32         1.688           40         1.906           50         2.375           65         2.875           80         3.500           90         4.000           100         4.500           125         5.563           150         6.625           200         8.625           250         10.750           300         12.750           350         14.000	15         0.840         21.3           20         1.062         26.9           25         1.315         33.4           32         1.688         42.4           40         1.906         48.3           50         2.375         60.3           65         2.875         73           80         3.500         88.9           90         4.000         101.6           100         4.500         114.3           125         5.563         141.3           150         6.625         168.3           200         8.625         219.1           250         10.750         273           300         12.750         323.9           350         14.000         355.6	15         0.840         21.3         0.104           20         1.062         26.9         0.104           25         1.315         33.4         0.128           32         1.688         42.4         0.160           40         1.906         48.3         0.160           50         2.375         60.3         0.144           65         2.875         73         0.144           0.176         0.176         0.176           90         4.000         101.6         0.176           101         0.176         0.176           102         10.10         0.176           102         0.192         0.192           100         4.500         114.3         0.176           125         5.563         141.3         0.192           150         6.625         168.3         0.292           150         6.625         168.3         0.250           0.281         0.250         0.281           200         8.625         219.1         0.250           301         10.750         273         0.312           300         12.750         233.9         0.250	15         0.840         21.3         0.104         2.6           20         1.062         26.9         0.104         2.6           25         1.315         33.4         0.128         3.2           0.160         4.0         0.160         4.0           32         1.688         42.4         0.180         3.2           0.160         4.0         0.160         4.0           50         2.375         60.3         0.144         3.6           0.176         4.5         0.176         4.5           80         3.500         88.9         0.169         4.0           90         4.000         101.6         0.176         4.5           100         4.500         114.3         0.176         4.5           125         5.563         141.3         0.176         4.5           125         5.563         141.3         0.192         5.0           150         6.625         168.3         0.192         5.0           150         6.625         168.3         0.212         5.4           150         6.625         168.3         0.212         5.4           0.281         7									

Welding Fitting Dimensions

## **TUBE SIZES**

			ANSI	B 36.19				
Sch	Schedule 5S		edule	Sch	edule	Schedule 80S		
			OS	4	08			
mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m	
		1.65	0.50	2.24	0.64	3.02	0.81	
		1.65	0.64	2.31	0.86	3.20	1.12	
1.65	0.81	2.11	1.02	2.77	1.29	3.73	1.65	
1.65	1.03	2.11	1.30	2.87	1.71	3.91	2.23	
1.65	1.31	2.77	2.13	3.38	2.54	4.55	3.29	
1.65	1.68	2.77	2.73	3.56	3.44	4.85	4.53	
1.65	1.93	2.77	3.16	3.68	4.11	5.08	5.49	
1.65	2.42	2.77	3.99	3.91	5.52	5.54	7.60	
2.11	3.75	3.05	5.35	5.16	8.77	7.01	11.59	
2.11	4.59	3.05	6.56	5.49	11.47	7.62	15.51	
2.11	5.26	3.05	7.53	5.74	13.78	8.08	18.92	
2.11	5.93	3.05	8.50	6.02	16.32	8.56	22.67	
2.77	9.61	3.40	11.74	6.55	22.10	9.53	31.44	
2.77	11.48	3.40	14.04	7.11	28.70	10.97	43.22	
2.77	14.90	3.76	20.12	8.18	43.20	12.70	65.64	
3.40	22.95	4.19	28.20	9.27	61.22	12.70	82.78	
3.96	31.71	4.57	36.53	9.53	74.94	12.70	98.96	
3.96	34.87	4.78	41.99	9.53	82.50	12.70	109.05	
4.19	42.20	4.78	48.07	9.53	94.61	12.70	125.20	
4.19	47.53	4.78	54.15	9.53	106.83	12.70	141.35	
4.78	60.23	5.54	69.70	9.53	118.95	12.70	157.51	
4.78	66.31	5.54	76.75	9.53	131.07	12.70	173.66	
5.54	83.80	6.35	95.92	9.53	143.20	12.70	189.82	
				9.53	155.22	12.70	205.85	
				9.53	167.39	12.70	222.06	
6.35	120.15	7.92	149.55	9.53	179.56	12.70	238.28	
				9.53	191. <i>7</i> 3	12.70	254.50	
				9.53	203.90	12.70	270.72	
				9.53	215.83	12.70	286.62	

# **TUBE SIZES**

						ANSI B	36.10						
Nominal	Outside	Sche	edule	Sche	Schedule		Schedule Schedule		edule	Sche	edule	Schedule	
Pipe Size	Diameter	1	0	20 30		STD		40		60			
Inch	mm	mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m
1/4"	13.70							2.24	0.63	2.24	0.63		
3/8"	17.10							2.31	0.84	2.31	0.84		
1/2"	21.30							2.77	1.27	2.77	1.27		
3/4"	26.70							2.87	1.69	2.87	1.69		
1"	33.40							3.38	2.50	3.38	2.50		
1 1/4"	42.20							3.56	3.39	3.56	3.39		
1 1/2"	48.30							3.68	4.05	3.68	4.05		
2"	60.30							3.91	5.44	3.91	5.44		
2 1/2"	73.00							5.16	8.63	5.16	8.63		
3"	88.90							5.49	11.29	5.49	11.29		
3 1/2"	101.60							5.74	13.57	5.74	13.57		
4"	114.30							6.02	16.07	6.02	16.07		
5"	141.30							6.55	21.77	6.55	21.77		
6"	168.30							7.11	28.26	7.11	28.26		
8"	219.10			6.35	33.31	7.04	36.81	8.18	42.55	8.18	42.55	10.31	53.08
10"	273.00			6.35	41.77	7.80	51.03	9.27	60.31	9.27	60.31	12.70	81.55
12"	323.80			6.35	49.73	8.38	65.20	9.53	73.88	10.31	79.73	14.27	108.90
14"	355.60	6.35	54.69	7.92	67.90	9.53	81.33	9.53	81.33	11.13	94.55	15.09	126.70
16"	406.40	6.35	62.64	7.92	77.83	9.53	93.27	9.53	93.27	12.70	123.30	16.66	160.10
18"	457.20	6.35	70.57	7.92	87.71	11.13	122.30	9.53	105.10	14.27	155.80	19.05	205.70
20"	508.00	6.35	78.55	9.53	117.10	12.70	155.10	9.53	117.10	15.09	183.40	20.62	247.80
22"	558.80	6.35	86.54	9.53	129.10	12.70	171.00	9.53	129.10			22.23	294.20
24"	609.60	6.35	94.53	9.53	141.10	14.27	209.60	9.53	141.10	17.48	255.40	24.61	355.20
26"	660.40	7.92	127.30	12.70	202.70			9.53	152.80				
28"	711.20	7.92	137.30	12.70	218.60	15.88	271.20	9.53	164.80				
30"	762.00	7.92	147.20	12.70	234.60	15.88	291.10	9.53	176.80				
32"	812.80	7.92	157.20	12.70	250.60	15.88	312.10	9.53	188.80	17.48	342.90		
34"	863.60	7.92	167.20	12.70	266.60	15.88	332.10	9.53	200.30	17.48	364.90		
36"	914.40	7.92	176.90	12.70	282.20	15.88	351.70	9.53	212.50	19.05	420.40		

# **TUBE SIZES**

	ANSI B 36.10												
Sche	edule	Schedule		Sche	edule	Sche	edule	Schedule		Schedule		Schedule	
>	(S	8	0	100		120		140		160		X	KS
mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m	mm	kg/m
3.02	0.80	3.02	0.80										
3.20	1.10	3.20	1.10										
3.73	1.62	3.73	1.62							4.78	1.95	7.47	2.55
3.91	2.20	3.91	2.20							5.56	2.90	7.82	3.64
4.55	3.24	4.55	3.24							6.35	4.24	9.09	5.45
4.85	4.47	4.85	4.47							6.35	5.61	9.70	7.77
5.08	5.41	5.08	5.41							7.14	7.25	10.15	9.56
5.54	7.48	5.54	7.48							8.74	11.11	11.07	13.44
7.01	11.41	7.01	11.41							9.53	14.92	14.02	20.39
7.62	15.27	7.62	15.27							11.13	21.35	15.24	27.68
8.08	18.63	8.08	18.63										
8.56	22.32	8.56	22.32			11.13	28.32			13.49	33.54	17.12	41.03
9.53	30.97	9.53	30.97			12.70	40.28			15.88	49.11	19.05	57.43
10.97	42.56	10.97	42.56			14.27	54.20			18.26	67.56	21.95	79.22
12.70	64.64	12.70	64.64	15.09	75.92	18.26	90.44	20.62	100.90	23.01	111.20	22.23	107.90
12.70	81.55	15.09	96.01	18.26	114.70	21.44	133.00	25.40	155.10	28.58	172.30	25.40	155.10
12.70	97.46	17.48	132.00	21.44	159.90	25.40	186.90	28.58	208.10	33.32	238.70	25.40	186.90
12.70	107.30	19.05	158.10	23.83	194.90	27.79	224.60	31.75	253.50	35.71	281.70		
12.70	123.30	21.44	203.50	26.19	245.50	30.96	286.60	36.53	333.10	40.49	365.30		
12.70	139.10	23.83	254.50	29.36	245.50	34.93	363.50	39.67	408.20	42.24	459.30		
12.70	155.10	26.19	311.10	32.54	245.50	38.10	441.40	44.45	508.10	50.01	564.80		
12.70	171.00	28.58	373.80	34.93	245.50	41.28	527.00	47.63	600.60	53.90	672.20		
12.70	187.00	30.96	442.00	38.89	245.50	46.02	640.00	52.37	720.10	59.54	808.20		
12.70	202.70												
12.70	218.60												
12.70	234.60												
12.70	250.60												
12.70	266.60												
12.70	282.20												

# SPECIALIST DISTRIBUTORS OF COMMERCIAL HEATING, PLUMBING & DRAINAGE SOLUTIONS



